

GSM PHASE II+ TEST REPORT

for
Equipment: GSM Wireless Module
Model No.: SIM340

according to
3GPP TS 51.010-1
NAPRD.03

with
Final Hardware Version: SIM300_V7.03
Final Software Version: ADI 16.0

Tested and Prepared
by

ETS Product Service (Taiwan) Co., Ltd.

FCC Registration No.: 930600

Industry Canada filed test laboratory Reg. No. IC 5679

Accredited Testing Laboratory

A2LA Accredited No.: 1983.02

PTCRB Accredited Type Certification Test House



Report No.: W6M20706-8192-T-51

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1 General Information

1.1 Notes

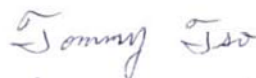



The test results of this test report relate exclusively to the test item specified in 1.6. ETS Product Service (Taiwan) Co., Ltd. does not assume responsibility for any conclusions and generalisations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report may only be reproduced or published in full. Reproduction or publications of extracts from the test report requires the prior written approval of ETS Product Service (Taiwan) Co., Ltd.

- Only applicable to protocol testing services -


The purpose of conformity testing is to increase the probability of adherence to essential requirements or conformity specifications, as appropriate. The complexity of the technical specifications, however, means that the full and thorough testing is impracticable for both technical and economic reasons. Furthermore, there is no guarantee that a test sample which has passed all the relevant tests conforms to a specification. Neither is there any guarantee that such a test sample will interwork with other genuinely open systems. The existence of the test nevertheless provides the confidence that the test sample possess the qualities as maintained and that its performance generally conforms to representative cases of communications equipment.

A declaration by the manufacturer has to be submitted for all non tested required parameters and technical procedures which certifies the conformation to the corresponding subclauses of 3GPP TS 51.010-1 and NAPRD.03.

Tester:

	Tommy Tso	
	Henry Chen	
	Paul Yun	
23 January 2008	Roy Shie	
Date	Name	Signature

Technical responsibility for area of testing:

23 January 2008	Arthur Ma	
Date	Name	Signature

1.2 Testing laboratory

1.2.1 Location

ETS PRODUCT SERVICE (TAIWAN) Co., Ltd. (ETS)
6F, NO. 58, LANE 188, RUEY-KUANG RD
NEIHU, TAIPEI 114
TAIWAN, R.O.C.
Telephone : +886-2-66068877
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1.2.2 Details of accreditation status

A2LA- Accredited number: 1983.02

FCC filed test laboratory Reg. No.: 930600

Industry Canada filed test laboratory Reg. No.: IC 5679

PTCRB Accredited Type Certification Test House

1.2.3 Test location, where different from ETS

CETECOM Taiwan Ltd.
2F, No. 181, Ti Ding Blvd. Sec. 2,
Nei-Hu Dist., Taipei 114, Taiwan, R.O.C.
Telephone: +886-2-2627-3883

1.3 Details of approval holder

Name : Shanghai Simcom Ltd
Street : SIM Technology Building, 700 Yishan Rd, Shanghai 200233
Town : Shanghai
Country : China
Contact : Li Yong Sheng
Telephone : +86-21-54278632
Fax : +86-21-54278901
Email : yongsheng.li@sim.com

1.4 Details of Manufacturer

Name : Shanghai Simcom Ltd
Street : SIM Technology Building, 700 Yishan Rd, Shanghai 200233
Town : Shanghai
Country : China
Contact : Li Yong Sheng
Telephone : +86-21-54278632
Fax : +86-21-54278901
Email : yongsheng.li@sim.com

1.5 Application details

Date of receipt of application : 12 June 2007
Date of test : 20 June 2007 – 26 October 2007
Date of re-test : 18 January 2008 – 23 January 2008

1.6 Test item

1.6.1 Final build identification of test item

Description of test item	GSM Wireless Module
Type identification	SIM340
IC	TBD
FCC ID	UDV-0606020060002
Hardware Version	SIM300_V7.03
Software Version	ADI 16.0

1.6.2 Discription of all test item samples used

Sample: 1

Description of test item	GSM Wireless Module
Type identification	SIM340
Serial number	000001
Hardware Version	SIM300_V7.03
Software Version	ADI 16.0
IMEI	011412000000012
IMEISV	0114120000000101
GPRS class	10
SIM ATK	Supported
Date of Receipt	12 June 2007

Sample: 2

Description of test item	GSM Wireless Module
Type identification	SIM340
Serial number	000002
Hardware Version	SIM300_V7.03
Software Version	ADI 16.0
IMEI	011412000000020
IMEISV	0114120000000201
GPRS class	10
SIM ATK	Supported
Date of Receipt	12 June 2007

Sample: 3

Description of test item	GSM Wireless Module
Type identification	SIM340
Serial number	000003
Hardware Version	SIM300_V7.03
Software Version	ADI 16.0
IMEI	011412000000038
IMEISV	0114120000000301
GPRS class	10
SIM ATK	Supported
Date of Receipt	12 June 2007

Sample:4

Description of test item	GSM Wireless Module
Type identification	SIM340
Serial number	000004
Hardware Version	SIM300_V7.03
Software Version	ADI 16.0
IMEI	011412000000046
IMEISV	0114120000000401
GPRS class	10
SIM ATK	Supported
Date of Receipt	12 June 2007

1.7 Reference documents and test standards

- **3GPP TS 51.010-1 (GSM 11.10), June 2007** **version 7.6.0**
- **Permanent reference document NAPRD.03** **version 3.12.0**

1.8 Additional information

1.9 Abbreviations used for the test result list

pass	EUT passed this test case
fail	EUT failed this test case
inc.	EUT did not pass and did not fail this test case, therefore the verdict “INCONCLUSIVE”
n.a.	Test case not applicable for the EUT
A	Test fully available and fully validated, testing at an accredited test laboratory required
B	Testing at an accredited test laboratory with exceptions (related to PTCRB)
D	Manufacturer’s declaration without evidence
E	Tests validated, results are provided to CTIA; negative results will not cause loss of certification
N	Tests not applicable to a particular GSM frequency band
P	New test not yet validated

2 Technical Test

2.1 Summary of test results

No deviations from the requirements were ascertained in the course of the test performed.



The deviations from the requirements as shown in clause 3 were ascertained in the course of the test performed.



2.2 Test environment

Temperature : 18 ... 25 °C

Relative humidity content : 20 ... 75 %

Air pressure : 860 ... 1030 hPa

Details of power supply : 220 ... 240 V AC

Other parameter :

- Extreme test conditions : Operating voltage of the mobile

V_{nom} = 4.00 V DC

V_{min} = 3.60 V DC

V_{max} = 4.40 V DC

- Extreme temperature : - 20°C / 55 °C

2.3 Measurement and test set-up

GSM/ PCN/ PCS/ 850 Test System SAT 08 by Anite

GSM/ PCN/ PCS/ 850 Test System TS8950G by Rohde&Schwarz

Test configuration and procedures in accordance to the 3GPP TS 51.010-1 (GSM 11.10)

2.4 Test equipment utilised**2.4.1 GSM/PCN/PCS/850 TS8950G**

Software:	<u>Base Software:</u> Common part V10.10 CR02P2P ASP V2.41 V2.50 V2.96 V3.35 V3.37 V3.61 V4.16 CR02P2P BP V1.32 CR02P2P EP V1.65 <u>Testcase Software:</u> Application part V3.34 V3.90 V3.93 V4.41 V4.42 V5.00 RF-LIB V3.34 V3.90 V3.93 V4.41 V4.42 V5.00
Hardware:	TS8950G 1140.0009K02
Manufacturer:	Rohde&Schwarz
Applied standard:	Permanent reference document NAPRD.03 Global Certification Forum reference document GCF-CC
Calibration date:	18 January 2008

2.4.2 GSM SIM Simulator Comprion IT3

Software:	<u>Base Software:</u> IT3 Test Platform R3.8.3 <u>Testcase Software:</u> IT3 3GPP TS 51.010-1 (analog) R3.8.3 IT3 3GPP TS 51.010-1 (digital) R3.8.3 IT3 3GPP TS 11.10-4 Stage 1 R3.8.3 IT3 3GPP TS 11.10-4 Stage 2 R3.8.3
Hardware:	V 1.2 Simulator
Manufacturer:	Comprion GmbH
Applied standard:	Permanent reference document NAPRD.03 Global Certification Forum reference document GCF-CC
Calibration date:	23 July 2007

2.4.3 GSM/PCN/PCS/850 Anite SAT8

Software:	<u>Base Software:</u> Anite PT(GERAN) V28 <u>Testcase Software:</u> CT GSM V26.00 GPRS Testcase VG1.38 (Batch#1) VG2.38 (Batch#2) VG3.38 (Batch#3) VG4.38 (Batch#4) VG5.38 (Batch#5) VG6.38 (Batch#6) EGPRS Testcase V.E1.38 V.E2.38 V.E3.38 V.E4.38
Hardware:	Agilent 8960 V4.29 Anite RF Combiner Vertical
Manufacturer:	Anite Telecoms Ltd.
Applied standard:	Permanent reference document NAPRD.03 Global Certification Forum reference document GCF-CC
Calibration date:	22 September 2006

2.4.4 R&S Universal Radio Communication tester CMU200

Software:	<u>Base Software:</u> Firmware V4.10 <u>Testcase Software:</u> CMU-K21 V4.11 CMU-K22 V4.11 CMU-K23 V4.11 CMU-K24 V4.11
Hardware:	CMU200 with B21 _{V14} and B52 _{V14}
Manufacturer:	Rohde&Schwarz
Applied standard:	Permanent reference document NAPRD.03 Global Certification Forum reference document GCF-CC
Calibration date:	17 October 2007

2.4.5 R&S UPL 16

Software:	<u>Base Software:</u> V3.03 <u>Testcase Software:</u> U81 V1.15 UPL-B9 V2.20
Hardware:	Audio Analyser UPL 16
Manufacturer:	Rohde&Schwarz
Applied standard:	Permanent reference document NAPRD.03 Global Certification Forum reference document GCF-CC
Calibration date:	25 October 2007

2.4.6 GSM/PCN/PCS/850 CRTU-G/CRTU-S

Software:	<u>Base Software:</u> CR02P2P ACC V3.60 V4.42 V4.43 V4.46 V4.48 CR02P2P ASP V3.34 V3.44 V3.50 V3.61 CR02P2P BP V1.32 CR02P2P EP V1.65 MDDB V15.01 Server V4.12 Tools V4.13 <u>Testcase Software:</u> CRTKSS1 V1.80 CRTPK53/63/73 V2.10 CRTPK5B/6B/7B V2.00 CRTPK59/69/79 V2.10 CRTU-GC02 V1.70 CRTU-GC05 V1.50 CRTU-GC19 V1.80 CRTU-GC20 V1.60 CRTU-GC23 V1.40 CRTU-GC62 V4.10 CRTU-GC70 V4.10 CRTU-GC72 V4.10 CRTU-GC80 V4.10
Hardware:	CTRU-G V3.23 CRTU-S V3.23
Manufacturer:	Rohde&Schwarz
Applied standard:	Permanent reference document NAPRD.03 Global Certification Forum reference document GCF-CC
Calibration date:	15 January 2008

2.4.7 GSM/PCN/PCS/850 TS8950G*

Software:	<u>Base Software:</u> Common part V10.02 CR02P2P ASP V2.41 V2.50 V2.96 V3.35 V3.37 CR02P2P BP V1.32 CR02P2P EP V1.65 <u>Testcase Software:</u> Application part V3.34 V3.90 V3.93 V4.41 V4.42 RF-LIB V3.34 V3.90 V3.93 V4.41 V4.42
Hardware:	TS8950G 1144.6699.02
Manufacturer:	Rohde&Schwarz
Applied standard:	Permanent reference document NAPRD.03 Global Certification Forum reference document GCF-CC
Calibration date:	12 January 2007

*Test platform provided by CETECOM Taiwan Ltd.

3 Test Results

3.1 Test group overview (TS 51.010-1)

- 11 General tests
- 12 Transceiver
- 13 Transmitter
- 14 Receiver
- 15 Timing advance and absolute delay
- 16 Reception time tracking speed
- 17 Access times during handover
- 18 Temporary reception gaps
- 19 Channel release after unrecoverable errors
- 20 Cell selection and Reselection
- 21 Received signal measurements
- 22 Transmit power control timing and confirmation
- 25 Tests of layer 2 functions
- 26 Tests of layer 3 functions
- 27 Testing of the SIM/ME interface
- 28 Test of autocalling restrictions
- 29 Testing of bearer services
- 31 Test of supplementary services
- 32 Testing of speech transcoding functions
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- 34 Short messages services
- 41 GPRS paging
- 42 Test of MAC protocol
- 43 RLC test cases
- 44 Test case requirements for GPRS mobility management
- 45 Session mangement procedures
- 46 LLC and SNDCP tests
- 47 Dual Transfer Mode
- 51 EGPRS Paging, TBF establishment/release and DCCH related procedures
- 52 EGPRS Test of Medium Access Control (MAC) protocol
- 53 Test of EGPRS Radio Link Control (RLC) Protocol
- 57 EGPRS Dual Transfer Mode

3.2 Result Summary

Verdict \ Band	850	1900
Pass	207	727
Fail	0	0
Inconclusive	0	0
Total	207	727

Total Pertinent Test Cases Performed	934
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3.3 Tests under normal and extreme test conditions

3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
11.1.1	Verification of support and non-support of services (MT).	N	A	Single	N/A	Pass
11.1.2	Verification of support and non-support of services (MO).	N	A	Single	N/A	Pass
11.2	Verification of support of the single numbering scheme	N	A	Single	N/A	Pass
12.1.1	Conducted spurious emissions - MS allocated a channel	A	A	All	Pass *note 2	Pass *note 2
	Voltage High	A	A	All	Pass	Pass
	Voltage Low	A	A	All	Pass	Pass
12.1.2	Conducted spurious emissions - MS in idle mode	A	A	All	Pass *note 2	Pass *note 2
	Voltage High	A	A	All	Pass	Pass
	Voltage Low	A	A	All	Pass	Pass
13.1	Transmitter – Frequency error and phase error	A	A	All	Pass *note 2	Pass *note 2
	Temperature High, Voltage High	A	A	All	Pass	Pass
	Temperature High, Voltage Low	A	A	All	Pass	Pass
	Temperature Low, Voltage High	A	A	All	Pass	Pass
	Temperature Low, Voltage Low	A	A	All	Pass	Pass
	Vibration	A	A	All	Pass	Pass

