



SLOVENSKI STANDARD

SIST ETS 300 609-4 E3:2003

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Digital cellular telecommunications system (Phase 2 and Phase 2+) (GSM); Base Station System (BSS) equipment specification; Part 4: Repeaters (GSM 11.26 version 5.1.1)

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ICS:

33.070.50	Globalni sistem za mobilno telekomunikacijo (GSM)	Global System for Mobile Communication (GSM)
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**Digital cellular telecommunications system (Phase 2 & Phase 2+);
Base Station System (BSS) equipment specification;
Part 4: Repeaters
(GSM 11.26 version 5.1.1)**

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Foreword

This European Telecommunication Standard (ETS) has been produced by the Special Mobile Group (SMG) Technical Committee of the European Telecommunications Standards Institute (ETSI).

This European Telecommunication Standard (ETS) describes the Radio Frequency (RF) tests for GSM 900 and DCS 1800 repeaters within the digital cellular telecommunications system (Phase 2/Phase 2+).

The contents of this ETS may be subject to continuing work within SMG and may change following formal SMG approval. Should SMG modify the contents of this ETS, it will be resubmitted for OAP by ETSI with an identifying change of release date and an increase in version number as follows:

Version 5.x.y

where:

- y the third digit is incremented when editorial only changes have been incorporated in the specification;
- x the second digit is incremented for all other types of changes, i.e. technical enhancements, corrections, updates, etc.

Transposition dates	
Date of adoption of this ETS:	23 October 1998
Date of latest announcement of this ETS (doa):	31 January 1999
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Date of withdrawal of any conflicting National Standard (dow):	31 July 1999

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1 Scope

This European Telecommunication Standard (ETS) describes the Radio Frequency (RF) tests for GSM 900 and DCS 1800 repeaters which receive, amplify, and retransmit a received Mobile Station (MS) signal in the GSM MS transmit band and simultaneously receive, amplify and retransmit a received Base Transceiver Station (BTS) RF signal in the GSM BTS transmit band.

This ETS is applicable to repeaters meeting the requirements of either GSM Phase 2 or GSM Phase 2+. Unless otherwise stated, all tests are applicable to repeaters meeting Phase 2 and/or Phase 2+ GSM requirements, because the requirements of the Phase 2 and Phase 2+ core GSM specifications which are referenced in the test are consistent. Most differences between Phase 2 and Phase 2+ requirements represent Phase 2+ features which are optional for the BSS to support.

2 Normative references

This ETS incorporates by dated and undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this ETS only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies.

- [1] ETR 100 (GSM 01.04): "Digital cellular telecommunication system (Phase 2); Abbreviations and acronyms".
- [2] ETS 300 019-1-0: "Equipment Engineering (EE): Environmental conditions and environmental tests for telecommunications equipment Part 1-0; Classification of environmental conditions; Introduction".
- [3] ETS 300 019-1-3: "Equipment Engineering (EE): Environmental conditions and environmental tests for telecommunications equipment Part 1-3; Classification of environmental conditions, Stationary use at weather-protected locations".
- [4] ETS 300 019-1-4: "Equipment Engineering (EE): Environmental conditions and environmental tests for telecommunications equipment Part 1-4; Classification of environmental conditions, Stationary use at non-weather-protected locations".
- [5] ETS 300 113: "Radio Equipment and Systems (RES); Land mobile service; Technical characteristics and test conditions for radio equipment intended for the transmission of data (and speech) and having an antenna connector".
- [6] ETS 300 577 (GSM 05.05): "Digital cellular telecommunication system (Phase 2); Radio transmission and reception".
- [7] IEC 68-2: "Basic environmental testing procedures: Part 2 Tests".
- [8] IEC 721: "Classification of environmental conditions".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of this ETS, the following definitions apply:

broadband repeater: A repeater which is designed for operation on any combination of ARFCNs (up to a specified maximum number) within the operating band of the repeater.

channelized repeater: A repeater which is designed for operation on a specified subset of ARFCNs within the operating band of the repeater. The subset of ARFCNs may be determined during the manufacture of the repeater, or may be programmable.

GSM: Unless otherwise specified, references to GSM include both GSM 900 and DCS 1800.