

SLOVENSKI STANDARD
SIST TBR 005:2000

01-julij-2000

9 j fcdg_]`X][]HUb]`W]Yb]`HYY_ca i b]_UWg_]`g]ghYa !`Df]`1]j YbYnU hYj Y
a cV]`b]`dcgHUb]`g]ghYa U; GA `f[`cVUb]`g]ghYa `a cV]`b]`ca i b]_UW!`8cgkcd

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

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Ta slovenski standard je istoveten z: [SIST TBR 005:2000](https://standards.iteh.ai/catalog/standards/sist/551d8973-df8c-4cac-9ddb-26de6d36f490/sist-tbr-005-2000) **TBR 005 Edition 2**
<https://standards.iteh.ai/catalog/standards/sist/551d8973-df8c-4cac-9ddb-26de6d36f490/sist-tbr-005-2000>

ICS:

33.070.50	Globalni sistem za mobilno telekomunikacijo (GSM)	Global System for Mobile Communication (GSM)
-----------	---	--

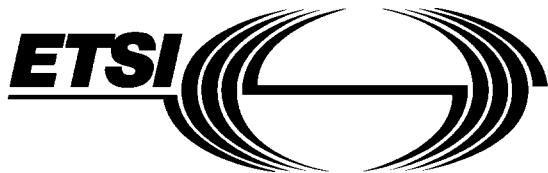
SIST TBR 005:2000

en

**iTeh STANDARD PREVIEW
(standards.iteh.ai)**

SIST TBR 005:2000

[https://standards.iteh.ai/catalog/standards/sist/551d8973-df8c-4cac-9ddb-
26de6d36f490/sist-tbr-005-2000](https://standards.iteh.ai/catalog/standards/sist/551d8973-df8c-4cac-9ddb-26de6d36f490/sist-tbr-005-2000)



TECHNICAL BASIS for REGULATION

TBR 5

October 1995

Second Edition

Source: ETSI TC-SMG

Reference: RTBR/SMG-0005

ICS: 33.060.50

Key words: European digital cellular telecommunications system, Global System for Mobile communications (GSM)

iTeh STANDARD PREVIEW

European digital cellular telecommunications system; (standards.iteh.ai)

Attachment requirements for Global System for Mobile communications (GSM) mobile stations

TS 102 290

[https://standards.iteh.ai/catalog/standards/sist/551d8973-df8c-4cac-9ddb-
26de6d36f490](https://standards.iteh.ai/catalog/standards/sist/551d8973-df8c-4cac-9ddb-26de6d36f490) Access

ETSI

European Telecommunications Standards Institute

ETSI Secretariat

Postal address: F-06921 Sophia Antipolis CEDEX - FRANCE
Office address: 650 Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE
X.400: c=fr, a=atlas, p=etsi, s=secretariat - **Internet:** secretariat@etsi.fr

Tel.: +33 92 94 42 00 - Fax: +33 93 65 47 16

Copyright Notification: No part may be reproduced except as authorized by written permission. The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 1995. All rights reserved.

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST TBR 005:2000

[https://standards.iteh.ai/catalog/standards/sist/551d8973-df8c-4cac-9ddb-
26de6d36f490/sist-tbr-005-2000](https://standards.iteh.ai/catalog/standards/sist/551d8973-df8c-4cac-9ddb-26de6d36f490/sist-tbr-005-2000)