3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
13.2	Transmitter – Frequency error under multipath and interference conditions	A	A	All	Pass *note 2	Pass *note 2
	Temperature High, Voltage High	A	A	All	Pass	Pass
	Temperature High, Voltage Low	A	A	All	Pass	Pass
	Temperature Low, Voltage High	A	A	All	Pass	Pass
	Temperature Low, Voltage Low	A	A	All	Pass	Pass
13.3.4.1	Transmitter output power and burst timing - MS with permanent antenna	A	A	All	Pass *note 2	Pass *note 2
	Temperature High, Voltage High	A	A	All	Pass	Pass
	Temperature High, Voltage Low	A	A	All	Pass	Pass
	Temperature Low, Voltage High	A	A	All	Pass	Pass
	Temperature Low, Voltage Low	A	A	All	Pass	Pass
13.4	Transmitter - Output RF spectrum	A	A	All	Pass *note 2	Pass *note 2
	Temperature High, Voltage High	A	A	All	Pass	Pass
	Temperature High, Voltage Low	A	A	All	Pass	Pass
	Temperature Low, Voltage High	A	A	All	Pass	Pass
	Temperature Low, Voltage Low	A	A	All	Pass	Pass
13.16.1	Frequency error and phase error in GPRS multislot configuration	B	B	All	Pass *note 2	Pass *note 2
	Temperature High, Voltage High	B	B	All	Pass	Pass
	Temperature High, Voltage Low	B	B	All	Pass	Pass
	Temperature Low, Voltage High	B	B	All	Pass	Pass
	Temperature Low, Voltage Low	B	B	All	Pass	Pass
	Vibration	B	B	All	Pass	Pass
13.16.2-1	Transmitter output power in GPRS multislot configuration - MS with permanent antenna connector	B	B	All	Pass *note 2	Pass *note 2
	Temperature High, Voltage High	B	B	All	Pass	Pass
	Temperature High, Voltage Low	B	B	All	Pass	Pass
	Temperature Low, Voltage High	B	B	All	Pass	Pass
	Temperature Low, Voltage Low	B	B	All	Pass	Pass
13.16.3	Output RF spectrum in GPRS multislot configuration	B	B	All	Pass *note 2	Pass *note 2
	Temperature High, Voltage High	B	B	All	Pass	Pass
	Temperature High, Voltage Low	B	B	All	Pass	Pass
	Temperature Low, Voltage High	B	B	All	Pass	Pass
	Temperature Low, Voltage Low	B	B	All	Pass	Pass
14.1.1.1	Receiver / Bad Frame Indication - TCH/FS - Random RF input	A	A	All	Pass *note 2	Pass *note 2
14.1.1.2	Receiver / Bad Frame Indication - TCH/FS - Frequency hopping and downlink DTX	A	A	All	Pass *note 2	Pass *note 2

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3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
14.1.5.1	Bad Frame Indication - TCH/AFS	A	A	All	Pass *note 2	Pass *note 2
14.2.1	Receiver / Reference sensitivity - TCH/FS	A	A	All	Pass *note 2	Pass *note 2
	Temperature High, Voltage High	A	A	All	Pass	Pass
	Temperature High, Voltage Low	A	A	All	Pass	Pass
	Temperature Low, Voltage High	A	A	All	Pass	Pass
	Temperature Low, Voltage Low	A	A	All	Pass	Pass
14.2.3	Receiver / Reference sensitivity - FACCH/F	A	A	All	Pass *note 2	Pass *note 2
14.2.4	Receiver/ Reference sensitivity - FACCH/H	B	B	All	Pass *note 2	Pass *note 2
14.2.10	Reference Sensitivity - TCH/AFS	A	A	All	Pass *note 2	Pass *note 2
14.2.19	Reference Sensitivity - TCH/AFS-INB	A	A	All	Pass *note 2	Pass *note 2
14.3	Receiver / Usable receiver input level range	A	A	All	Pass *note 2	Pass *note 2
	Temperature High, Voltage High	A	A	All	Pass	Pass
	Temperature High, Voltage Low	A	A	All	Pass	Pass
	Temperature Low, Voltage High	A	A	All	Pass	Pass
	Temperature Low, Voltage Low	A	A	All	Pass	Pass
14.4.1	Co-channel rejection - TCH/FS	A	A	All	Pass *note 2	Pass *note 2
14.4.4	Co-channel rejection - FACCH/F	A	A	All	Pass *note 2	Pass *note 2
14.4.5	Co-Channel rejection - FACCH/H	B	B	All	Pass *note 2	Pass *note 2
14.4.8	Co-channel rejection - TCH/AFS	A	A	All	Pass *note 2	Pass *note 2
14.4.17	Co-channel rejection - TCH/AFS-INB	A	A	All	Pass *note 2	Pass *note 2
14.5.1.1	Adjacent channel rejection - TCH/FS	A	A	All	Pass *note 2	Pass *note 2
	Temperature High, Voltage High	A	A	All	Pass	Pass
	Temperature High, Voltage Low	A	A	All	Pass	Pass
	Temperature Low, Voltage High	A	A	All	Pass	Pass
	Temperature Low, Voltage Low	A	A	All	Pass	Pass
14.5.1.2	Adjacent channel rejection - TCH/AFS	A	A	All	Pass *note 2	Pass *note 2
14.6.1	Intermodulation rejection - TCH/FS	A	A	All	Pass *note 2	Pass *note 2
	Temperature High, Voltage High	A	A	All	Pass	Pass
	Temperature High, Voltage Low	A	A	All	Pass	Pass
	Temperature Low, Voltage High	A	A	All	Pass	Pass
	Temperature Low, Voltage Low	A	A	All	Pass	Pass

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3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
14.7.1	Blocking and spurious response - TCH/FS	A	A	All	Pass *note 2	Pass *note 2
14.8.1	AM Suppression – Speech Channels	A	A	All	Pass *note 2	Pass *note 2
14.16.1	Minimum Input level for Reference Performance	B	B	All	Pass *note 2	Pass *note 2
	Temperature High, Voltage High	B	B	All	Pass	Pass
	Temperature High, Voltage Low	B	B	All	Pass	Pass
	Temperature Low, Voltage High	B	B	All	Pass	Pass
	Temperature Low, Voltage Low	B	B	All	Pass	Pass
14.16.2.1	Co-channel rejection for packet channels	B	A	All	Pass *note 2	Pass *note 2
15.1	Timing advance and absolute delay	N	A	All	Pass	Pass
16	Reception time tracking speed	A	A	All	Pass *note 1	Pass *note 1
17.1	Access times during handover - Intra cell channel change	N	A	All	Pass	Pass
17.2	Access times during handover - Inter cell handover	N	A	All	Pass	Pass
20.1	Cell Selection	A	A	All	Pass	Pass
20.2	Cell selection with varying signal strength values.	A	A	All	Pass	Pass
20.3	Basic Cell Reselection	N	A	All	Pass	Pass
20.4	Cell Reselection OFFSET/TIME parameters	A	A	All	Pass	Pass
20.5	Cell reselection – parameters in Sys Info Type 2bis, 7 and 8	N	A	All	Pass	Pass
20.6	Cell reselection timings	A	A	All	Pass	Pass
20.7	Priority of Cells	N	A	All	Pass	Pass
20.8	Cell Reselection when C1 (serving cell) < 0 for 5 secs	A	A	All	Pass	Pass
20.9	Running average of surrounding cell BCCH carrier signal levels	A	A	All	Pass	Pass
20.10	Running average of serving cell BCCH carrier signal level	A	A	All	Pass	Pass
20.11	Updating list of 6 strongest carriers and decoding BCCH info of new carrier.	N	A	All	Pass	Pass
20.12	Decoding BSIC of the list of six strongest neighbour carriers.	A	A	All	Pass	Pass
20.13	Decoding BSIC of the list of 6 strongest neighbours	A	A	All	Pass	Pass
20.15	Cell Reselection due to MS rejections "LA not allowed".	A	A	All	Pass	Pass
20.16	Downlink signalling failure	A	A	All	Pass	Pass
20.17	Cell Selection if no suitable cell found in 10 secs	A	A	All	Pass	Pass
20.19	Cell Selection on release of SDCCH and TCH	A	A	All	Pass	Pass

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3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
20.22.1	Cell selection	A	A	All	Pass	Pass
20.22.2	Cell reselection in Packet idle mode	A	A	All	Pass	Pass
20.22.3	Priority of cells	A	A	All	Pass	Pass
20.22.4	Cell re-selection with cells in different routing area	A	A	All	Pass	Pass
20.22.6	Cell reselection timings	A	A	All	Pass	Pass
20.22.7	Downlink signalling failure	A	A	All	Pass	Pass
20.22.8	Cell selection when the best cell does not support GPRS	N	A	Single	N/A	Pass
20.22.13	Cell Reselection based on C32 quality	A	A	All	Pass	Pass
20.22.16	Cell reselection/ ready state/ Reselection and Cell update procedure	A	A	All	Pass	Pass
20.22.17	C2 Reselection in another RA - no cell reselection	A	A	All	Pass	Pass
20.22.18	C2 Reselection in another RA - routing area updated	A	A	All	Pass	Pass
20.22.19	Borders between routing areas - reselection of a GPRS cell in a homogenous network	A	A	All	Pass	Pass
20.22.26	Cell Reselection based on C32 quality / Cell Reselection on CCCH - PBCCH not supported	A	A	All	Pass	Pass
21.1	Received signal measurements - Signal strength (5 BCCH)	N	A	All	Pass *note 2	Pass *note 2
	Temperature High, Voltage High	N	A	All	Pass	Pass
	Temperature High, Voltage Low	N	A	All	Pass	Pass
	Temperature Low, Voltage High	N	A	All	Pass	Pass
	Temperature Low, Voltage Low	N	A	All	Pass	Pass
21.2	Signal strength selectivity	A	A	All	Pass *note 2	Pass *note 2
21.3.1	Signal quality under static conditions - TCH/FS	A	A	All	Pass *note 2	Pass *note 2
21.4.1	Signal quality under TU50 propagation conditions	A	A	All	Pass *note 2	Pass *note 2
22.1	Transmit power control timing and confirmation, single slot	N	A	All	Pass *note 2	Pass *note 2
22.4	GPRS Uplink Power Control - Independence of TS Power Control	B	B	All	Pass *note 2	Pass *note 2
25.2.1.1.1	Layer 2 Initialisation – Initialization when contention resolution required - Normal initialization	N	B	Single	N/A	Pass
25.2.1.1.2.1	Initialization failure - Loss of UA frame	N	B	Single	N/A	Pass
25.2.1.1.2.2	UA frame with different information field	N	B	Single	N/A	Pass

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3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
25.2.1.1.2.3	Information frame and supervisory frames in response to an SABM frame	N	B	Single	N/A	Pass
25.2.1.1.3	Initialization Denial	N	B	Single	N/A	Pass
25.2.1.1.4	Total initialization failure	N	B	Single	N/A	Pass
25.2.1.2.1	Initialization, contention resolution not required - Normal initialization without contention resolution	N	B	Single	N/A	Pass
25.2.1.2.2	Initialization failure	N	B	Single	N/A	Pass
25.2.1.2.3	Initialization Denial	N	B	Single	N/A	Pass
25.2.1.2.4	Total initialization failure	N	B	Single	N/A	Pass
25.2.2.1	Layer 2 – Normal information transfer - Sequence counting and I frame acknowledgements	N	B	Single	N/A	Pass
25.2.2.2	Receipt of an I frame in the timer recovery state	N	B	Single	N/A	Pass
25.2.2.3	Segmentation and concatenation	N	B	Single	N/A	Pass
25.2.3	Normal layer 2 disconnection	N	B	Single	N/A	Pass
25.2.4.3	RR response frame loss (MS to SS)	N	B	Single	N/A	Pass
25.2.5.1	Test of frame transmission with incorrect C/R values - I frame with C bit set to zero	N	B	Single	N/A	Pass
25.2.5.2	SABM frame with C bit set to zero	N	B	Single	N/A	Pass
25.2.6.1	Test of errors in the control field N(S) sequence error	N	B	Single	N/A	Pass
25.2.6.2	N(R) sequence error	N	B	Single	N/A	Pass
25.2.7	Test on receipt of invalid frames	N	B	Single	N/A	Pass
26.2.1.1	Initial Layer 3 tests - Channel request / initial time	N	A	Single	N/A	Pass
26.2.1.2	Channel request / repetition time	N	A	Single	N/A	Pass
26.2.1.3	Channel request / random reference	N	A	Single	N/A	Pass
26.2.2-1	IMSI detach and IMSI attach pr1	N	A	Single	N/A	Pass
26.2.2-3	IMSI detach and IMSI attach pr3	N	A	Single	N/A	Pass
26.2.2-4	IMSI detach and IMSI attach pr4	N	A	Single	N/A	Pass
26.2.3	Sequenced MM / CC message transfer	N	A	Single	N/A	Pass
26.2.4-1	Establishment Cause /pr1 (TCH)	N	A	Single	N/A	Pass
26.2.4-3	/pr3 (TCH/FS)	N	A	Single	N/A	Pass
26.2.4-4	/pr4 (data)	N	A	Single	N/A	Pass
26.2.4-5	/pr5	N	A	Single	N/A	Pass
26.2.4-6	/pr6	N	A	Single	N/A	Pass
26.2.4-7	/pr7 (non-call-SS)	N	A	Single	N/A	Pass
26.2.4-8	/pr8 (SMS/PP MO)	N	A	Single	N/A	Pass

