

Unofficial Translation

(DRAFT)

Notification of the National Broadcasting and Telecommunications Commission on Technical Standards of Telecommunication Equipment for Base Station and Repeater in Cellular Land Mobile Service Using GSM-R Technology

Whereas it is deemed appropriate to prescribe technical standards of telecommunication equipment for base station and repeater in cellular land mobile service using Global System for Mobile Communications-Railway (GSM-R) technology in order to keep pace with the advancement of current technology and to support railway transportation;

Pursuant to Section 27 (10) and (24) and Section 81 of the Act on Organization to Assign Radio Frequency and to Regulate the Broadcasting and Telecommunication Services, B.E. 2553 (2010), in conjunction with Section 32 of the Telecommunications Business Act B.E. 2544 (2001) and Section 29 (4) of the Radiocommunications Act B.E. 2498 (1955), the National Broadcasting and Telecommunications Commission hereby issues a Notification as follows:

1. This Notification shall come into force as from the day following the date of its publication in the Royal Thai Government Gazette.
2. All other notifications, rules, regulations and orders, insofar as they deal with matters provided herein or are contrary hereto or inconsistent herewith, shall be replaced by this Notification.
3. Technical Standards of Telecommunication Equipment for Base Station and Repeater in Cellular Land Mobile Service Using GSM-R Technology are detailed in the Technical Standards No. NBTC TS 10xx-256x appended hereto.

Issued on the xx day of xxx B.E. 25xx (20xx)

(Clinical Professor Sarana Boonbaichaiyapruck)

Chairman of the National Broadcasting and Telecommunications Commission



Technical Standards of Telecommunication Equipment

NBTC TS 10XX – 256X

Base Station and Repeater
in Cellular Land Mobile Service
Using GSM-R Technology

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NBTC TS 10XX – 256X
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1. Scope

These technical standards specify the minimum technical characteristics of telecommunication equipment for base station and repeater in cellular land mobile service using Global System for Mobile Communications-Railway (GSM-R) technology.

2. Operating Frequency

Operating frequency of telecommunication equipment for base station and repeater in cellular land mobile service using GSM-R technology shall comply with relevant National Broadcasting and Telecommunications Commission (NBTC) Notification on Frequency Plan or frequency specified by NBTC.

3. Technical Requirements

3.1 Radio Frequency Requirements for Base Station

The technical requirements of telecommunication equipment for base station in cellular land mobile service using GSM-R technology shall comply with the following standard:

ETSI EN 301 502 : V12.5.1 or newer version	Global System for Mobile communications (GSM); Base Station (BS) equipment; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU
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3.2 Radio Frequency Requirements for Repeater

The technical requirements of telecommunication equipment for repeater in cellular land mobile service using GSM-R technology shall comply with the following standard:

ETSI EN 300 609-4	Global System for Mobile communications (GSM); Part 4: Harmonized EN for GSM Repeaters covering the essential requirements of article 3.2 of the R&TTE Directive
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3.3 Electrical Safety Requirements

The electrical safety requirements of telecommunication equipment for base station and repeater in cellular land mobile service using GSM-R technology shall comply with one of the following standards:

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|-------|--|---|
| 3.3.1 | IEC 60950-1 : | Information Technology Equipment – Safety – Part 1: General Requirements |
| 3.3.2 | TIS 1561 – 2556 :
or current version | Information Technology Equipment -Safety: General Requirements |
| 3.3.3 | IEC 62368-1 : | Audio/Video, information and Communication technology equipment - Part 1: Safety Requirements |
| 3.3.4 | TIS 62368 Part 1-2563:
or newer version | Audio/Video, information and Communication technology equipment - Part 1: Safety Requirements |

3.4 Radiation Exposure Requirements

The use of telecommunication equipment for base station and repeater in cellular land mobile service using GSM-R technology shall comply with the safety standard for the use of radiocommunication equipment on human health and safety criteria and measure for the use of radiocommunication equipment on human health prescribed by NBTC.

4. Conformity with the Standard

The telecommunication equipment for base station and repeater in cellular land mobile service using GSM-R technology shall present its conformity with these standards. It shall be regarded as telecommunication equipment Type B prescribed in the Notification of the National Telecommunication Commission on Conformity Assessment of Telecommunication Equipment.

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Reference

1. ETSI EN 301 502 (V12.5.1): Global System for Mobile communications (GSM); Base Station (BS) equipment; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU
2. ETSI EN 300 609-4: Global System for Mobile communications (GSM); Part 4: Harmonized EN for GSM Repeaters covering the essential requirements of article 3.2 of the R&TTE Directive
3. IEC 60950-1: Information Technology Equipment – Safety – Part 1: General Requirements
4. TIS 1561 – 2556: Information Technology Equipment -Safety: General Requirements
5. IEC 62368–1: Audio/Video, information and Communication technology equipment - Part 1: Safety Requirements
6. TIS 62368 Part 1-2563: Audio/Video, information and Communication technology equipment - Part 1: Safety Requirements