Contents

Foreword	11
1 Scope	13
2 Normative references.....	13
3 Information from the client to the test laboratory.....	14
4 Other requirements for GSM mobile stations.....	14
5 Structure of the TBR	14
6 References to GSM core specifications	15
7 Abbreviations.....	16
8 General tests and procedures.....	18
8.1 Support and non-support of services.....	18
8.2 Support of single numbering scheme	19
8.3 IMEI Security.....	20
9 Spurious emissions.....	20
9.1 MS allocated a channel (conducted spurious emissions).....	20
9.2 MS in idle mode (conducted spurious emissions)	21
9.3 MS allocated a channel (radiated spurious emissions)	22
9.4 MS in idle mode (radiated spurious emissions)	23
10 Transmitter	23
10.1 Phase error and frequency error.....	23
10.2 Frequency error under multipath and interference conditions	24
10.3 Peak transmitter carrier power and burst timing.....	25
10.4 Output RF spectrum, modulation and switching transients	28
11 Receiver	29
11.1 Sensitivity	29
11.1.1 Reference Sensitivity for TCH/FS	29
11.1.2 Reference sensitivity for Control Channel (CCH).....	30
11.2 Usable Receiver Input Level Range	31
11.3 Co-channel rejection.....	32
11.3.1 TCH-Full Rate Speech	32
11.3.2 Control Channel	33
11.4 Adjacent channel rejection.....	34
11.4.1 Adjacent interferer 200 kHz (I2W).....	34
11.4.2 Adjacent interferer 400 kHz (I4W).....	35
11.5 Intermodulation rejection	38
11.6 Blocking and spurious response.....	39
11.6.1 TCH-Full Rate Speech	39
11.6.2 TCH Control Channel	39
12 Tests of Layer 2 signalling functions	40
12.1 Timing requirements and frame format	40
12.1.1 Timing requirements	40
12.1.2 Frame format.....	41
12.2 Initialisation when contention resolution required	41
12.2.1 Normal initialisation	42
12.2.2 Initialisation failure.....	42

12.2.2.1	Loss of UA frame.....	42
12.2.2.2	UA frame with different information field.....	43
12.2.2.3	Information frame or supervisory frames in response to an SABM frame ...	44
12.2.3	Initialisation denial.....	44
12.2.4	Total initialisation failure	45
12.3	Initialisation, contention resolution not required	46
12.3.1	Normal initialisation.....	46
12.3.2	Initialisation failure	47
12.3.3	Initialisation denial.....	47
12.3.4	Total initialisation failure	48
12.4	Normal information transfer	49
12.4.1	Sequence counting and I frame acknowledgements.....	49
12.4.2	Receipt of an I frame in the timer recovery state.....	50
12.4.3	Segmentation and concatenation	51
12.5	Normal Layer 2 disconnection.....	52
12.6	RR response frame loss (MS to SS)	52
12.7	Test of frame transmission with incorrect C/R value.....	53
12.8	Test of errors in the control field.....	54
12.9	Test on receipt of invalid frame	54
13	Initial Tests.....	56
13.1	Scheduling of the channel request transmission.....	56
13.1.1	Txinteger is low, non-combined case	56
13.1.2	Txinteger is low, combined case	57
13.1.3	Txinteger and Maxretrans are put to random values, non combined case ..	59
13.1.4	Txinteger and Maxretrans are put to random values, combined case	60
13.1.5	Test of random generator	61
13.2	IMSI detach/attach	62
13.2.1	IMSI attach and detach are not allowed, SIM remains continuously in the ME	62
13.2.2	IMSI attach and detach are not allowed, SIM is removed and put again.....	63
13.2.3	IMSI attach and detach are required, the MS is powered off.....	64
13.2.4	IMSI attach and detach are required, the MS is powered on.....	64
13.2.5	IMSI attach and detach are required, SIM is removed.....	65
13.2.6	IMSI attach and detach are required, SIM is inserted.....	66
13.3	Test of sequenced MM/CC message transfer	67
14	Test of MS functions in idle mode	67
14.1	MS indication of available PLMN.....	67
14.2	MS will send only if BSS is "On air"	68
15	Test of L3 error handling	69
15.1	Errors in L3 messages	69
15.1.1	Wrong protocol discriminator.....	69
15.2	Test of MS reaction to errors in Transaction Identifier	69
15.2.1	Test of TI error in RR management message	69
15.2.2	Test of TI error in MM message	70
15.2.3	Test of TI error in CC message	71
15.2.3.1	Test of TI error in CC message - 1st case	71
15.2.3.2	Test of TI error in CC message - 2nd case	71
15.2.3.3	Test of TI error in CC message - 3rd case	72
15.2.3.4	Test of TI error in CC message - 4th case	72
15.3	Test of message type errors	73
15.3.1	Test of MS reaction to non-existent message type - CC protocol	73
15.3.2	Test of MS reaction to message inconsistent with Call Control PD.....	74
15.3.3	Test of MS reaction to message inconsistent with call state	74
15.4	Test of general information element errors	75
15.4.1	Test of MS response to duplicated Information Elements	75
15.5	Test of MS reaction to mandatory information element errors.....	76
15.5.1	Test of MS reaction to Mandatory Information Element errors in RR message	76
15.5.1.1	Test of MS reaction to Mandatory Information Element errors in RR message - CHANNEL RELEASE	76