3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
26.5.1	Handling of unknown protocol discriminator.	N	A	Single	N/A	Pass
26.5.2.1.1	Handling of unknown TI and skip indicator / RR	N	A	Single	N/A	Pass
26.5.2.1.2	TI Skip indicator / RR / RR Connection established	N	A	Single	N/A	Pass
26.5.2.2	TI and skip indicator / MM	N	A	Single	N/A	Pass
26.5.2.3	TI and skip indicator / CC	N	A	Single	N/A	Pass
26.5.3.1	Undefined or unexpected Message type / undefined message type / CC	N	A	Single	N/A	Pass
26.5.3.2	Undefined or unexpected message type / undefined message type / MM	N	A	Single	N/A	Pass
26.5.3.3	Undefined or unexpected message type / undefined message type / RR	N	A	Single	N/A	Pass
26.5.3.4	Undefined or unexpected message type / unexpected message type / CC	N	A	Single	N/A	Pass
26.5.4.1	Unforeseen info elements in non-imperative message part / duplicated info elements.	N	A	Single	N/A	Pass
26.5.5.1.1.1	Non-semantic mandatory IE errors / RR / missing mandatory IE error / special case	N	A	Single	N/A	Pass
26.5.5.1.1.2	Non-semantic mandatory IE errors / RR / missing mandatory IE error / general case	N	A	Single	N/A	Pass
26.5.5.1.2	Non-semantic mandatory ie errors / RR / comprehension required	N	A	Single	N/A	Pass
26.5.5.2.1	Non-semantic mandatory IE errors / MM / syntactically incorrect mandatory IE	N	A	Single	N/A	Pass
26.5.5.2.3	Non-semantic mandatory IE errors / MM / comprehension required	N	A	Single	N/A	Pass
26.5.5.3.1.1	Non-semantic mandatory IE errors / CC / missing mandatory IE / disconnect message	N	A	Single	N/A	Pass
26.5.5.3.2	Non-semantic mandatory IE errors / CC / comprehension required	N	A	Single	N/A	Pass
26.5.6.1.1	Unknown IE, comprehension not required / MM / IE unknown in the protocol	N	A	Single	N/A	Pass
26.5.6.1.2	Unknown IE, comprehension not required / MM / IE unknown in the message	N	A	Single	N/A	Pass
26.5.6.2.1	Unknown info elements in the non-imperative message part / CC / Call establishment	N	A	Single	N/A	Pass
26.5.6.2.4	Unknown info elements in the non-imperative message part / CC / release complete	N	A	Single	N/A	Pass
26.5.6.3	Unknown IE in the non-imperative message part, comprehension not required / RR	N	A	Single	N/A	Pass

3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
26.5.7.1.1	Spare bits / RR / paging channel	N	A	Single	N/A	Pass
26.5.7.1.3	Spare bits / RR / AGCH	N	A	Single	N/A	Pass
26.5.7.1.4	Spare bits / RR / connected mode	N	A	Single	N/A	Pass
26.5.7.2	Spare bits / MM	N	A	Single	N/A	Pass
26.5.7.3	Spare bits / CC	N	A	Single	N/A	Pass
26.6.1.1	Immediate Assignment / SDCCH or TCH assignment	A	A	All	Pass	Pass
26.6.1.2	Immediate Assignment / extended assignment	A	A	All	Pass	Pass
26.6.1.3	Immediate Assignment / assignment rejection	A	A	All	Pass	Pass
26.6.1.4	Immediate Assignment / ignore assignment	A	A	All	Pass	Pass
26.6.2.1.1	Paging / normal / type 1	N	A	Single	N/A	Pass
26.6.2.1.2	Paging / normal / type 2	N	A	Single	N/A	Pass
26.6.2.1.3	Paging / normal / type 3	N	A	Single	N/A	Pass
26.6.2.2	Paging / extended	N	A	Single	N/A	Pass
26.6.2.3.1	Paging / reorganisation / procedure 1	N	A	Single	N/A	Pass
26.6.2.3.2	procedure 2	N	A	Single	N/A	Pass
26.6.2.4	Paging / same as before	N	A	Single	N/A	Pass
26.6.2.5	Multislot CCCH handling	N	A	Single	N/A	Pass
26.6.3.1	Measurement / no neighbours	N	A	All	Pass	Pass
26.6.3.2	Measurement / all neighbours present	N	A	All	Pass	Pass
26.6.3.3	Measurement / barred cells and non-permitted NCCs	N	A	All	Pass	Pass
26.6.3.4	Measurement / DTX	N	A	All	Pass	Pass
26.6.4.1	Dedicated assignment / Successful case	N	A	All	Pass	Pass
26.6.4.2.2	Dedicated assignment / failure / general case	A	A	All	Pass	Pass
26.6.5.1-1	Handover / successful / active call / non-synchronized / procedure 1	A	A	All	Pass	Pass
26.6.5.1-2	Handover / successful / active call / non-synchronized / procedure 2	A	A	All	Pass	Pass
26.6.5.1-3	Handover / successful / active call / non-synchronized / procedure 3	A	A	All	Pass	Pass
26.6.5.2-1	Handover / successful / cell under establishment / non-synchronized / procedure 1	N	A	All	Pass	Pass
26.6.5.2-3	Handover / successful / cell under establishment / non-synchronized / procedure 3	N	A	All	Pass	Pass
26.6.5.2-4	Handover / successful / cell under establishment / non-synchronized / procedure 4	N	A	All	Pass	Pass

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3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
26.6.5.2-7	Handover / successful / cell under establishment / non-synchronized / procedure 7	N	A	All	Pass	Pass
26.6.5.2-8	Handover / successful / cell under establishment / non-synchronized / procedure 8	N	A	All	Pass	Pass
26.6.5.2-9	Handover / successful / cell under establishment / non-synchronized / procedure 9	N	A	All	Pass	Pass
26.6.5.3-1	Handover / successful / active call / finely synchronized / procedure 1	A	A	All	Pass	Pass
26.6.5.4-1	Handover / successful / call under establishment / finely synchronized / procedure 1	N	A	All	Pass	Pass
26.6.5.4-2	Handover / successful / call under establishment / finely synchronized / procedure 2	N	A	All	Pass	Pass
26.6.5.4-3	Handover / successful / call under establishment / finely synchronized / procedure 3	N	A	All	Pass	Pass
26.6.5.4-4	Handover / successful / call under establishment / finely synchronized / procedure 4	N	A	All	Pass	Pass
26.6.5.5.1	Handover / successful / active call / pre-synchronised / TA IE not included	A	A	All	Pass	Pass
26.6.5.5.2	Handover / successful / call being estab. / pre-synchronised / TA IE is included / time diff requested	A	A	All	Pass	Pass
26.6.5.6	Handover / successful / active call / pseudo-synchronised.	A	A	All	Pass	Pass
26.6.5.7	Handover / successful / active call / non-synchronised / reporting of observed Time diff requested.	A	A	All	Pass	Pass
26.6.5.8	Handover / L3-failure	A	A	All	Pass	Pass
26.6.5.9	Handover / L1-failure	A	A	All	Pass	Pass
26.6.6.1	Frequency redefinition	A	A	All	Pass	Pass
26.6.7.1	Channel mode modify / full rate	A	A	All	Pass	Pass
26.6.7.2	Channel mode modify / half rate	A	A	All	Pass	Pass
26.6.8.5	Ciphering mode / IMEI request	N	A	Single	N/A	Pass
26.6.12.1	Channel release / SDCCH	A	A	All	Pass	Pass
26.6.12.2	Channel release / SDCCH - no L2 ACK	A	A	All	Pass	Pass
26.6.12.3	Channel release / TCH-F	A	A	All	Pass	Pass
26.6.12.4	Channel release / TCH-F - no L2 ACK	A	A	All	Pass	Pass
26.6.13.3	Dedicated assignment with starting time & freq re-definition- failure	A	A	All	Pass	Pass
26.6.13.5	Handover with starting time - time not elapsed	A	A	All	Pass	Pass

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3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
26.6.13.6	Handover with starting time - time elapsed	A	A	All	Pass	Pass
26.6.13.8	Handover with starting time & freq re-definition- failure	N	A	All	Pass	Pass
26.6.13.9	Immediate assignment with starting time- time not elapsed	A	A	All	Pass	Pass
26.6.13.10	Immediate assignment with starting time-time elapsed	A	A	All	Pass	Pass
26.7.1	TMSI reallocation	N	A	Single	N/A	Pass
26.7.2.1	Authentication accepted	N	A	Single	N/A	Pass
26.7.2.2	Authentication rejected	N	A	Single	N/A	Pass
26.7.3.1-1	Identification / test 1	N	A	Single	N/A	Pass
26.7.3.1-2	Identification / test 2	N	A	Single	N/A	Pass
26.7.3.2	Test of short IMSI	N	A	Single	N/A	Pass
26.7.4.1	Location updating / accepted	N	A	Single	N/A	Pass
26.7.4.2.1	Location updating / rejected / IMSI invalid	N	A	Single	N/A	Pass
26.7.4.2.2-1	Location updating / rejected / PLMN not allowed / test 1	N	A	Single	N/A	Pass
26.7.4.2.2-2	Location updating / rejected / PLMN not allowed / test 2	N	A	Single	N/A	Pass
26.7.4.2.3	Location updating / rejected / location area not allowed	N	A	Single	N/A	Pass
26.7.4.2.4-1	Location updating / rejected / roaming not allowed in this location area / pr 1	N	A	Single	N/A	Pass
26.7.4.3.1	Location updating / abnormal cases / random access fails	N	A	Single	N/A	Pass
26.7.4.3.2	Location updating / abnormal cases / attempt counter smaller than 4, LAI different	N	A	Single	N/A	Pass
26.7.4.3.3	Location updating / abnormal cases / attempt counter equal to 4	N	A	Single	N/A	Pass
26.7.4.3.4	Loc updtg / abnorm. Cases / attmpt count. less or equal to 4, stored LAI = to broadcast LAI	N	A	Single	N/A	Pass
26.7.4.5.1	Location updating / periodic spread	N	A	Single	N/A	Pass
26.7.4.5.2	Location updating / periodic normal / test 1	N	A	Single	N/A	Pass
26.7.4.5.4.1	Location updating / periodic HPLMN search / MS waits time T	N	A	Single	N/A	Pass
26.7.4.5.4.2	Location updating / periodic HPLMN search / MS in manual mode	N	A	Single	N/A	Pass
26.7.4.5.4.3	Location updating / periodic HPLMN search / MS waits at least two minutes and at most T minutes	N	A	Single	N/A	Pass
26.7.4.6	Location updating / interworking of attach and periodic	N	A	Single	N/A	Pass
26.7.5.3	MM connection / establishment without cipher	N	A	Single	N/A	Pass

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3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
26.7.5.5	MM connection / establishment rejected cause 4	N	A	Single	N/A	Pass
26.7.5.7.1	MM Connection / abortion by the network cause #6	N	A	Single	N/A	Pass
26.8.1.2.2.1	Outgoing call / U0.1 MM connection pending / CM service rejected	N	A	Single	N/A	Pass
26.8.1.2.2.2	Outgoing call / U0.1 MM connection pending / CM service accepted	N	A	Single	N/A	Pass
26.8.1.2.3.2	Outgoing call / U1 call initiated / rejecting with RELEASE COMPLETE	N	A	Single	N/A	Pass
26.8.1.2.3.5	Outgoing call / U1 call initiated / receiving ALERTING	N	A	Single	N/A	Pass
26.8.1.2.3.6	Outgoing call / U1 call initiated / entering state U10	N	A	Single	N/A	Pass
26.8.1.2.4.2	Outgoing call / U3 MS originating call proceeding / CONNECT received	N	A	Single	N/A	Pass
26.8.1.2.4.3	Outgoing call / U3 MS origintg. call proceeding / PROGRESS received without in band info.	N	A	Single	N/A	Pass
26.8.1.2.4.4	Outgoing call / U3 MS originating call proceeding / PROGRESS with in band information	N	A	Single	N/A	Pass
26.8.1.2.4.5	Outgoing call / U3 MS originating call proceeding / DISCONNECT with in band tones	N	A	Single	N/A	Pass
26.8.1.2.4.6	Outgoing call / U3 MS originating call proceeding / DISCONNECT without in band tones	N	A	Single	N/A	Pass
26.8.1.2.4.7	Outgoing call / U3 MS originating call proceeding / RELEASE received	N	A	Single	N/A	Pass
26.8.1.2.4.8	Outgoing call / U3 MS originating call proceeding / termination requested by the user	N	A	Single	N/A	Pass
26.8.1.2.4.13	Outgoing call / U3 MS originating call proceeding / Internal alerting indication	N	A	Single	N/A	Pass
26.8.1.2.5.2	Outgoing call / U4 call delivered / termination requested by the user	N	A	Single	N/A	Pass
26.8.1.2.5.3	Outgoing call / U4 call delivered / DISCONNECT with in band tones	N	A	Single	N/A	Pass
26.8.1.2.6.2	U10 call active / RELEASE received	N	A	Single	N/A	Pass
26.8.1.2.6.3	U10 call active / DISCONNECT with in band tones	N	A	Single	N/A	Pass
26.8.1.2.6.5	U10 call active / RELEASE COMPLETE received	N	A	Single	N/A	Pass
26.8.1.2.6.6	U10 Call Active/SETUP received	N	A	Single	N/A	Pass
26.8.1.2.7.1	U11 disconnect request / clear collision	N	A	Single	N/A	Pass
26.8.1.2.7.3	U11 disconnect request / timer T305 timeout	N	A	Single	N/A	Pass

