

HKTA 1033  
ISSUE 7  
MARCH 2012

**PERFORMANCE SPECIFICATION  
FOR MOBILE STATIONS AND PORTABLE  
EQUIPMENT FOR USE IN THE  
GLOBAL SYSTEM FOR  
MOBILE COMMUNICATIONS (GSM)  
900 AND 1800 MHz BANDS**



**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 mobile stations and portable equipment for use in the Global System for Mobile Communications (GSM) 900 and 1800 MHz bands.
2. Under section 39 of the Ordinance, a person is exempted from the obligation to hold a licence under the Ordinance so long as the conditions set out in the Telecommunications (Telecommunications Apparatus) (Exemption from Licensing) Order (“the Order”) are satisfied. Radiocommunications apparatus falling into the scope of this specification, unless covered by other specification with more specific scope, shall meet the requirements stipulated to fulfil the conditions of the Order.
3. At present, the Office of the Telecommunications Authority (OFTA) operates a Hong Kong Telecommunications Equipment Evaluation and Certification (HKTEC) Scheme. Details of the HKTEC Scheme can be found in the information note OFTA 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 OFTA I 401. A label prescribed by the Telecommunications Authority (TA) may be affixed to the certified equipment. Details of the labelling arrangement can be found in the Standardisation Guide HKTA 3211.
4. The TA may amend any part of this specification as and when he 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 manufacturers of the equipment, the decision of the TA shall be final.
6. The HKTA specifications and information notes issued by the TA can be downloaded from OFTA’s website at <http://www.ofta.gov.hk>. Enquiries about this specification may be directed to:

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## AMENDMENT TABLE

Item	Issue No.	Clause	Descriptions
1.	Issue 02 July 1998	1,2,3 & 4	The scope of the specification was extended to cover the base station system equipment for use in the PCS.  The specification was revised to set out the technical requirements for GSM Phase 1, Phase 2 and Phase 2+ equipment.
		5	The content in this paragraph was moved to the Foreword.
2.	Issue 3	Foreword	Include information about the HKTEC Scheme.
		2	Include electrical safety requirement.
		4	Include updates on the latest ETSI standards and new ETSI conformance specifications for GSM Phase 2+ terminal equipment.
		5	Include updates on the method of type approval evaluation by the TA.
3.	Issue 4	Foreword	Certification and labelling arrangements are updated.
4.	Issue 5	3	The frequency range of GSM mobile stations or handsets is expanded to the Extended GSM (EGSM) band.
5.	Issue 6	5	Remove the clause about declaration of compliance.
6.	Issue 7	Foreword	Editorial change.
		4	Update the list of ETSI standard under reference for the technical requirements.
		5	Update the evaluation requirements by referring to the test conditions and test procedures as specified in the ETSI standards specified in clause 4.
		6	A new clause 6 listing out the standards under reference in this specification is added.

## **CONTENT**

- 1. SCOPE OF SPECIFICATION**
- 2. ELECTRICAL SAFETY**
- 3. OPERATING FREQUENCIES**
- 4. TECHNICAL REQUIREMENTS**
- 5. EVALUATION REQUIREMENTS**
- 6. REFERENCE**

## 1. SCOPE OF SPECIFICATION

This specification sets out the technical and evaluation requirements for mobile stations and portable equipment (hereafter referred to as “the equipment”) for use in the Global System for Mobile Communications (GSM) 900 MHz and 1800 MHz bands.

## 2. ELECTRICAL SAFETY

The equipment shall comply with HKTA 2001 “Compliance Test Specification - Safety and Electrical Protection Requirements for Subscriber Telecommunications Equipment” issued by the TA.

## 3. OPERATING FREQUENCIES

The equipment for use in the GSM 900 service shall have the following operating frequency ranges and carrier spacing –

<u>Mobile Transmit</u>	<u>Mobile Receive</u>	<u>Carrier Spacing</u>
890-915 MHz	935-960 MHz	200 kHz

The equipment for use in the EGSM<sup>1</sup> service shall have the following operating frequency ranges and carrier spacing –

<u>Mobile Transmit</u>	<u>Mobile Receive</u>	<u>Carrier Spacing</u>
880-915 MHz	925-960 MHz	200 kHz

The equipment for use in the GSM 1800 service shall have the following operating frequency ranges and carrier spacing –

<u>Mobile Transmit</u>	<u>Mobile Receive</u>	<u>Carrier Spacing</u>
1710-1785 MHz	1805-1880 MHz	200 kHz

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<sup>1</sup> EGSM band stands for Extended GSM band, which includes standard GSM band plus downward extended spectrum of 880 – 890 MHz paired with 925 – 935 MHz.

#### **4. TECHNICAL REQUIREMENTS**

The equipment shall meet the technical requirements as specified in the standard EN 301 511 “Global System for Mobile communications (GSM); Harmonized EN for mobile stations in the GSM 900 and GSM 1800 bands covering essential requirements under article 3.2 of the R&TTE directive (1999/5/EC)” published by the European Telecommunications Standards Institute (ETSI).

Note:

The technical requirements for the supplementary service laid down in the above standard under reference are applicable only when the equipment supports the relevant supplementary services.

#### **5. EVALUATION REQUIREMENTS**

The equipment shall comply with the safety requirements, operating frequencies and technical requirements as specified in clauses 2, 3 and 4 respectively. Compliance with the technical requirements shall be evaluated in accordance with the procedures specified in the ETSI standard as given in clause 4.

#### **6. REFERENCE**

- (a) HKTA 2001 “Compliance Test Specification - Safety and Electrical Protection Requirements for Subscriber Telecommunications Equipment” issued by the TA
- (b) EN 301 511 “Global System for Mobile communications (GSM); Harmonized EN for mobile stations in the GSM 900 and GSM 1800 bands covering essential requirements under article 3.2 of the R&TTE directive (1999/5/EC)” published by the ETSI

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