15.5.1.2	Test of MS reaction to Mandatory Information Element errors in RR message - CIPHER MODE COMMAND	76
15.5.2	Test of MS reaction to Mandatory Information Element errors in MM message.....	77
15.5.3	Test of MS reaction to Mandatory information Element errors in CC message.....	77
15.5.3.1	Test of MS reaction to Mandatory Information Element errors in CC message - 1st case	77
15.5.3.2	Test of MS reaction to Mandatory Information Element errors in CC message - 2nd case	78
15.5.3.3	Test of MS reaction to Mandatory Information Element errors in CC message - 3rd case.....	79
15.6	Test of MS reaction to non-mandatory information element errors	79
15.6.1	Test of MS reaction to non-mandatory information element errors in RR message.....	79
15.6.1.1	Test of MS reaction to unrecognized information element in RR message on a dedicated control channel - comprehension required	79
15.6.1.2	Test of MS reaction to unrecognized information element in RR message on a dedicated control channel - comprehension not required	80
15.6.2	Test of MS reaction to non-mandatory information element errors in MM message.....	80
15.6.2.1	Test of MS reaction to non-mandatory information element errors in MM messages - comprehension required.....	80
15.6.2.2	Test of MS reaction to non-mandatory information element errors in MM messages - comprehension not required.....	81
15.6.3	Test of MS reaction to non-mandatory information element errors in CC message.....	82
15.6.3.1	Test of MS reaction to non-mandatory information element errors in CC messages - 1st case	82
15.6.3.2	Test of MS reaction to non-mandatory information element errors in CC messages - 2nd case	83
15.6.3.3	Test of MS reaction to non-mandatory information element errors in CC messages - 3rd case	83
15.6.3.4	Test of MS reaction to non-mandatory information element errors in CC messages - 4th case	84
15.6.3.5	Test of MS reaction to non-mandatory information element errors in CC messages - 5th case	85
16	Elementary procedures for Radio Resource management.....	85
16.1	Immediate assignment.....	85
16.1.1	Assignment procedure	85
16.1.2	Extended assignment.....	86
16.1.3	Assignment rejection	88
16.1.4	Ignore assignment for another MS.....	88
16.2	Test of paging	89
16.2.1	Normal paging	89
16.2.1.1	Paging request type 1.....	89
16.2.1.2	Paging request type 2.....	90
16.2.1.3	Paging request type 3.....	92
16.2.1.4	MS with no more TMSI available.....	92
16.2.2	Extended paging	93
16.2.3	Paging reorganisation	94
16.2.4	No change of page mode.....	95
16.3	Measurement report	95
16.3.1	No neighbouring cells.....	96
16.3.2	All neighbours present.....	96
16.3.3	Combination of barred cells and un-permitted PLMNs	97
16.3.4	Use of DTX in the measurement report	97
16.4	Test of dedicated channel assignment	98
16.4.1	Assignment completion	98
16.4.2	Assignment failure.....	100
16.5	Test of handover.....	100