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3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
26.8.1.2.8.1	U12 disconnect indication / call releasing requested by the user	N	A	Single	N/A	Pass
26.8.1.2.9.1	Outgoing call / U19 release request / timer T308 timeout	N	A	Single	N/A	Pass
26.8.1.2.9.2	Outgoing call / U19 release request / 2nd timer T308 timeout	N	A	Single	N/A	Pass
26.8.1.2.9.4	Outgoing call / U19 release request / RELEASE COMPLETE received	N	A	Single	N/A	Pass
26.8.1.3.1.1	Incoming call / U0 null state / SETUP received with a non supported bearer capability	N	A	Single	N/A	Pass
26.8.1.3.3.1	Incoming call / U9 mobile terminating call confirmed / alerting or immediate connecting	N	A	Single	N/A	Pass
26.8.1.3.3.4	Incoming call / U9 mobile terminating call confirmed / DISCONNECT received	N	A	Single	N/A	Pass
26.8.1.3.4.2	Incoming call / U7 call received / termination requested by the user	N	A	Single	N/A	Pass
26.8.1.3.4.3	Incoming call / U7 call received / DISCONNECT received	N	A	Single	N/A	Pass
26.8.1.3.4.8	Incoming call / U7 call received / RELEASE COMPLETE received	N	A	Single	N/A	Pass
26.8.1.3.5.2	Incoming call / U8 connect request / timer T313 timeout	N	A	Single	N/A	Pass
26.8.1.3.5.3	Incoming call / U8 connect request / termination requested by the user	N	A	Single	N/A	Pass
26.8.1.3.5.4	Incoming call / U8 connect request / DISCONNECT received with in-band information	N	A	Single	N/A	Pass
26.8.1.3.5.5	Incoming call / U8 connect request / DISCONNECT received without in-band information	N	A	Single	N/A	Pass
26.8.1.4.1.1	In-call functions / DTMF information transfer / basic procedures	N	A	Single	N/A	Pass
26.8.1.4.2.1	In-call functions / User notification / MS terminated	N	A	Single	N/A	Pass
26.8.1.4.3.1	In-call functions / Channel changes / A successful channel change in active state	A	A	All	Pass	Pass
26.8.1.4.3.2	In-call functions / Channel changes / An unsuccessful channel change in active mode	A	A	All	Pass	Pass
26.8.2.1	Call Re-establishment / Call Present, re-establishment allowed.	A	A	All	Pass	Pass
26.8.2.2	Call Re-establishment / Call Present, re-establishment not allowed.	A	A	All	Pass	Pass
26.8.2.3	Call Re-establishment / Call under establishment, transmission stopped.	A	A	All	Pass	Pass
26.8.3	User to user signalling	N	A	Single	N/A	Pass
26.9.2	Structured procedures / MS originated call / early assignment	N	A	Single	N/A	Pass

3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
26.9.3	Structured procedures / MS originated call / late assignment	N	A	Single	N/A	Pass
26.9.4	Structured procedures / MS terminated call / early assignment	N	A	Single	N/A	Pass
26.9.5	Structured procedures / MS terminated call / late assignment	N	A	Single	N/A	Pass
26.9.6.1.1	Structured procedures / emergency call / idle updated / preferred channel rate	A	A	All	Pass	Pass
26.9.6.2.1	Structured procedures / emergency call / idle, no IMSI / accept case	A	A	All	Pass	Pass
26.9.6.2.2	Structured procedures / emergency call / idle, no IMSI / reject case	A	A	All	Pass	Pass
26.12.1	EFR signalling / test of the channel mode modify procedure	A	A	All	Pass	Pass
26.12.2.1	EFR signalling / Handover / active call / successful case	P	A	All	Pass	Pass
26.12.3	EFR Signalling / Structured procedures / MS originated call / late assignment	N	A	Single	N/A	Pass
26.12.4	Structured procedures / MS terminated call / early assignment	N	A	Single	N/A	Pass
26.12.5	Structured procedures / emergency call	A	A	All	Pass	Pass
26.16.2	AMR Signalling/ Inband Signalling, Uplink Codec Adaptation	A	A	All	Pass	Pass
26.16.3	AMR Signalling/ Structured procedures / MS terminated call / early assignment / no initial codec mode	A	A	Single	N/A	Pass
26.16.3a	AMR Signalling/ Structured procedures / MS terminated call / early assignment / specified initial codec mode	A	A	Single	N/A	Pass
26.16.4	AMR Signalling/ Structured procedures / MS originated call / late assignment / specified initial codec mode	A	A	Single	N/A	Pass
26.16.4a	AMR Signalling/ Structured procedures / MS originated call / late assignment / no initial codec mode	A	A	Single	N/A	Pass
26.16.6	AMR Signalling/ Structured procedures / emergency call	A	A	All	Pass	Pass
26.16.7	AMR Signalling/ AMR Signalling / Directed Retry / Mobile Originated Call	A	A	All	Pass	Pass
26.16.8	AMR Signalling/ AMR Signalling / Directed Retry / Mobile Terminated Call	A	A	All	Pass	Pass
26.16.9.1	AMR Configuration Change (normal)	A	A	All	Pass	Pass
26.16.9.2	AMR Configuration Change (abnormal)	A	A	All	Pass	Pass

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3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
26.16.9.3	Codec Mode Phase Change (normal)	A	A	All	Pass	Pass
26.16.9.4	Codec Mode Phase Change (abnormal)	A	A	All	Pass	Pass
26.16.9.6	Threshold Change (abnormal)	A	A	All	Pass	Pass
26.16.9.7	Unknown RATSCCH REQ Message	A	A	All	Pass	Pass
26.16.9.8	Ignore subsequent REQ prior to expiry of REQ Activation counter	A	A	All	Pass	Pass
26.16.9.9	Initialization of Transaction with ACK_OK, ACK_ERR or ACK_UNKNOWN	A	A	All	Pass	Pass
26.16.9.11	Change of Active Codec Set	A	A	All	Pass	Pass
26.16.10.1	AMR signalling / test of the channel mode modify procedure	A	A	All	Pass	Pass
26.16.10.2	AMR signalling / test of the channel mode modify procedure	A	A	All	Pass	Pass
26.16.11	Handover / layer 1 failure	A	A	All	Pass	Pass
27.1.1	MS Identification by short IMSI - Normal Case	N	A	Single	N/A	Pass
27.2	MS Identification by short TMSI	N	A	Single	N/A	Pass
27.3	MS Identification by long TMSI	N	A	Single	N/A	Pass
27.4	MS Identification by long IMSI, TMSI updating and cipher key sequence number assignment.	N	A	Single	N/A	Pass
27.5	Forbidden PLMN's, Location Updating and undefined cipher key.	N	A	Single	N/A	Pass
27.6	MS updating forbidden PLMN's.	N	A	Single	N/A	Pass
27.7	MS deleting forbidden PLMN's.	N	A	Single	N/A	Pass
27.10-1	MS Access Control management (procedure a)	N	A	Single	N/A	Pass
27.10-2	MS Access Control management (procedure b)	N	A	Single	N/A	Pass
27.10-3	MS Access Control management (procedure c)	N	A	Single	N/A	Pass
27.10-4	MS Access Control management (procedure d)	N	A	Single	N/A	Pass
27.10-5	MS Access Control management (procedure e)	N	A	Single	N/A	Pass
27.10-6	MS Access Control management (procedure f)	N	A	Single	N/A	Pass
27.10-7	MS Access Control management (procedure g)	N	A	Single	N/A	Pass
27.10-8	MS Access Control management (procedure h)	N	A	Single	N/A	Pass
27.11.1.1	Character Transmission - Bit / Char. duration during transmission to the SIM	N	A	Single	N/A	Pass
27.11.1.2	Bit / Character duration during the transmission from the SIM Simulator to the ME	N	A	Single	N/A	Pass

3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
27.11.1.3	Inter-character delay	N	A	Single	N/A	Pass
27.11.1.4	Error handling during the transmission from the ME to the SIM Simulator	N	A	Single	N/A	Pass
27.11.2.2	Acceptance of SIMs with active low RST.	N	P	Single	N/A	Pass
27.11.2.3	Characters of the answer to Reset..	N	A	Single	N/A	Pass
27.11.2.4	PTS Procedure	N	A	Single	N/A	Pass
27.11.2.5	Reset repetition	N	A	Single	N/A	Pass
27.11.3	Command Processing Procedure bytes ACK:	N	A	Single	N/A	Pass
27.12.1	Evaluation of Directory Characteristics Operating Speed in Authentication Procedure	N	A	Single	N/A	Pass
27.12.2	Clock Stop	N	A	Single	N/A	Pass
27.14.1	Entry of PIN	N	A	Single	N/A	Pass
27.14.2	Change of PIN	N	A	Single	N/A	Pass
27.14.3	Disabling the PIN	N	A	Single	N/A	Pass
27.14.4	PUK entry	N	A	Single	N/A	Pass
27.14.5	Entry of PIN2	N	A	Single	N/A	Pass
27.14.6	Change of PIN2	N	A	Single	N/A	Pass
27.14.7	PUK2 entry	N	A	Single	N/A	Pass
27.17.1.1	Electrical tests – phase preceding ME power on	N	A	Single	N/A	Pass
27.17.1.2	Phase during SIM power on	N	A	Single	N/A	Pass
27.17.1.4	Phase during ME power off with clock stop allowed	N	A	Single	N/A	Pass
27.17.1.5.7	SIM Type Recognition and Voltage Switching - Reaction of 1,8V technology MEs on type recognition of 3V technology SIMs	N	A	Single	N/A	Pass
27.17.1.5.8	SIM Type Recognition and Voltage Switching - Reaction of 1,8V technology MEs on type recognition of 1,8V technology SIMs	N	A	Single	N/A	Pass
27.17.2.1.1	Electrical tests on Contact C1 test 1	N	A	Single	N/A	Pass
27.17.2.1.2	Contact C1 test 2	N	A	Single	N/A	Pass
27.17.2.2	Contact C2	N	A	Single	N/A	Pass
27.17.2.3	Contact C3	N	A	Single	N/A	Pass
27.17.2.5	Electrical tests on contact C7	N	A	Single	N/A	Pass
27.18.1.1	ME and SIM with fixed number dialling activated	N	A	Single	N/A	Pass
27.18.2	ME and SIM with fixed number dialling deactivated	N	A	Single	N/A	Pass
27.19	Phase identification	N	A	Single	N/A	Pass

3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
27.20	SIM presence detection	N	A	Single	N/A	Pass
27.22.1	Initialisation of SIM Application Toolkit Enabled SIM by SIM Application Toolkit Enabled ME (Profile Download)	P	A	Single	N/A	Pass
27.22.2	Contents of the TERMINAL PROFILE command	P	A	Single	N/A	Pass
27.22.3	Servicing of Proactive SIM Commands	P	A	Single	N/A	Pass
27.22.4.1.1	Proactive SIM commands: DISPLAY TEXT (Normal)	P	A	Single	N/A	Pass
27.22.4.1.2	Proactive SIM commands: DISPLAY TEXT (Support of "No response from user")	P	A	Single	N/A	Pass
27.22.4.1.3	Proactive SIM commands: DISPLAY TEXT (Display of extension text)	P	A	Single	N/A	Pass
27.22.4.1.4	Proactive SIM commands: DISPLAY TEXT (Sustained text)	A	A	Single	N/A	Pass
27.22.4.2.1	Proactive SIM commands: GET INKEY(normal)	P	A	Single	N/A	Pass
27.22.4.2.2	Proactive SIM commands: GET INKEY (No response from User)	P	A	Single	N/A	Pass
27.22.4.2.7	Proactive SIM commands: GET INKEY(Help Information)	P	A	Single	N/A	Pass
27.22.4.3.1	Proactive SIM commands: GET INPUT (normal)	P	A	Single	N/A	Pass
27.22.4.3.2	Proactive SIM commands: GET INPUT(No response from User)	P	A	Single	N/A	Pass
27.22.4.3.5	Proactive SIM commands: GET INPUT (default text)	P	A	Single	N/A	Pass
27.22.4.3.7	Proactive SIM commands: GET INPUT (Help Information)	P	A	Single	N/A	Pass
27.22.4.4	Proactive SIM command: MORE TIME	P	A	Single	N/A	Pass
27.22.4.5	Proactive SIM command: PLAY TONE	A	A	Single	N/A	Pass
27.22.4.6	Proactive SIM command: POLL INTERVAL	P	A	Single	N/A	Pass
27.22.4.7.1	Proactive SIM commands: REFRESH (normal)	A	A	Single	N/A	Pass
27.22.4.7.2	Proactive SIM commands: REFRESH (IMSI changing procedure)	A	A	Single	N/A	Pass
27.22.4.8.1	Proactive SIM commands: SET UP MENU (normal) and ENVELOPE MENU SELECTION	P	A	Single	N/A	Pass
27.22.4.8.2	Proactive SIM commands: (help request support) and ENVELOPE MENU SELECTION	P	A	Single	N/A	Pass
27.22.4.8.3	Proactive SIM commands: (next action support) and ENVELOPE MENU SELECTION	P	A	Single	N/A	Pass

3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
27.22.4.9.1	Proactive SIM commands: SELECT ITEM (mandatory features for ME supporting SELECT ITEM)	P	A	Single	N/A	Pass
27.22.4.9.2	Proactive SIM commands: SELECT ITEM (next action support)	P	A	Single	N/A	Pass
27.22.4.9.3	Proactive SIM commands: SELECT ITEM (default item support)	P	A	Single	N/A	Pass
27.22.4.9.4	Proactive SIM commands: SELECT ITEM (help request support)	P	A	Single	N/A	Pass
27.22.4.9.6	Proactive SIM commands: SELECT ITEM (presentation style)	P	A	Single	N/A	Pass
27.22.4.9.8	Proactive SIM commands: SELECT ITEM (Support of "No response from user")	P	A	Single	N/A	Pass
27.22.4.10.1	Proactive SIM commands: SEND SHORT MESSAGE (normal)	A	A	Single	N/A	Pass
27.22.4.11.1	Proactive SIM commands: SEND SS (normal)	A	A	Single	N/A	Pass
27.22.4.12.1	Proactive SIM commands: SEND USSD (normal)	A	A	Single	N/A	Pass
27.22.4.13.1	Proactive SIM commands: SET UP CALL (normal)	A	A	Single	N/A	Pass
27.22.4.14	Proactive SIM command: POLLING OFF	A	A	Single	N/A	Pass
27.22.4.15	Proactive SIM command: PROVIDE LOCAL INFORMATION	A	A	Single	N/A	Pass
27.22.4.16	Proactive SIM command: SET UP EVENT LIST	A	A	Single	N/A	Pass
27.22.4.21.1	Proactive SIM commands: TIMER MANAGEMENT	P	A	Single	N/A	Pass
27.22.4.21.2	Proactive SIM commands: ENVELOPE TIMER EXPIRATION	P	A	Single	N/A	Pass
27.22.4.22.1	Proactive SIM commands: SET UP IDLE MODE TEXT (normal)	A	A	Single	N/A	Pass
27.22.4.24.1	Proactive SIM commands: SEND DTMF (Normal)	A	A	Single	N/A	Pass
27.22.5.1	SMS-PP Data Download	A	A	Single	N/A	Pass
27.22.5.2	SMS-CB Data Download	A	A	Single	N/A	Pass
27.22.6.1	Call control by SIM - Procedure for mobile originated calls	A	A	Single	N/A	Pass
27.22.6.2	Call control by SIM - Procedure for Supplementary Services	A	A	Single	N/A	Pass
27.22.7.1	Event Download - MT Call Event	A	A	Single	N/A	Pass
27.22.7.2.1	EVENT DOWNLOAD: Call Connected Event (MT and MO call)	A	A	Single	N/A	Pass
27.22.7.2.2	EVENT DOWNLOAD: Call Connected Event (ME supporting SET UP CALL)	A	A	Single	N/A	Pass
27.22.7.3	Event Download - Call Disconnected Event	A	A	Single	N/A	Pass

