

RADIO SPECTRUM AND TECHNICAL STANDARDS ADVISORY COMMITTEE

**Proposed technical standard
for GSM-R radiocommunications equipment**

Purpose

This paper proposes the adoption of the following technical standard –

HKCA 1064 Issue 1	Performance Specification for Global System for Mobile communications – Railway (GSM-R) Radiocommunications Equipment
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Background

2. GSM-R is a radiocommunications standard in railway communications between trains and railway control centres for both voice and data communications services. Since GSM-R system will be used in the Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL), part of which runs within the territory of Hong Kong, it is necessary to adopt a technical standard so that GSM-R equipment may be certified under the Hong Kong Telecommunications Equipment Evaluation and Certification (HKTEC) Scheme.

Proposed HKCA 1064 Issue 1

3. GSM-R system is built on GSM technology. The harmonized technical standards for GSM equipment published by the European Telecommunications Standards Institute (ETSI) also cover GSM-R equipment in the designated GSM-R frequency bands, i.e. the 885 - 889 MHz uplink and 930 - 934 MHz downlink. In addition, there are also harmonized technical standards from the European Committee for Electrotechnical Standardization (CENELEC) covering electromagnetic compatibility (EMC) requirements for equipment used in railway communications. Having considered the technical requirements and the test procedures, it is recommended that the relevant ETSI and CENELEC standards be adopted in HKCA 1064 “Performance Specification for Global System for Mobile communications – Railway (GSM-R) Radiocommunications

Equipment ”.

4. The proposed specification of HKCA 1064 covers the following aspects –
 - (a) EMC requirements for GSM-R base station and repeater equipment and mobile station/portable equipment; and
 - (b) electrical and radiation safety requirements for the GSM-R mobile station/portable equipment.

The specification, once adopted, will replace the type acceptance criteria titled “Type Acceptance Criteria for Global System for Mobile Communications – Railway (GSM-R) Radiocommunications Equipment Operating in the 885 – 889 MHz and 930 – 934 MHz Frequency Bands” previously issued by the CA.

Certification Requirement

5. GSM-R base stations, repeaters, mobile stations and portable equipment are classified under the Compulsory Certification Scheme (CCS) of the HKTEC Scheme. Such equipment must be certified under the HKTEC Scheme before they can be used in Hong Kong.

WTO Notification

6. Since the proposed HKCA 1064 is based on European harmonized standards which are widely used internationally, notification to the World Trade Organisation (WTO) is not required.

Recommendation

7. It is recommended that HKCA 1064 Issue 1 attached in the Annex be adopted by the CA.

Advice Sought

8. Members are invited to give their comments on the recommendation above.

**Office of the Communications Authority
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