16.5.1	Non synchronized handover during call in progress towards a TCH/F without frequency hopping	100
16.5.2	Non synchronized handover during call in progress, from a TCH/H without frequency hopping to a TCH/H with frequency hopping	101
16.5.3	Non synchronized handover during call establishment from TCH/F with frequency hopping to TCH/F with frequency hopping	102
16.5.4	Non synchronized handover during call establishment from SDCCH with frequency hopping to TCH/F without frequency hopping	103
16.5.5	Synchronized handover during call in progress from TCH/F with frequency hopping to TCH/F without frequency hopping	105
16.5.6	Synchronized handover during call in progress from TCH/H with frequency hopping to TCH/H without frequency hopping	105
16.5.7	Synchronized handover during call establishment from SDCCH with frequency hopping to SDCCH with frequency hopping	106
16.5.8	Synchronized handover during call establishment from TCH/F without frequency hopping to TCH/F with frequency hopping	108
16.5.9	Synchronized handover during call establishment from SDCCH without frequency hopping to TCH/F without frequency hopping	109
16.5.10	Layer 3 failure on the target cell during non synchronized handover procedure from TCH/F with frequency hopping to TCH/F without frequency hopping	110
16.5.11	Layer 1 failure on the target cell during non synchronized handover procedure from TCH/F without frequency hopping to TCH/F with frequency hopping	111
16.6	Frequency redefinition	111
16.7	Transmission mode change	112
16.8	Ciphering mode setting	113
16.9	Classmark change	114
16.10	Channel release	115
16.11	Ciphering mode setting for MS supporting A5/2	116
16.12	Classmark Interrogation	117
17	Elementary procedures of Mobility Management (MM)	117
17.1	Test of TMSI reallocation procedure	117
17.2	Test of authentication procedure	118
17.3	Test of identification procedure	119
17.4	Test of location updating procedure	120
17.4.1	Location updating accepted	120
17.4.2	Location updating reject	121
17.4.2.1	Location updating reject cause "IMSI unknown in HLR"	121
17.4.2.2	Location updating reject cause "PLMN not allowed"	122
17.4.2.3	Location updating reject cause "Location area not allowed"	124
17.4.3	Abnormal cases during location updating procedure	125
17.4.3.1	Random access fails	125
17.4.3.2	Attempt counter smaller than 4, stored LAI different from broadcast LAI	126
17.4.3.3	Attempt counter greater or equal to 4, stored LAI different from broadcast LAI	128
17.4.3.4	Attempt counter smaller than 4, stored LAI equal to broadcast LAI	130
17.4.4	Test of periodic updating	132
17.5	MM connection establishment	134
17.5.1	MM connection establishment with cipher mode setting	134
17.5.2	MM connection establishment rejected with cause "IMSI unknown in VLR"	134
18	Tests related to circuit switched Call Control (CC)	135
18.1	Circuit switched Call Control state machine	135
18.1.1	Establishment of an outgoing call	135
18.1.1.1	U0 null state	135
18.1.1.2	U0.1 MM connection pending	136
18.1.1.2.1	U0.1 MM connection pending - 1st case	136
18.1.1.2.2	U0.1 MM connection pending - 2nd case	136
18.1.1.2.3	U0.1 MM connection pending - 3rd case	137
18.1.1.3	U1 call initiated	138
18.1.1.3.1	U1 call initiated - 1st case	138