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3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
27.22.7.4	Event Download - Location Status Event	A	A	Single	N/A	Pass
27.22.7.5	Event Download - User Activity Event	P	A	Single	N/A	Pass
27.22.7.6	Event Download - Idle Screen Available Event	A	A	Single	N/A	Pass
29.3.2.6.7	Checkpoint recovery - total loss of reponse to checkpointing	N	A	Single	N/A	Pass
29.3.2.6.9	Checkpoint recovery - N2 retransmission of a sequence	N	A	Single	N/A	Pass
29.3.3.2	Negotiation of the RLP parameters - negotiation initiated by the MS [FFS]	N	A	Single	N/A	Pass
29.3.3.3	Negotiation of the RLP parameters - collision of XID frames [FFS]	N	A	Single	N/A	Pass
29.3.3.5	Total Loss of XID frames	N	A	Single	N/A	Pass
31.1.1.1	CLIP, Normal operation	N	A	Single	N/A	Pass
31.1.1.2.1	CLIP, Interrogation accepted	N	A	Single	N/A	Pass
31.1.1.2.2	CLIP, Interrogation rejected	N	A	Single	N/A	Pass
31.1.2.1	CLIR, Normal operation - requesting presentation of CLI	N	A	Single	N/A	Pass
31.1.2.2	CLIR, Normal operation - requesting restriction of CLI presentation	N	A	Single	N/A	Pass
31.1.2.3.1	CLIR, Interrogation accepted	N	A	Single	N/A	Pass
31.1.2.3.2	CLIR, Interrogation rejected	N	A	Single	N/A	Pass
31.1.3.1	COLP, Normal operation	N	A	Single	N/A	Pass
31.1.3.2.1	COLP, Interrogation accepted	N	A	Single	N/A	Pass
31.1.3.2.2	COLP, Interrogation rejected	N	A	Single	N/A	Pass
31.1.4.1.1	COLR, Interrogation accepted	N	A	Single	N/A	Pass
31.1.4.1.2	COLR, Interrogation rejected	N	A	Single	N/A	Pass
31.2.1.1.1	Call forwarding supplementary services / Registration accepted	N	A	Single	N/A	Pass
31.2.1.1.2	Call forwarding supplementary services / Registration rejected	N	A	Single	N/A	Pass
31.2.1.2.1	Call forwarding supplementary services / Erasure accepted	N	A	Single	N/A	Pass
31.2.1.2.2	Call forwarding supplementary services / Erasure rejected	N	A	Single	N/A	Pass
31.2.1.3	Call forwarding supp services \ activation	N	A	Single	N/A	Pass
31.2.1.4	Call forwarding supp services \ deactivation	N	A	Single	N/A	Pass
31.2.1.6.1	Call forwarding supplementary services, Interrogation accepted	N	A	Single	N/A	Pass
31.2.1.6.2	Call forwarding supplementary services, Interrogation rejected	N	A	Single	N/A	Pass
31.2.1.7.1.1	Normal operation – Served mobile subscriber side / Notification of incoming call	N	A	Single	N/A	Pass

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3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
31.2.1.7.1.2	Normal operation / served mobile subscriber side / Notification during outgoing call	N	A	Single	N/A	Pass
31.2.1.7.2	Call forwarding supplementary services, Forwarded-to mobile subscriber side	N	A	Single	N/A	Pass
31.3.1.1	Call Waiting, Waiting call indication and confirmation	N	A	Single	N/A	Pass
31.3.1.2.1	Call Waiting, Waiting call accepted; existing call released	N	A	Single	N/A	Pass
31.3.1.2.2.1	Call Waiting, Waiting call accepted; existing call on hold, no additional calls	N	A	Single	N/A	Pass
31.3.1.2.3	Call Waiting, Existing call released by user A; waiting call accepted	N	A	Single	N/A	Pass
31.3.1.3.1	Call Waiting, Waiting call released by subscriber B	N	A	Single	N/A	Pass
31.3.1.3.2	Call Waiting, Waiting call released by calling user C	N	A	Single	N/A	Pass
31.3.1.4	Call Waiting, Activation	N	A	Single	N/A	Pass
31.3.1.5	Call Waiting, Deactivation	N	A	Single	N/A	Pass
31.3.1.6.1	Call Waiting, Interrogation accepted	N	A	Single	N/A	Pass
31.3.1.6.2	Call Waiting, Interrogation rejected	N	A	Single	N/A	Pass
31.3.2.1	Call Hold, Hold invocation	N	A	Single	N/A	Pass
31.3.2.2	Call Hold, Retrieve procedure	N	A	Single	N/A	Pass
31.3.2.3	Call Hold, Alternate from one call to the other	N	A	Single	N/A	Pass
31.4.1.1	Multiparty, Beginning the Multiparty service, successful case	N	A	Single	N/A	Pass
31.4.1.2	Multiparty, Beginning the Multiparty service, unsuccessful case	N	A	Single	N/A	Pass
31.4.1.3	Multiparty, Beginning the Multiparty service, expiry of timer T(BuildMPTY)	N	A	Single	N/A	Pass
31.4.2.1.1.1	Multiparty, Managing an active Multiparty call, Put the multiparty call on hold successful case	N	A	Single	N/A	Pass
31.4.2.1.1.2	Multiparty, Managing an active Multiparty call, Put the multiparty call on hold unsuccessful case	N	A	Single	N/A	Pass
31.4.2.1.1.3	Multiparty, Managing an active Multiparty call, Put the multiparty call on hold expiry of timer T(HoldMPTY)	N	A	Single	N/A	Pass
31.4.2.1.2.1	Multiparty, Managing an active Multiparty call, Create a private communication with one of the remote parties, successful case	N	A	Single	N/A	Pass

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3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
31.4.2.1.2.2	Multiparty, Managing an active Multiparty call, Create a private communication with one of the remote parties, unsuccessful case	N	A	Single	N/A	Pass
31.4.2.1.2.3	Multiparty, Managing an active Multiparty call, Create a private communication with one of the remote parties, expiry of timer T(SplitMPTY)	N	A	Single	N/A	Pass
31.4.2.1.3	Multiparty, Managing an active Multiparty call, Terminate the entire Multiparty call	N	A	Single	N/A	Pass
31.4.2.1.4	Multiparty, Managing an active Multiparty call, Explicitly disconnect a remote party	N	A	Single	N/A	Pass
31.4.2.2.1	Multiparty, Remote parties, Release from the Multiparty call	N	A	Single	N/A	Pass
31.4.3.1.1	Multiparty, Managing a held Multiparty call, Retrieve the held Multiparty call, successful case	N	A	Single	N/A	Pass
31.4.3.1.2	Multiparty, Managing a held Multiparty call, Retrieve the held Multiparty call, unsuccessful case	N	A	Single	N/A	Pass
31.4.3.1.3	Multiparty, Managing a held Multiparty call, Retrieve the held Multiparty call, expiry of timer T(RetrieveMPTY)	N	A	Single	N/A	Pass
31.4.3.2	Multiparty, Initiate a new call	N	A	Single	N/A	Pass
31.4.3.3	Multiparty, Process a call waiting request	N	A	Single	N/A	Pass
31.4.3.4	Multiparty, Terminate the held Multiparty call	N	A	Single	N/A	Pass
31.4.4.1.1.1	Multiparty, Managing a single call and a Multiparty call, Disconnect the single call, single call active	N	A	Single	N/A	Pass
31.4.4.1.1.2	Multiparty, Managing a single call and a Multiparty call, Disconnect the single call, single call held	N	A	Single	N/A	Pass
31.4.4.1.2.3	Multiparty, Managing a single call and a Multiparty call, Disconnect the MPTY, clear single party, Multiparty call held	N	A	Single	N/A	Pass
31.4.4.1.2.4	Multiparty, Managing a single call and a Multiparty call, Disconnect the MPTY, clear single party, Multiparty call active	N	A	Single	N/A	Pass
31.4.4.2	Multiparty, Managing a single call and a Multiparty call, Disconnect the MPTY, clear all parties, Multiparty call held	N	A	Single	N/A	Pass
31.4.4.3.1	Multiparty, Managing a single call and a Multiparty call, Add a single call to the MPTY, Successful case	N	A	Single	N/A	Pass

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3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
31.4.4.3.2	Multiparty, Managing a single call and a Multiparty call, Add a single call to the MPTY, maximum number of participants exceeded	N	A	Single	N/A	Pass
31.4.4.4	Multiparty, Managing a single call and a Multiparty call, Alternate between the MPTY call and the single call	N	A	Single	N/A	Pass
31.4.5	Multiparty, Managing a single call and a Multiparty call, Adding extra remote parties	N	A	Single	N/A	Pass
31.8.1.1	Call restriction supplementary services / Registration accepted	N	A	Single	N/A	Pass
31.8.1.2.1	Registration rejected / Rejection after invoke of the Register Password operation	N	A	Single	N/A	Pass
31.8.1.2.2	Registration rejected / Rejection after password check with negative result	N	A	Single	N/A	Pass
31.8.1.2.3	Registration rejected / Rejection after new password mismatch	N	A	Single	N/A	Pass
31.8.3.1	Activation accepted	N	A	Single	N/A	Pass
31.8.3.2.1	Activation rejected / Rejection after invoke of ActivateSS operation	N	A	Single	N/A	Pass
31.8.4.1	Deactivation / Deactivation Accepted	N	A	Single	N/A	Pass
31.8.4.2.1	Rejection after invoke of DeactivateSS operation	N	A	Single	N/A	Pass
31.8.4.2.2	Rejection after use of password procedure	N	A	Single	N/A	Pass
31.8.6.1	Interrogation accepted	N	A	Single	N/A	Pass
31.8.6.2	Interrogation rejected	N	A	Single	N/A	Pass
31.8.7	Normal operation	N	A	Single	N/A	Pass
31.9.1.1	Mobile station initiated Unstructured supplementary service data operation, ProcessUnstructuredSS-request/accepted	N	A	Single	N/A	Pass
31.9.1.2	ProcessUnstructuredSS-request/cross phase compatibility and error handling	N	A	Single	N/A	Pass
31.9.2.1	Network initiated unstructured supplementary service operations, UnstructuredSS-Notify/accepted	N	A	Single	N/A	Pass
31.9.2.2	UnstructuredSS-Notify/rejected on user busy	N	A	Single	N/A	Pass
31.9.2.3	UnstructuredSS-Request/accepted	N	A	Single	N/A	Pass
31.10	MMI Input for USSD	N	A	Single	N/A	Pass
33.6	Subscription identity management	N	A	Single	N/A	Pass
34.2.1	Short message service / SMS point to point - SMS mobile terminated - procedure a) to e)	N	A	Single	N/A	Pass

3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
34.2.3	Test of the memory available notification:	N	A	Single	N/A	Pass
34.2.5.3	Test of Class 2 Short Messages	N	A	Single	N/A	Pass
34.3	Short message service cell broadcast	N	A	Single	N/A	Pass
41.1.1.1	RR / Paging / on PCCCH for GPRS service / normal paging with P-TMSI successful.	N	A	Single	N/A	Pass
41.1.1.2	RR/Paging/ on PCCCH for GPRS service/ normal paging with IMSI	N	A	Single	N/A	Pass
41.1.1.3	RR / Paging / on PCCCH for GPRS service / extended paging with P-TMSI successful.	N	A	Single	N/A	Pass
41.1.2	RR / Paging / on PCCCH for circuit-switched services / paging successful	N	A	Single	N/A	Pass
41.1.3	RR / Paging / on PCCCH / paging ignored	N	A	Single	N/A	Pass
41.1.4.1	RR/ Paging/ on PACCH for circuit switched services/ paging successful	N	A	Single	N/A	Pass
41.1.4.2	RR/ Paging/ on PACCH for circuit switched services/ paging ignored	N	A	Single	N/A	Pass
41.1.5.1.1	RR / Paging / on CCCH for GPRS service / normal paging with P-TMSI successful	N	A	Single	N/A	Pass
41.1.5.1.2	RR / Paging / on CCCH for GPRS service / normal paging with IMSI successful	N	A	Single	N/A	Pass
41.1.5.1.3	RR / Paging / on CCCH for GPRS service / normal paging with P-TMSI ignored	N	A	Single	N/A	Pass
41.1.5.2.1	RR / Paging / on CCCH for GPRS service / extended paging with P-TMSI successful	N	A	Single	N/A	Pass
41.1.6	RR / Paging / Before T3172 expiry	N	A	Single	N/A	Pass
41.2.1.1	Permission to access the network/ priority class	N	A	Single	N/A	Pass
41.2.2.1	Initiation of the packet access procedure/ establishment causes	N	A	Single	N/A	Pass
41.2.2.2	Random references for single block packet access	N	A	Single	N/A	Pass
41.2.2.3	Random references for one phase packet access	N	A	Single	N/A	Pass
41.2.2.4	Initiation of the packet access procedure / timer T3146	A	A	All	Pass	Pass
41.2.2.5	Initiation of the packet access procedure / Request Reference	A	A	All	Pass	Pass
41.2.3.1	Packet immediate assignment / One phase packet access/ Two-message assignment / Successful case	A	A	All	Pass	Pass
41.2.3.2	Two-message assignment / Failure cases	A	A	All	Pass	Pass

