



SLOVENSKI STANDARD

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European digital cellular telecommunications system; Attachment requirements for
Global System for Mobile communications (GSM) mobile stations; Telephony

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ICS:

33.070.50	Globalni sistem za mobilno telekomunikacijo (GSM)	Global System for Mobile Communication (GSM)
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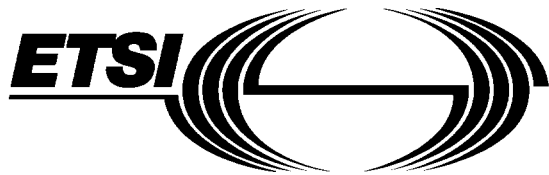
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TECHNICAL BASIS for REGULATION

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**European digital cellular telecommunications system;
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Contents

Foreword	5
1 Scope	7
2 Normative references	7
3 Information from the client to the test laboratory	8
4 Other requirements to GSM mobile stations	8
5 Structure of TBR	8
6 References to GSM core specifications	9
7 Abbreviations	10
8 Receiver	11
8.1 Test 1	11
9 Tests related to circuit switched call control	11
9.1 Circuit Switched Call Control state machine	11
9.1.1 U3 MS originating Call Proceeding - 4th case	11
9.2 Emergency call establishment	12
9.2.1 Emergency call establishment (idle updated)	12
9.2.2 Emergency call establishment (idle, no IMSI)	12
9.3 Call Re-establishment	13
10 Testing of structured procedures	14
10.1 MS originating call establishment, early assignment, release initiated by network (verification of audio path)	14
10.2 MS originating call establishment, early assignment, release initiated by network (verification of audio path)	15
10.3 MS terminating call establishment, early assignment, release initiated by MS (verification of audio path);	16
10.4 MS terminating call establishment, late assignment (verification of audio path)	17
11 Speech teleservices	17
11.1 Test 1	17
11.2 Test 2	18
11.3 Test 3	18
11.4 Test 4	19
11.5 Test 5	20
11.6 Test 6	20
11.7 Test 7	21
11.8 Test 8	21
12 Testing of speech transcoding functions	22
12.1 Downlink speech transcoding	22
12.2 Uplink speech transcoding;	22
12.3 Uplink transmitter DTX functions	23
12.4 Speech channel transmission delay	23
Annex A (informative): TBR 9 MATRIX	25
History	26

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Foreword

This Technical Basis for Regulation (TBR) has been produced by the Special Mobile Group (SMG) Technical Committee of the European Telecommunications Standards Institute (ETSI).

This TBR covers the attachment requirements for terminal equipment for the Global System for Mobile communications (GSM) telephony.

This TBR 9 second edition, has been produced as a result of further work carried out by TC-SMG.

This TBR contains the procedures and requirements for the approval testing of GSM equipment supporting telephony.

The requirements of other TBRs apply in addition to this TBR.

For each test, *SUPPLEMENTARY INFORMATION* is provided, giving a justification why this item has been selected for regulatory testing, and a reference to the relevant article of the Terminal Directive [1].

This TBR is based on GSM 11.10 (I-ETS 300 020-1) [2].

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1 Scope

This Technical Basis for Regulation (TBR) specifies the technical requirements to be provided by terminal equipment capable of connection to a public telecommunications network. These requirements apply to terminals for phase 1 of the public land mobile radio service utilising constant envelope modulation, operating in the 900 MHz band with a channel separation of 200 kHz, and carrying 8 full rate traffic channels per carrier according to the Time Division Multiple Access (TDMA) principle.

This TBR covers the requirements for GSM Telephony (speech).

NOTE: Certain access aspects are part of TBR 5 [7].

For each conformance requirement, one or more test purposes are given. For each test purpose, a single reference is given to the test method in GSM 11.10 (I-ETS 300 020-1) [2]. The requirements apply to speech transmission.

The measurement uncertainty is handled, as described in GSM 11.10 (I-ETS 300 020-1) [2].

This TBR covers the essential requirements of the Terminal Directive 91/263/EEC [1] Article 4g. Articles 4d, 4e and 4f are covered by TBR 5 [7].

The Terminal Directive 91/263/EEC [1] Articles 4a and 4b are covered by other directives, and, therefore, not by this TBR.

In this TBR, there are no EMC technical requirements in terms of the Terminal Directive 91/263/EEC [1], Article 4c.

NOTE: Technical Requirements for EMC performance and testing of the equipment are covered by the relevant standards applicable to the EMC Directive 89/336/EEC, Annex A. (standards.iteh.ai)

Terminal equipment may be subject to additional requirements in other Common Technical Regulations (CTR) depending on the equipments' functionality.

GSM 11.10 (I-ETS 300 020-1) [2] constitutes the full conformance test suite for GSM. The verification of the conformance requirements in this TBR are based on the tests described in this reference. The set of requirements in GSM 11.10 (I-ETS 300 020-1) [2] and the set of requirements in this TBR need not be identical.

2 Normative references

This TBR incorporates, by dated or 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 revision of any of these publications apply to the requirements specified in this TBR, only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

- [1] Terminal Directive 91/263/EEC: "Council directive of 29 April 1991 on the approximation of the laws of the Member States concerning telecommunications terminal equipment, including the mutual recognition of their conformity. ("The Terminal Directive)".
- [2] GSM 11.10 (I-ETS 300 020-1): "European digital cellular telecommunications system (phase 1); Mobile station conformity specifications".
- [3] CCITT Recommendation X.290 (1991): "Open Systems Interconnection - Conformance Testing Methodology and Framework, General Concepts".
- [4] CCITT Recommendation X.291 (1991): "Open Systems Interconnection - Conformance Testing Methodology and Framework, Abstract Test Suite Specification".