18.1.1.3.2	U1 call initiated - second case.....	138
18.1.1.3.3	U1 call initiated - 3rd case	139
18.1.1.3.4	U1 call initiated - 4th case	139
18.1.1.3.5	U1 call initiated - 5th case	140
18.1.1.3.6	U1 call initiated - 6th case	141
18.1.1.3.7	U1 call initiated - 7th case	141
18.1.1.4	U3 MS originating call proceeding.....	142
18.1.1.4.1	U3 MS originating call proceeding - first case	142
18.1.1.4.2	U3 MS originating call proceeding - 2nd case.....	142
18.1.1.4.3	U3 MS originating call proceeding - 3rd case.....	143
18.1.1.4.4	U3 MS originating call proceeding - 4th case	144
18.1.1.4.5	U3 MS originating call proceeding - 5th case	144
18.1.1.4.6	U3 MS originating call proceeding - 6th case	145
18.1.1.4.7	U3 MS originating call proceeding - 7th case	146
18.1.1.4.8	U3 MS originating call proceeding - 8th case	146
18.1.1.4.9	U3 MS originating call proceeding - 9th case	147
18.1.1.4.10	U3 MS originating call proceeding - 10th case	147
18.1.1.4.11	U3 MS originating call proceeding - 11th case	148
18.1.1.5	U4 call delivered.....	149
18.1.1.5.1	U4 call delivered - 1st case	149
18.1.1.5.2	U4 call delivered - 2nd case	149
18.1.1.5.3	U4 call delivered - 3rd case	150
18.1.1.5.4	U4 call delivered - 4th case	150
18.1.1.5.5	U4 call delivered - 5th case	151
18.1.1.5.6	U4 call delivered - 6th case	152
18.1.1.5.7	U4 call delivered - 7th case	152
18.1.1.5.8	U4 call delivered - 8th case	153
18.1.1.6	U10 call active.....	154
18.1.1.6.1	U10 call active - 1st case.....	154
18.1.1.6.2	U10 call active - 2nd case	154
18.1.1.6.3	U10 call active - 3rd case	155
18.1.1.6.4	U10 call active - 4th case	155
18.1.1.7	U11 disconnect request.....	156
18.1.1.7.1	U11 disconnect request - 1st case.....	156
18.1.1.7.2	U11 disconnect request - 2nd case.....	157
18.1.1.7.3	U11 disconnect request - 3rd case	157
18.1.1.7.4	U11 disconnect request - 4th case	158
18.1.1.7.5	U11 disconnect request - 5th case	159
18.1.1.8	U12 disconnect indication.....	159
18.1.1.8.1	U12 Disconnect Indication - 1st case	159
18.1.1.8.2	U12 Disconnect Indication - 2nd case	160
18.1.1.8.3	U12 Disconnect Indication - 3rd case	161
18.1.1.8.4	U12 Disconnect Indication - 4th case	161
18.1.1.9	U19 Release Request.....	162
18.1.1.9.1	U19 Release Request - 1st case.....	162
18.1.1.9.2	U19 Release Request - 2nd case	162
18.1.1.9.3	U19 Release Request - 3rd case	163
18.1.1.9.4	U19 Release Request - 4th case	164
18.1.1.9.5	U19 Release Request - 5th case	164
18.1.2	Incoming Call.....	165
18.1.2.1	U0 Null state	165
18.1.2.1.1	U0 Null state - 4th case	165
18.1.2.1.2	U0 Null state - 2nd case	165
18.1.2.2	U6 Call Present	166
18.1.2.2.1	U6 Call Present - 1st case	166
18.1.2.2.2	U6 Call Present - 2nd case	167
18.1.2.2.3	U6 Call Present - 5th case	167
18.1.2.2.4	U6 Call Present - 6th case	168
18.1.2.3	U9 MS Terminating Call Confirmed.....	168
18.1.2.3.1	U9 MS Terminating Call Confirmed - 1st/2nd case	168
18.1.2.3.2	U9 MS Terminating Call Confirmed - 4th case	169
18.1.2.3.3	U9 MS Terminating Call Confirmed - 5th case	170
18.1.2.3.4	U9 MS Terminating Call Confirmed - 6th case	170