3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
41.2.3.3	Packet immediate assignment / One phase packet access/ Packet uplink assignment / Polling bit set	A	A	All	Pass	Pass
41.2.3.4	Packet immediate assignment / One phase packet access/ One phase packet access / Contention resolution / Successful case	N	A	Single	N/A	Pass
41.2.3.5	One phase packet access / Contention resolution / TLLI mismatch	N	A	Single	N/A	Pass
41.2.3.6	One phase packet access / Contention resolution / Counter N3104	N	A	Single	N/A	Pass
41.2.3.7	One phase packet access / Contention resolution / Timer T3166	N	A	Single	N/A	Pass
41.2.3.8	One phase packet access / Contention resolution / 4 access repetition attempts	N	A	Single	N/A	Pass
41.2.3.9	One Phase packet Access / TBF starting time	N	A	Single	N/A	Pass
41.2.3.10	One phase packet access / Timing Advance Index present	N	A	Single	N/A	Pass
41.2.3.11	One phase packet access / Timing Advance Index not present	N	A	Single	N/A	Pass
41.2.4.1	Packet immediate assignment / Single block packet access / Single block packet access / Packet Resource Request	A	A	All	Pass	Pass
41.2.5.1	Packet access rejection / wait indication	N	A	Single	N/A	Pass
41.2.5.2	Packet access rejection / assignment before T3142 expires	A	A	All	Pass	Pass
41.2.6.1	Packet downlink assignment procedure using CCCH / Initiation of packet downlink assignment procedure / MS listens to correct CCCH block	A	A	All	Pass	Pass
41.2.6.2	Initiation of packet downlink assignment procedure / timer T3190	A	A	All	Pass	Pass
41.2.6.3	Initiation of packet downlink assignment procedure / TBF starting time	A	A	All	Pass	Pass
41.2.6.4	Initiation of packet downlink assignment procedure / incorrect TFI	A	A	All	Pass	Pass
41.3.1.1	TBF Release / Uplink / Normal / MS initiated / Acknowledged mode	N	A	Single	N/A	Pass
41.3.1.2	TBF Release / Uplink / Normal / MS initiated / Unacknowledged mode	N	A	Single	N/A	Pass
41.3.1.3	TBF Release / Uplink / Normal / MS initiated / Channel coding change during countdown	N	A	Single	N/A	Pass
41.3.2.1	TBF Release / Uplink / Normal / Network initiated / Acknowledged mode	N	A	Single	N/A	Pass

3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
41.3.2.2	TBF Release / Uplink / Normal / Network initiated / Unacknowledged mode	N	A	Single	N/A	Pass
41.3.3	TBF Release / Uplink / Network initiated / Abnormal release	N	A	Single	N/A	Pass
41.3.4.1	TBF Release / Downlink / Normal / Network initiated / Acknowledged mode (most important)	N	A	Single	N/A	Pass
41.3.4.2	TBF Release / Downlink / Normal / Network initiated / Unacknowledged mode	N	A	Single	N/A	Pass
41.3.5.2	PDCH Release / With TIMESLOTS AVAILABLE	A	A	All	Pass	Pass
42.1.1.1	Packet Channel Request / Message format	A	A	All	Pass	Pass
42.1.1.2	Packet Channel Request / Response to Packet Paging	A	A	All	Pass	Pass
42.1.1.4.1	Packet Channel Request/ Access persistence control on PRACH/ M+1 attempts	A	A	All	Pass	Pass
42.1.1.4.2	Packet Channel Request/ Access persistence control on PRACH/ persistence level	A	A	All	Pass	Pass
42.1.1.4.3	Packet Channel Request / Access persistence control on PRACH / Successive Attempts	A	A	All	Pass	Pass
42.1.2.1.1.1	Packet Uplink Assignment/ Packet queuing notification/ Stop sending packet channel requests	A	A	All	Pass	Pass
42.1.2.1.1.2	Packet Uplink Assignment/ Packet queuing notification/ Ignoring packet queuing notification	A	A	All	Pass	Pass
42.1.2.1.1.3	Packet Uplink Assignment / Packet queuing notification / Assigned PDCHs	A	A	All	Pass	Pass
42.1.2.1.1.4	Packet Uplink Assignment/ Packet queuing notification/ Expiry of timer T3162	A	A	All	Pass	Pass
42.1.2.1.2	Packet Uplink Assignment / Response to packet polling request	A	A	All	Pass	Pass
42.1.2.1.3.1	Packet Uplink Assignment/ Packet access reject/ Action during wait indication	A	A	All	Pass	Pass
42.1.2.1.3.2	Packet Uplink Assignment/ Packet access reject/ No respond	A	A	All	Pass	Pass
42.1.2.1.4	Packet Uplink Assignment/ Packet uplink assignment handling	A	A	All	Pass	Pass
42.1.2.1.5	Packet Uplink Assignment / One or two phase access	A	A	All	Pass	Pass
42.1.2.1.6	Packet Uplink Assignment / Decoding of frequency parameters	A	A	All	Pass	Pass

3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
42.1.2.1.7	Packet Uplink Assignment / Most recently received Packet Uplink Assignment	A	A	All	Pass	Pass
42.1.2.1.8.1.1	Packet Uplink Assignment / One phase access / Contention resolution / Inclusion of TLLI in RLC data blocks	A	A	All	Pass	Pass
42.1.2.1.8.1.2	Packet Uplink Assignment / One phase access / Contention resolution / Counter N3104	A	A	All	Pass	Pass
42.1.2.1.8.1.3	Packet Uplink Assignment/ One phase access/ Contention resolution/ Timer T3166	A	A	All	Pass	Pass
42.1.2.1.8.1.4	Packet Uplink Assignment/ One phase access/ Contention resolution/ TLLI mismatch	A	A	All	Pass	Pass
42.1.2.1.8.1.5	Packet Uplink Assignment/ One phase access/ Contention resolution/ 4 access repetition attempts	A	A	All	Pass	Pass
42.1.2.1.8.2.1	Packet Uplink Assignment / One phase access / Timing Advance / TA Index present	A	A	All	Pass	Pass
42.1.2.1.8.2.2	Packet Uplink Assignment / One phase access / Timing Advance / TA Index not present	A	A	All	Pass	Pass
42.1.2.1.9.1	Packet Uplink Assignment / Two phase access / Packet Resource Request / RLC Octet Count	A	A	All	Pass	Pass
42.1.2.1.9.2.1	Packet Uplink Assignment / Two phase access / Contention resolution / Expiry of timer T3168	A	A	All	Pass	Pass
42.1.2.1.9.2.2	Packet Uplink Assignment / Two phase access / Contention resolution / TLLI mismatch	A	A	All	Pass	Pass
42.1.2.1.9.3	Packet Uplink Assignment / Two phase access / Packet Resource Request / No response to Packet Downlink Assignment	A	A	All	Pass	Pass
42.1.2.1.10.1	Packet Uplink Assignment/ Abnormal cases/ incorrect PCDH assignment	A	A	All	Pass	Pass
42.1.2.1.10.2	Packet Uplink Assignment/ Abnormal cases/ expiry of timer T3164	A	A	All	Pass	Pass
42.1.2.1.12	Variable PBCCH and PSI Scheduling	A	A	All	Pass	Pass
42.1.2.2.1	Packet Downlink Assignment / Response to poll bit	A	A	All	Pass	Pass
42.1.2.2.2	Packet Downlink Assignment / PCCCH monitoring	A	A	All	Pass	Pass
42.1.2.2.3	Packet Downlink Assignment / Frequency Hopping	N	A	All	Pass	Pass
42.1.2.2.4	Packet Downlink Assignment / Response to Packet Polling	A	A	All	Pass	Pass

3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
42.1.2.2.5.1	Packet Downlink Assignment/ Abnormal cases/ Incorrect PDCH Assignment	A	A	All	Pass	Pass
42.1.2.2.5.2	Packet Downlink Assignment/ Abnormal cases/ Expiry of timer T3190	A	A	All	Pass	Pass
42.1.2.2.6	Packet Downlink Assignment Timing Advance / TA value field not provided	A	A	All	Pass	Pass
42.3.1.1.1	Dynamic Allocation / Uplink Transfer / Normal / Successful	A	A	All	Pass	Pass
42.3.1.1.3	Dynamic Allocation / Uplink Transfer / Normal / Starting frame number encoding	N	A	Single	N/A	Pass
42.3.1.1.4	Dynamic Allocation / Uplink Transfer / Normal / Starting time	N	A	Single	N/A	Pass
42.3.1.1.6	Packet Downlink Assignment / Response to Packet Polling	N	A	Single	N/A	Pass
42.3.1.1.7	Dynamic Allocation / Uplink Transfer / Normal / PACCH operation	A	A	All	Pass	Pass
42.3.1.1.8	Dynamic Allocation / Uplink Transfer / Normal / Two uplink timeslots	A	A	All	Pass	Pass
42.3.1.2.3	Dynamic Allocation / Uplink Transfer / Abnormal / with cell reselection in unacknowledged mode	A	A	All	Pass	Pass
42.3.2.1.1	Dynamic Allocation / Uplink Transfer with Downlink TBF establishment / Normal / Successful	A	A	All	Pass	Pass
42.3.2.2.1	Dynamic Allocation / Uplink Transfer with Downlink TBF establishment / Abnormal / with random access	A	A	All	Pass	Pass
42.3.2.2.2	Dynamic Allocation / Uplink Transfer with Downlink TBF establishment / Abnormal / / Continuation of normal operation	A	A	All	Pass	Pass
42.4.1.1	Measurement reports / Network Control measurement reporting / Uplink / Normal case	A	A	All	Pass	Pass
42.4.1.3	Measurement reports / Network Control measurement reporting / Downlink / Normal case	A	A	All	Pass	Pass
42.4.2.1.1	Cell change order procedure / Uplink transfer / Normal case	A	A	All	Pass	Pass
42.4.2.1.3	Cell change order procedure / Uplink transfer / Failure cases / REJECT from the new cell	A	A	All	Pass	Pass
42.4.2.1.4	Cell change order procedure / Uplink transfer / Failure cases / Contention resolution failure	A	A	All	Pass	Pass

3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
42.4.2.1.6	Cell change order procedure / Uplink transfer / Failure cases / Frequency not implemented	A	A	All	Pass	Pass
42.4.2.2.1	Cell change order procedure / Downlink transfer / Normal case	A	A	All	Pass	Pass
42.4.2.2.2	Cell change order procedure / Downlink transfer / Failure cases / REJECT from the new cell	A	A	All	Pass	Pass
42.4.2.2.3	Cell change order procedure / Downlink transfer / Failure cases / Frequency not implemented	N	A	All	Pass	Pass
42.4.2.3.1	Cell change order procedure / Simultaneous uplink and downlink transfer / Normal case	A	A	All	Pass	Pass
42.4.4.1	Cell Change Order Procedures without PBCCH /Network Controlled Cell Reselection – Packet Measurement Order Procedure	A	A	All	Pass	Pass
42.4.4.2	Cell Change Order Procedures without PBCCH /Network Controlled Cell Reselection/validity of reselection parameters/MS enters standby state	A	A	All	Pass	Pass
42.5.1.1	Downlink Transfer / Normal Operation / Relative Encoding TBF starting time	N	A	Single	N/A	Pass
42.5.1.2	Downlink Transfer/ Normal Operation / Without TBF starting time	N	A	Single	N/A	Pass
42.5.2.1	Downlink Transfer / Polling/ Normal operation/ RLC data block	N	A	Single	N/A	Pass
42.5.2.2	Downlink Transfer / Polling/ Packet Polling Request/ Access Burst Format	N	A	Single	N/A	Pass
42.5.2.3	Downlink Transfer / Polling/ Packet Polling Request/ Control block format	N	A	Single	N/A	Pass
42.5.3.1	Downlink Transfer / T3190 Expiry / Initial allocation / Restart with valid RLC data block	N	A	Single	N/A	Pass
42.5.4.1	Downlink Transfer/ T3190 Expiry / Resource reallocation / Without TBF starting time	N	A	Single	N/A	Pass
42.5.4.2	Downlink Transfer/ T3190 Expiry / Resource reallocation / With TBF starting time	N	A	Single	N/A	Pass
42.5.4.3	Downlink Transfer/ T3190 Expiry / Resource reallocation / Restart with valid RLC data block	N	A	Single	N/A	Pass
42.5.5.1	Downlink Transfer / Reestablishment / T3192 Expiry	N	A	Single	N/A	Pass