- [5] CCITT Recommendation X.294 (1991): "Open Systems Interconnection - Conformance Testing Methodology and Framework, Requirements on Test Laboratories and Clients for the Conformance Assessment Process".
- [6] ETS 300 085 (1990): "Integrated Services Digital Network (ISDN); 3,1 kHz telephony teleservice attachment requirements for handset terminals".
- [7] prTBR 5: "European digital cellular telecommunications system; Attachment requirements for Global System for Mobile communications (GSM) mobile stations; Mobile Services".

3 Information from the client to the test laboratory

The applicability of the individual tests in this TBR is dependent on the type of equipment submitted for approval.

The information required to be supplied from the client to the test laboratory appears in Annex 3 of GSM 11.10 (I-ETS 300 020-1) [2].

NOTE: The terms PICS and PIXIT in GSM 11.10 (I-ETS 300 020-1) [2] are not the same as the corresponding terms in CCITT Recommendation X.290 [3] and CCITT Recommendation X.291 [4].

4 Other requirements to GSM mobile stations

Some special test functions in GSM 11.10 (I-ETS 300 020-1) [2] shall be implemented by the manufacturer.

5 Structure of TBR

Test group objective (where applicable): gives a narration of the common objective for a group of closely related test cases.

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Test purpose (single or multiple): describes the purpose for performing a particular test i.e. which behaviour, action, etc. is to be tested.

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Test case references (procedures in GSM 11.10 (I-ETS 300 020-1) [2]): points to the detailed test method and procedure in GSM 11.10 (I-ETS 300 020-1) [2] to be used for the test.

Conformance requirement: describes the requirements to be met in the test.

Requirement reference (from the core specifications); identifies the GSM core specification(s) accommodating the requirement(s) for these test results. The identification is as accurate as possible, basically down to a logical unit of the given specification (chapter, section, subsection, etc.) determined on a per case basis.

6 References to GSM core specifications

This TBR incorporates by versioned references provisions from other GSM specifications. These specifications should be considered when using this TBR.

NOTE: This GSM specification list is applicable to all GSM phase 1 related TBRs and therefore may contain more specifications than actually referred to in this TBR.

<u>Number</u>	<u>Version</u>	<u>Title</u>
GSM		
02.02	3.2.0	Bearer Services Supported by a GSM PLMN
02.03	3.4.0	Teleservices Supported by a GSM PLMN
02.04	3.7.1	Description of Supplementary Services
02.06	3.2.0	Types of Mobile Stations
02.07	3.4.1	Mobile Station Features
02.09	3.1.0	Security Aspects
02.11	3.7.0	Service Accessibility
02.16	3.0.1	International MS Equipment Identities
02.17	3.2.0	Subscriber Identity Modules, Functional Characteristics
02.30	3.9.0	Man-machine Interface of the Mobile Station
02.40	3.2.0	Procedures for Call Progress Indications
02.82	3.6.1	Call Offering Supplementary Services
02.88	3.6.1	Call Restriction Supplementary Services
03.03	3.6.0	Numbering, Addressing and Identification
03.05	3.2.0	Technical performance objectives
03.10	3.3.0	GSM PLMN Connection Types
03.13	3.0.2	Discontinuous Reception (DRX) in the GSM System
03.14	3.0.2	Support of DTMF via the GSM System
03.20	3.3.2	Security-related Network Functions
03.40	3.7.0	Technical Realization Short Message Service Point-to-point
03.41	3.4.0	Technical Realization of Short Message Service Cell Broadcast
03.43	3.0.1	Technical Realization of Videotex
03.44	3.0.1	Support of Teletex in a GSM PLMN
03.45	3.3.0	Technical Realization of Facsimile Group 3 Service - transparent
03.46	3.2.1	Technical Realization of Facsimile Group 3 Service - non transparent
03.50	3.4.0	Transmission Planning Aspects of the Speech Service in the GSM PLMN System
04.01	3.0.1	MS-BSS Interface - General Aspects and Principles
04.02	3.0.2	GSM PLMN Access Reference Configuration
04.03	3.0.3	MS-BSS Interface : Channel Structures and Access Capabilities
04.04	3.3.4	MS-BSS Layer 1 - General Requirements
04.05	3.1.5	MS-BSS Data Link Layer - General Aspects
04.06	3.9.0	MS-BSS Data Link Layer Specification
04.07	3.3.3	Mobile Radio Interface Signalling Layer 3 -General Aspects
04.08	3.13.0	Mobile Radio Interface - Layer 3 Specification
04.10	3.2.3	Mobile Radio Interface Layer 3 -Supplementary Services Specification -General Aspects
04.11	3.3.0	Point-to-point Short Message Service Support on Mobile Radio Interface
04.12	3.2.1	Cell Broadcast Short Message Service Support on Mobile Radio Interface
04.21	3.4.0	Rate Adaptation on MS-BSS Interface
04.22	3.7.0	Radio Link Protocol for Data and Telematic Services on the MS-BSS Interface
04.80	3.2.0	Mobile Radio Interface Layer 3 - SS Specification - Formats and Coding
04.82	3.1.3	Mobile Radio Interface Layer 3 - Call Offering SS Specification
04.88	3.1.3	Mobile Radio Interface Layer 3 - Call Restriction SS Specification
05.01	3.3.2	Physical Layer on the Radio Path (General Description)
05.02	3.6.1	Multiplexing and Multiple Access on the Radio Path
05.03	3.6.1	Channel Coding
05.04	3.1.2	Modulation
05.05	3.16.0	Radio Transmission and Reception
05.08	3.7.0	Radio Subsystem Link Control
05.10	3.5.1	Radio Subsystem Synchronization
06.01	3.0.0	Speech Processing Functions : General Description