18.1.2.3.5	U9 MS Terminating Call Confirmed - 7th case.....	171
18.1.2.3.6	U9 MS Terminating Call Confirmed - 8th case.....	172
18.1.2.4	U7 Call Received	172
18.1.2.4.1	U7 Call Received - 1st case	172
18.1.2.4.2	U7 Call Received - 2nd case	173
18.1.2.4.3	U7 Call Received - 3rd case	173
18.1.2.4.4	U7 Call Received - 5th case	174
18.1.2.4.5	U7 Call Received - 6th case	175
18.1.2.4.6	U7 Call Received - 7th case	175
18.1.2.4.7	U7 Call Received - 8th case	176
18.1.2.5	U8 Connect Request	176
18.1.2.5.1	U8 Connect Request - 1st case.....	176
18.1.2.5.2	U8 Connect Request - 2nd case.....	177
18.1.2.5.3	U8 Connect Request - 3rd case	178
18.1.2.5.4	U8 Connect Request - 4th case.....	178
18.1.2.5.5	U8 Connect Request - case 5a.....	179
18.1.2.5.6	U8 Connect Request - 6th case	179
18.1.2.5.7	U8 Connect Request - 7th case.....	180
18.1.2.5.8	U8 Connect Request - 8th case.....	181
18.1.2.5.9	U8 Connect Request - 9th case.....	181
18.1.3	In call functions	182
18.1.3.1	U10 call active - 8th case.....	182
18.1.3.2	U10 call active - 9th case.....	182
18.2	Emergency call establishment	183
18.2.1	Emergency call establishment (idle updated)	183
18.2.2	Emergency call establishment (Idle, no IMSI)	184
18.2.3	Emergency Call Rejection	186
18.3	Call Re-establishment.....	187
18.3.1	Call present, re-establishment allowed (No verification of audio path).....	187
18.3.2	Call Present , re-establishment not allowed	188
18.3.3	Call under establishment, re-establishment allowed	188
18.4	DTMF information transfer	189
18.5	User to User signalling	190
19	Testing of structured procedures..... https://standards.iteh.ai/catalog/standards/sist/551d8973-df8c-4cac-9ddb-26d16156290/sist-br-005-2000	190
19.1	MS originating call establishment, early assignment, release initiated by network (No verification of audio path)	190
19.2	MS originating call establishment, late assignment (no verification of audio path)	192
19.3	MS terminating call establishment, early assignment, release initiated by MS (no verification of audio path)	194
19.4	MS terminating call establishment, late assignment (No verification of audio path)	195
20	Synchronization to the system	196
20.1	Receive/Transmit Delay	196
20.1.1	Absolute Delay and Timing Advance Setting.....	196
20.1.2	Reception Time Tracking Speed	197
20.2	Access Times During Handover.....	198
20.2.1	Intra-Cell Handover.....	198
20.2.2	Inter-Cell Handover.....	199
20.3	Temporary Reception Gaps	200
20.4	Channel Release after Unrecoverable Errors	201
20.5	Cell Selection/Reselection.....	203
20.5.1	Cell Selection	203
20.5.2	Cell Reselection	204
20.5.3	Cell Selection after Release of TCH and SDCCH	204
20.5.4	Cell Selection (Abnormal Cases and Emergency Calls).....	205
20.6	RX Measurement	206
20.6.1	Signal Strength	206
20.6.2	Signal Quality.....	207
20.6.2.1	Signal Quality under Static Conditions.....	207
20.6.2.2	Signal Quality under TU50 Propagation Conditions	208
20.7	Power Control.....	209