3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
42.5.5.2	Downlink Transfer / Reestablishment/ Packet Downlink Assignment	N	A	Single	N/A	Pass
42.5.5.3	Downlink Transfer/ Reestablishment/ Invalid Frequency Parameters IE	N	A	Single	N/A	Pass
43.1.1.1	Dynamic Allocation/ uplink transfer/ normal operation/ successful	N	A	Single	N/A	Pass
43.1.1.2	Dynamic Allocation/ uplink transfer/ normal / request new resources	N	A	Single	N/A	Pass
43.1.1.3	Acknowledged mode / Uplink TBF / Acknowledge state variable V(A)	N	A	Single	N/A	Pass
43.1.1.4	Acknowledged mode / Uplink TBF / Negatively acknowledged RLC data blocks	N	A	Single	N/A	Pass
43.1.1.5	Acknowledged mode / Uplink TBF / Invalid Negative Acknowledgement	N	A	Single	N/A	Pass
43.1.1.6	Acknowledged mode / Uplink TBF / Negatively acknowledged RLC data blocks	N	A	Single	N/A	Pass
43.1.2.1	Acknowledged mode / Downlink TBF / Receive state variable V(R)	N	A	Single	N/A	Pass
43.1.2.2	Acknowledged mode / Downlink TBF / Receive window state variable V(Q)	N	A	Single	N/A	Pass
43.1.2.3	Acknowledged mode / Downlink TBF / Reassembly of RLC data blocks	N	A	Single	N/A	Pass
43.1.2.4	Acknowledged mode / Downlink TBF / Re-assembly / Length Indicator	N	A	Single	N/A	Pass
43.2.1	Control Blocks Re-assembly	N	A	Single	N/A	Pass
44.2.1.1.1	GPRS attach procedure/ Normal GPRS attach / GPRS attach / accepted	N	A	Single	N/A	Pass
44.2.1.1.2	GPRS attach / rejected / IMSI invalid / illegal MS	N	A	Single	N/A	Pass
44.2.1.1.3	GPRS attach / rejected / IMSI invalid / GPRS services not allowed	N	A	Single	N/A	Pass
44.2.1.1.4-1	GPRS attach procedure/ Normal GPRS attach / GPRS attach / rejected / PLMN not allowed / Test procedure 1	N	A	Single	N/A	Pass
44.2.1.1.4-2	GPRS attach procedure/ Normal GPRS attach / GPRS attach / rejected / PLMN not allowed / Test procedure 2	N	A	Single	N/A	Pass
44.2.1.1.5-1	GPRS attach procedure/ Normal GPRS attach / GPRS attach / rejected / roaming not allowed in this location area / procedure 1	N	A	Single	N/A	Pass
44.2.1.1.5-2	GPRS attach procedure/ Normal GPRS attach / GPRS attach / rejected / roaming not allowed in this location area / procedure 2	N	A	Single	N/A	Pass

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3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
44.2.1.1.5-3	GPRS attach / rejected / roaming not allowed in this location area / procedure 3	N	A	Single	N/A	Pass
44.2.1.1.5-4	GPRS attach procedure/ Normal GPRS attach / GPRS attach / rejected / roaming not allowed in this location area / procedure 4	N	A	Single	N/A	Pass
44.2.1.1.6-1	GPRS attach / abnormal cases / access barred due to access class control / Test procedure 1	N	A	Single	N/A	Pass
44.2.1.1.6-2	GPRS attach / abnormal cases / access barred due to access class control / Test procedure 2	N	A	Single	N/A	Pass
44.2.1.1.7	GPRS attach / abnormal cases / change of cell into new routing area	N	A	Single	N/A	Pass
44.2.1.1.8	GPRS attach / abnormal cases / power off	N	A	Single	N/A	Pass
44.2.1.1.9	GPRS attach / abnormal cases / GPRS detach procedure collision	N	A	Single	N/A	Pass
44.2.1.2.1	GPRS attach procedure/ Combined GPRS attach / GPRS and non-GPRS attach accepted	N	A	Single	N/A	Pass
44.2.1.2.2-1	Combined GPRS attach / GPRS only attach accepted / Test procedure 1	N	A	Single	N/A	Pass
44.2.1.2.2-2	Combined GPRS attach / GPRS only attach accepted / Test procedure 2	N	A	Single	N/A	Pass
44.2.1.2.4	Combined GPRS attach / rejected / IMSI invalid / illegal ME	N	A	Single	N/A	Pass
44.2.1.2.5	Combined GPRS attach / rejected / GPRS services and non-GPRS services not allowed	N	A	Single	N/A	Pass
44.2.1.2.6	GPRS attach procedure/ Combined GPRS attach / Combined GPRS attach / rejected / GPRS services not allowed	N	A	Single	N/A	Pass
44.2.1.2.7	GPRS attach procedure/ Combined GPRS attach / Combined GPRS attach / rejected / location area not allowed	N	A	Single	N/A	Pass
44.2.1.2.8	Combined GPRS attach / abnormal cases / attempt counter check / miscellaneous reject causes	N	A	Single	N/A	Pass
44.2.1.2.9	Combined GPRS attach / abnormal cases / GPRS detach procedure collision	N	A	Single	N/A	Pass
44.2.2.1.1	GPRS detach procedure / MS initiated GPRS detach procedure / Normal GPRS detach procedure / power off / accepted	N	A	Single	N/A	Pass
44.2.2.1.2	GPRS detach procedure / / MS initiated GPRS detach procedure / GPRS detach / accepted	N	A	Single	N/A	Pass

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3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
44.2.2.1.3	GPRS detach / abnormal cases / attempt counter check / procedure timeout	N	A	Single	N/A	Pass
44.2.2.1.4	GPRS detach / abnormal cases / GMM common procedure collision	N	A	Single	N/A	Pass
44.2.2.1.5	GPRS detach procedure / Combined GPRS detach / power off / accepted	N	A	Single	N/A	Pass
44.2.2.1.6	GPRS detach / accepted / GPRS/IMSI detach	N	A	Single	N/A	Pass
44.2.2.1.8	GPRS detach / abnormal cases / change of ccell into new routing area	N	A	Single	N/A	Pass
44.2.2.1.9	GPRS detach / abnormal cases / GPRS detach procedure collision	N	A	Single	N/A	Pass
44.2.2.2.1	GPRS detach / re-attach not required / accepted	N	A	Single	N/A	Pass
44.2.2.2.2	GPRS detach / rejected / IMSI invalid / GPRS services not allowed	N	A	Single	N/A	Pass
44.2.2.2.3	GPRS detach / IMSI detach / accepted	N	A	Single	N/A	Pass
44.2.2.2.4	GPRS detach / re-attach requested / accepted	N	A	Single	N/A	Pass
44.2.2.2.5	GPRS detach / rejected / location area not allowed	N	A	Single	N/A	Pass
44.2.3.1.1	Routing area updating procedure / Normal routing area updating / Routing area updating / accepted	N	A	Single	N/A	Pass
44.2.3.1.2	Routing area updating / rejected / IMSI invalid / illegal ME	N	A	Single	N/A	Pass
44.2.3.1.3	Routing area updating / rejected / MS identity cannot be derived by the network	N	A	Single	N/A	Pass
44.2.3.1.4	Routing area updating / rejected / location area not allowed	N	B	Single	N/A	Pass
44.2.3.1.5	Routing area updating / abnormal cases / attempt counter check / miscellaneous reject causes	N	A	Single	N/A	Pass
44.2.3.1.6	Routing area updating / abnormal cases / change of cell into new routing area	N	A	Single	N/A	Pass
44.2.3.1.7	Routing area updating / abnormal cases / change of cell during routing area updating procedure	N	A	Single	N/A	Pass
44.2.3.1.8	Routing area updating / abnormal cases / P-TMSI reallocation procedure collision	N	A	Single	N/A	Pass
44.2.3.2.1	Routing area updating procedure / Combined routing area updating / Combined routing area updating / combined RA/LA accepted / test 1	N	A	Single	N/A	Pass
44.2.3.2.2	Combined routing area updating / MS in CS operation at change of RA	N	A	Single	N/A	Pass
44.2.3.2.3-1	Combined routing area updating / RA only accepted / Test Procedure 1	N	A	Single	N/A	Pass

3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
44.2.3.2.3-2	Combined routing area updating / RA only accepted / Test Procedure 2	N	A	Single	N/A	Pass
44.2.3.2.4	Routing area updating procedure/ Combined routing area updating /Combined routing area updating / rejected / PLMN not allowed	N	A	Single	N/A	Pass
44.2.3.2.5-1	Routing area updating procedure/ Combined routing area updating /Combined routing area updating / rejected / roaming not allowed in this location area/proc 1	N	A	Single	N/A	Pass
44.2.3.2.5-2	Routing area updating procedure/ Combined routing area updating /Combined routing area updating / rejected / roaming not allowed in this location area/proc 2	N	A	Single	N/A	Pass
44.2.3.2.6-1	Combined routing area updating / abnormal cases / access barred due to access class control / Test Procedure 1	N	A	Single	N/A	Pass
44.2.3.2.6-2	Combined routing area updating / abnormal cases / access barred due to access class control / Test Procedure 2	N	A	Single	N/A	Pass
44.2.3.2.7	Combined routing area updating / abnormal cases / attempt counter check / procedure timeout	N	A	Single	N/A	Pass
44.2.3.2.8	Combined routing area updating / abnormal cases / change of cell into new routing area	N	A	Single	N/A	Pass
44.2.3.2.9	Combined routing area updating / abnormal cases / change of cell during routing area updating procedure	N	A	Single	N/A	Pass
44.2.3.2.10-1	Combined routing area updating / abnormal cases / GPRS detach procedure collision / procedure 1	N	A	Single	N/A	Pass
44.2.3.2.10-2	Combined routing area updating / abnormal cases / GPRS detach procedure collision / procedure 2	N	A	Single	N/A	Pass
44.2.3.3.1	Routing area updating procedure/ Periodic routing area updating / Periodic routing area updating / accepted	N	A	Single	N/A	Pass
44.2.3.3.2	Periodic routing area updating / accepted / T3312 default value	N	A	Single	N/A	Pass
44.2.3.3.3	Periodic routing area updating / no cell available / network mode I	N	A	Single	N/A	Pass
44.2.3.3.4	Combined periodic routing area updating / no cell available	N	A	Single	N/A	Pass
44.2.4	P-TMSI reallocation	N	A	Single	N/A	Pass

3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
44.2.5.1.1	GPRS authentication and ciphering/ Test of authentication/ Authentication accepted	N	A	Single	N/A	Pass
44.2.5.1.2	Authentication rejected	N	A	Single	N/A	Pass
44.2.5.2.1-1	GPRS authentication and ciphering/ Test of ciphering mode setting / Ciphering mode / start ciphering	N	A	Single	N/A	Pass
44.2.5.2.2	Ciphering mode / stop ciphering	N	A	Single	N/A	Pass
44.2.5.2.3	Ciphering mode / IMEISV request	N	A	Single	N/A	Pass
44.2.6.1	General Identification	N	A	Single	N/A	Pass
44.2.7-1	GMM READY/ STANDBY timer handling/ Test procedure 1 (cell update)	N	A	Single	N/A	Pass
44.2.7-2	GMM READY/ STANDBY timer handling/ Test procedure 2	N	A	Single	N/A	Pass
44.2.7-3	GMM READY/ STANDBY timer handling/ Test procedure 3 (force to standby)	N	A	Single	N/A	Pass
44.2.7-4	GMM READY/ STANDBY timer handling/ Test procedure 4	N	A	Single	N/A	Pass
45.2.1.1	PDP context activation / PDP context activation initiated by the mobile station / Attach initiated by context activation/QoS Offered by Network is the QoS Requested	N	A	Single	N/A	Pass
45.2.1.2.1	PDP context activation / PDP context activation initiated by the mobile station / QoS Offered by Network is a lower QoS / QoS Accepted by MS	N	A	Single	N/A	Pass
45.2.1.2.2	QoS Rejected by MS	N	A	Single	N/A	Pass
45.2.2-1	PDP context activation / PDP context activation requested by the network, successful and unsuccessful	N	A	Single	N/A	Pass
45.2.4.1	T3380 Expiry	N	A	Single	N/A	Pass
45.3.1	PDP context modification procedure (Cases 1 & 2)	N	A	Single	N/A	Pass
45.4.1	PDP context deactivation procedure / PDP context deactivation initiated by the MS	N	A	Single	N/A	Pass
45.4.2	PDP context deactivation procedure / PDP context deactivation initiated by the network	N	A	Single	N/A	Pass
45.4.3.1	T3390 Expiry	N	A	Single	N/A	Pass
45.4.3.2	Collision of MS and network initiated PDP context deactivation requests	N	A	Single	N/A	Pass
45.5.1	Error Cases	N	A	Single	N/A	Pass
46.1.2.1.2	Data transmission in unprotected mode	N	A	Single	N/A	Pass
46.1.2.1.3	Reception of I frame in ADM	N	A	Single	N/A	Pass