21	Testing of the ME/SIM (subscriber identification module) interface	211
21.1	Test Sequence 1.....	211
21.2	Test Sequence 2.....	211
21.3	Test Sequence 3.....	212
21.4	Test Sequence 4.....	212
21.5	Test Sequence 5.....	213
21.6	Test Sequence 7 - Electrical Tests	214
21.6.1	Test of Power Transition Phases	214
21.6.1.1	Phase preceding ME Power-On.....	214
21.6.1.2	Phase during SIM Power-On.....	214
21.6.1.3	Phase During Power Off.....	215
21.6.2	Electrical Tests on each ME Contact	215
21.6.2.1	Electrical Tests on Contact C1	215
21.6.2.1.1	Test 1	215
21.6.2.1.2	Test 2	216
21.6.2.2	Electrical Tests on Contact C2	217
21.6.2.2.1	Test on contact C2 = low level RST	217
21.6.2.2.2	Test on contact C2 = high level RST.....	217
21.6.2.3	Electrical Tests on Contact C3	218
21.6.2.3.1	Test on contact C3 = CLK at low level	218
21.6.2.3.2	Test on contact C3 = CLK switch from low level to high level.....	218
21.6.2.3.3	Test on contact C3 = CLK at high level.....	219
21.6.2.3.4	Test on contact C3 = CLK switch from high level to low level.....	219
21.6.2.3.5	Clock cycle ratio test	220
21.6.2.4	Electrical Tests on Contact C6 (Vpp) *	220
21.6.2.5	Electrical Tests on Contact C7 (I/O).....	221
21.7	Test Sequence 8 - Access Control	222
21.8	Test Sequence 9 - Exchange Protocol Tests	223
21.8.1	Character Transmission	223
21.8.1.1	Bit/Character duration during the transmission from the ME to the SIM	223
21.8.1.2	Bit/Character duration during the transmission from the SIM to the ME	223
21.8.1.3	Inter-character delay	224
21.8.1.4	Error Handling	225
21.8.1.4.1	Error handling during the transmission from the ME to the SIM	225
21.8.1.4.2	Error handling during the transmission from the SIM to the ME	225
21.8.2	Answer to Reset (RST)	226
21.8.2.1	Sorts of RST	226
21.8.2.1.1	Internal Reset	226
21.8.2.1.2	Active Low Reset	226
21.8.2.2	Characters of the Answer to Reset	227
21.8.3	Command Processing	227
21.8.3.1	Procedure Bytes ACK	227
21.9	Test Sequence 10 - Evaluation of Directory Characteristics	228
21.9.1	Operating speed in Authentication Procedure	228
21.9.2	Clock Stop	229
21.10	Test Sequence 11 - Mechanical Tests	229
21.10.1	Contact Pressure	229
21.10.2	Contact Shape	230
22	Autocalling restrictions	230
22.1	Constraining the access to a single number (rec. GSM 02.07 category 3)	230
22.2	Constraining the access to a single number (rec. GSM 02.07 categories 1&2)	231
22.3	Behaviour of the MS when its list of blacklisted numbers is full.....	232
23	Short message service.....	232
23.1	SMS Mobile Terminated - Case 1	232
23.2	SMS Mobile Terminated - Case 2	233
23.3	SMS Mobile Terminated - Case 3	234
23.4	SMS Mobile Originated - Case 1	234
23.5	SMS Mobile Originated - Case 2	235
23.6	SMS Mobile Originated - Case 3	236
23.7	SMS Mobile Originated - Case 4	236
23.8	SMS Mobile Originated - Case 5	237

23.9	SMS Mobile Originated - Case 6.....	237
24	Supplementary services	238
24.1	Call Forwarding	238
24.1.1	Registration.....	238
24.1.2	Erasure	239
24.1.3	Normal Operation	239
24.1.3.1	Test Case 1	239
24.1.3.2	Test Case 2	240
24.2	Call Barring.....	240
24.2.1	Registration;.....	240
24.2.2	Activation	241
24.3	Future Services	242
24.3.1	Operation not yet specified.....	242
25	Mobile station features.....	242
25.1	Called Number	242
25.2	Network Selection/Indication	243
25.3	Subscription Identity Management	246
25.4	Barring of Outgoing Calls	247
25.5	Prevention of Unauthorized Calls	247
Annex A (informative): TBR 5 MATRIX		249
History		265

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST TBR 005:2000](#)

<https://standards.iteh.ai/catalog/standards/sist/551d8973-df8c-4cac-9ddb-26de6d36f490/sist-tbr-005-2000>

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 general access requirements for terminal equipment for the Global System for Mobile communications (GSM) mobile services.

This TBR 5 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 terminal equipment for access.

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].

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST TBR 005:2000](#)

<https://standards.iteh.ai/catalog/standards/sist/551d8973-df8c-4cac-9ddb-26de6d36f490/sist-tbr-005-2000>

Blank page

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST TBR 005:2000

<https://standards.iteh.ai/catalog/standards/sist/551d8973-df8c-4cac-9ddb-26de6d36f490/sist-tbr-005-2000>

1 Scope

This Technical Basis for Regulation (TBR) specifies the technical requirements to be met 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 Global System for Mobile communications (GSM) access to the network.

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 at the air interface and the SIM-ME interface for the access requirements, which may be stimulated to perform the tests by additional equipment if necessary.

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] Articles 4d, 4e, 4f. Non access related aspects of speech telephony, where Article 4g has been applied, are covered by TBR 9 [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.

iTeh STANDARD PREVIEW
 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.

Terminal equipment may be subject to additional requirements in other Common Technical Regulations (CTR) depending on the equipments functionality.
<https://standards.iten.auctalog.standards/sist/551d8973-d18c-4cac-9ddb-26de6d36490/sist-tbr-005-2000>

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".