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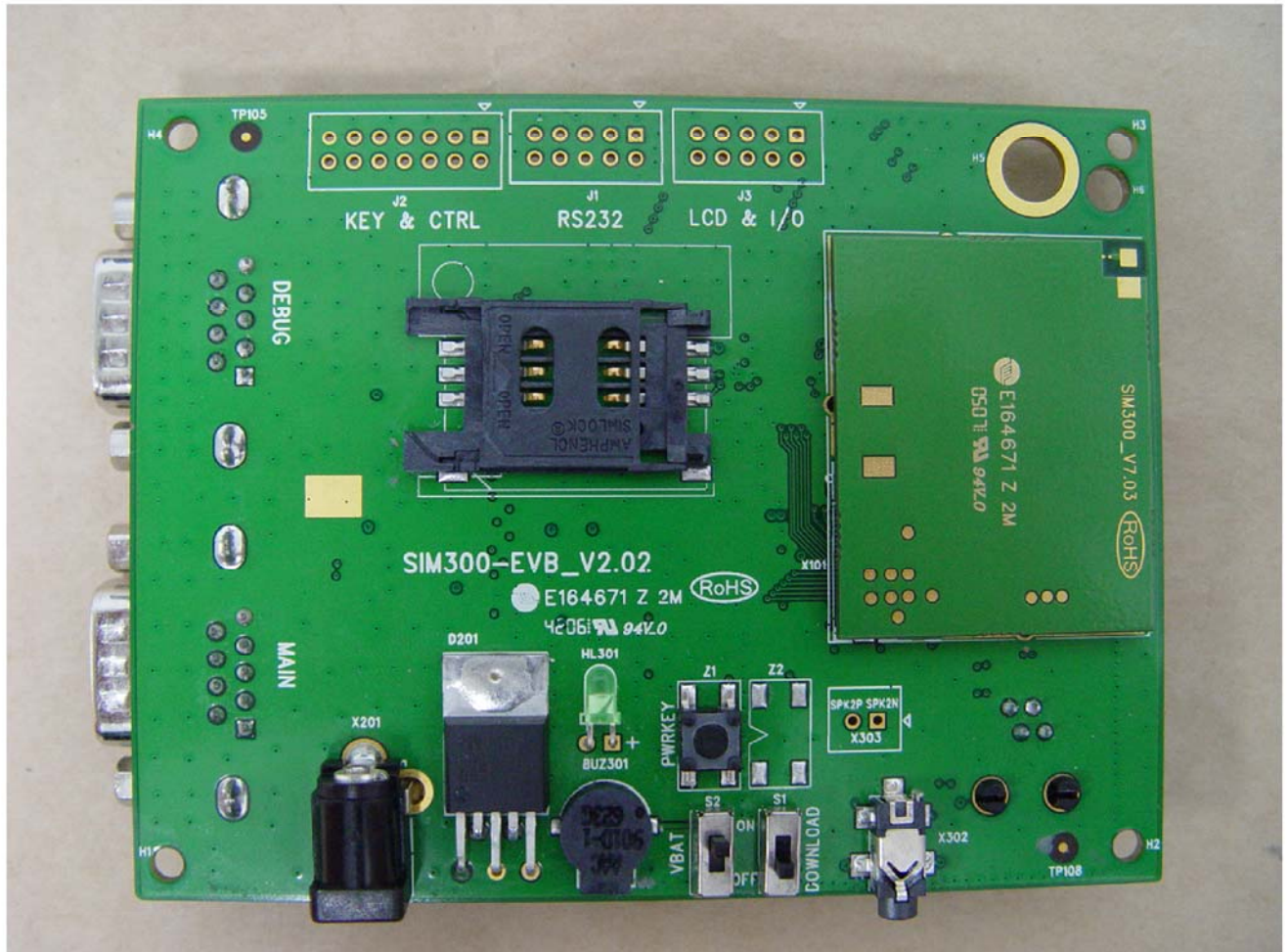
3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
46.1.2.2.1.1	Link establishment from MS to SS	N	A	Single	N/A	Pass
46.1.2.2.1.2	Link establishment from SS to MS	N	A	Single	N/A	Pass
46.1.2.2.1.3	Loss of UA frame	N	A	Single	N/A	Pass
46.1.2.2.1.4	Total loss of UA frame	N	A	Single	N/A	Pass
46.1.2.2.1.5	DM Response	N	A	Single	N/A	Pass
46.1.2.2.2.1	Checking N(S)	N	A	Single	N/A	Pass
46.1.2.2.2.2	Busy condition at the peer, with RR sent for resumption of transmission	N	A	Single	N/A	Pass
46.1.2.2.2.3	Busy condition at the peer, with ACK sent for resumption of transmission	N	A	Single	N/A	Pass
46.1.2.2.2.4	SACK frame	N	A	Single	N/A	Pass
46.1.2.2.3.1	Checking N(R)	N	A	Single	N/A	Pass
46.1.2.2.3.2	MS handling busy condition during bi-directional data transfer	N	A	Single	N/A	Pass
46.1.2.2.3.3	SACK frame	N	A	Single	N/A	Pass
46.1.2.2.3.4	ACK frame	N	A	Single	N/A	Pass
46.1.2.2.4.1	Reestablishment due to reception of SABM	N	A	Single	N/A	Pass
46.1.2.2.4.2	Reestablishment due to N200 failures	N	A	Single	N/A	Pass
46.1.2.2.4.3	Reestablishment due to reception of DM	N	A	Single	N/A	Pass
46.1.2.3.1	Collision of SABM	N	A	Single	N/A	Pass
46.1.2.3.2	Collision of SABM and DISC	N	A	Single	N/A	Pass
46.1.2.3.3	Collision of SABM and XID commands	N	A	Single	N/A	Pass
46.1.2.4.1	Unsolicited DM	N	A	Single	N/A	Pass
46.1.2.5.1	Sending FRMR due to undefined command control field	N	A	Single	N/A	Pass
46.1.2.5.2	Sending FRMR due to reception of an S frame with incorrect length	N	A	Single	N/A	Pass
46.1.2.5.3	Sending FRMR due to reception of an I frame information field exceeding the maximum length	N	A	Single	N/A	Pass
46.1.2.5.4	Frame reject condition during establishment of ABM	N	A	Single	N/A	Pass
46.1.2.7.1	Negotiation initiated by the SS during ABM, for T200 and N200	N	A	Single	N/A	Pass
46.1.2.7.2	Negotiation initiated by the SS during ADM, for N201-I	N	A	Single	N/A	Pass
46.1.2.7.4	Negotiation initiated by the SS (during ADM, for N201-U)	N	A	Single	N/A	Pass
46.1.2.7.5-1	Negotiation initiated by the SS (during ADM, for IOV-UI)	N	A	Single	N/A	Pass
46.1.2.7.7	XID command with unrecognised type field	N	A	Single	N/A	Pass
46.1.2.7.8	XID Response with out of range values	N	A	Single	N/A	Pass

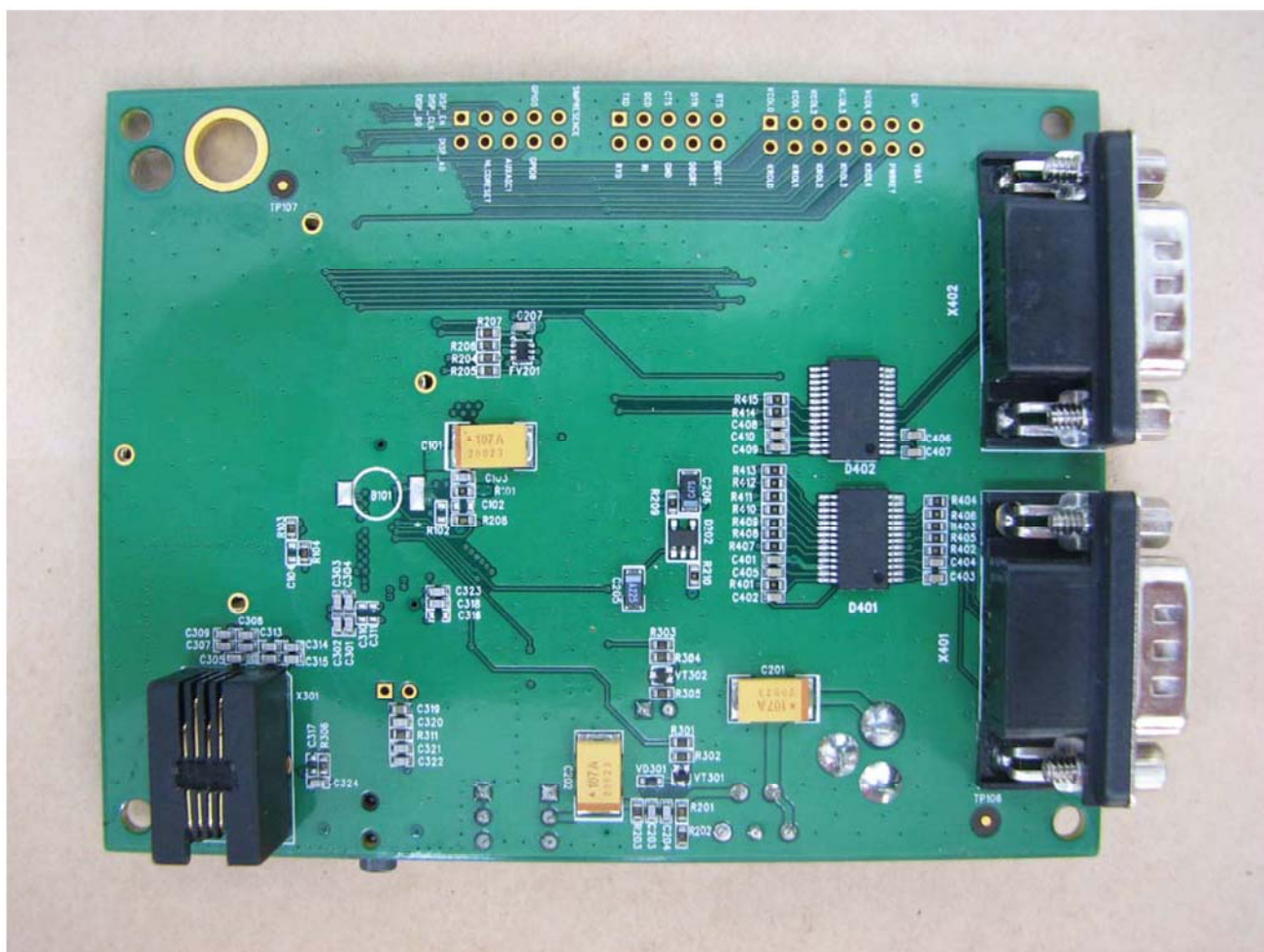
3GPP TS 51.010-1 Item	TEST DESCRIPTION	PTCRB 850	PTCRB 1900	850/1900 required	Verdict PTCRB 850	Verdict PTCRB 1900
46.2.2.1.1	Mobile originated normal data transfer with LLC in acknowledged mode	N	A	Single	N/A	Pass
46.2.2.1.2	Mobile originated normal data transfer with LLC in unacknowledged mode	N	A	Single	N/A	Pass
46.2.2.2.1	LLC link re-establishment on reception of SN-DATA PDU with F=0 in ack mode in the Receive First Segment state	N	A	Single	N/A	Pass
46.2.2.2.2	LLC link re-establishment on receiving second segment with F=1 and with different PCOMP and DCOMP values in the acknowledged mode data transfer	N	A	Single	N/A	Pass
46.2.2.2.3	Single segment N-PDU from MS	N	A	Single	N/A	Pass
46.2.2.3.1	LLC link release on receiving DM from the SS during acknowledged data transfer	N	A	Single	N/A	Pass
46.2.2.4.1	Response from MS on receiving XID request from the SS	N	A	Single	N/A	Pass
46.2.2.4.2	Response from MS on receiving an XID request from the SS with an unassigned entity number	N	A	Single	N/A	Pass
46.2.2.4.3	Response from MS on receiving an XID response from the SS with unrecognised type field	N	A	Single	N/A	Pass
46.2.2.5	LLC link release on receiving "Invalid XID response" from the network during link establishment procedure	N	A	Single	N/A	Pass

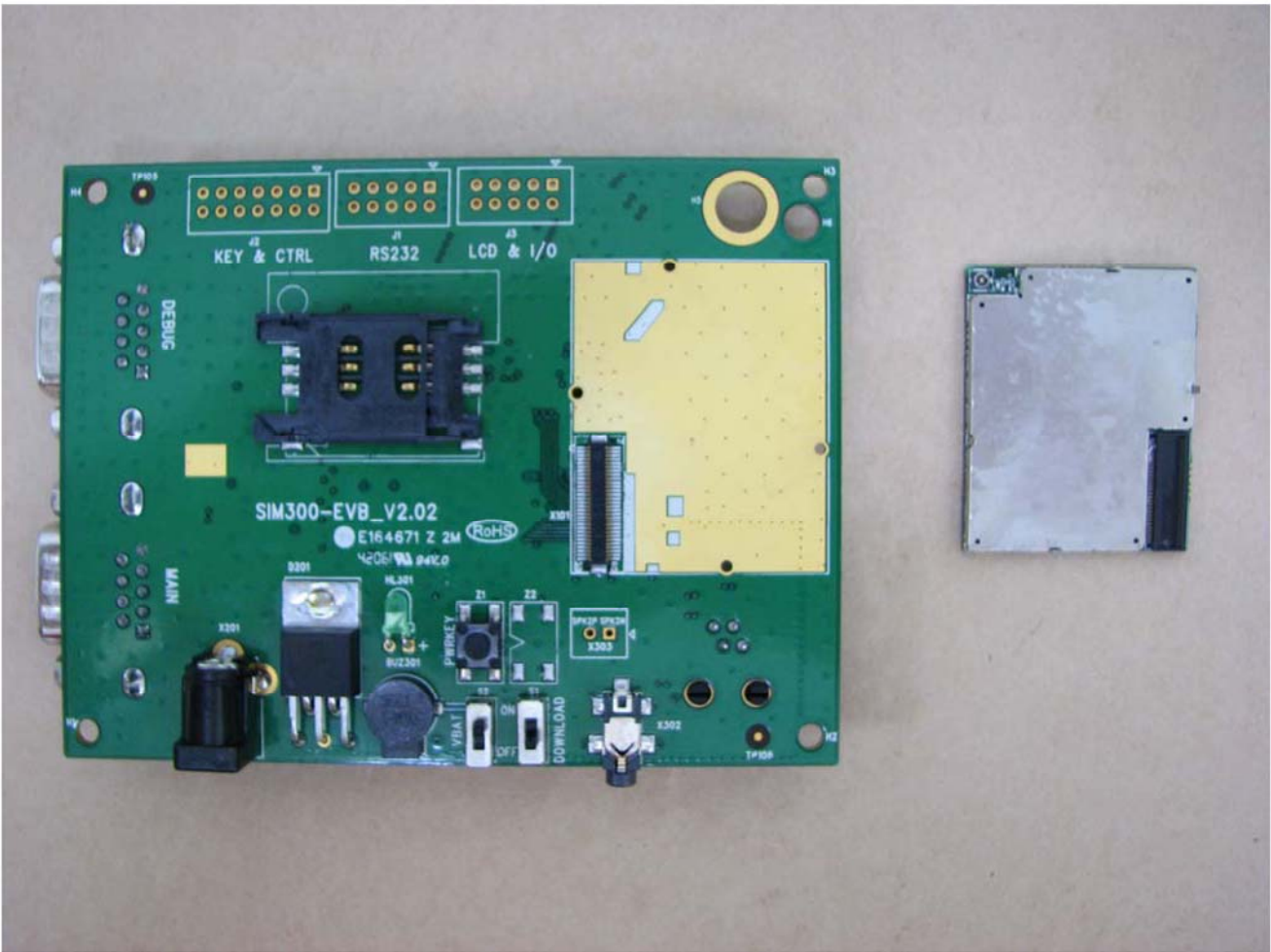
* note 1: This test was passed at CETECOM Taiwan Ltd. Details of this test laboratory are show in section 1.2.3

*note 2: This test was retested and passed with new operational software and calibration date Rohde&Schwarz TS8950G. Details of this instrument are show in section 2.4.1.

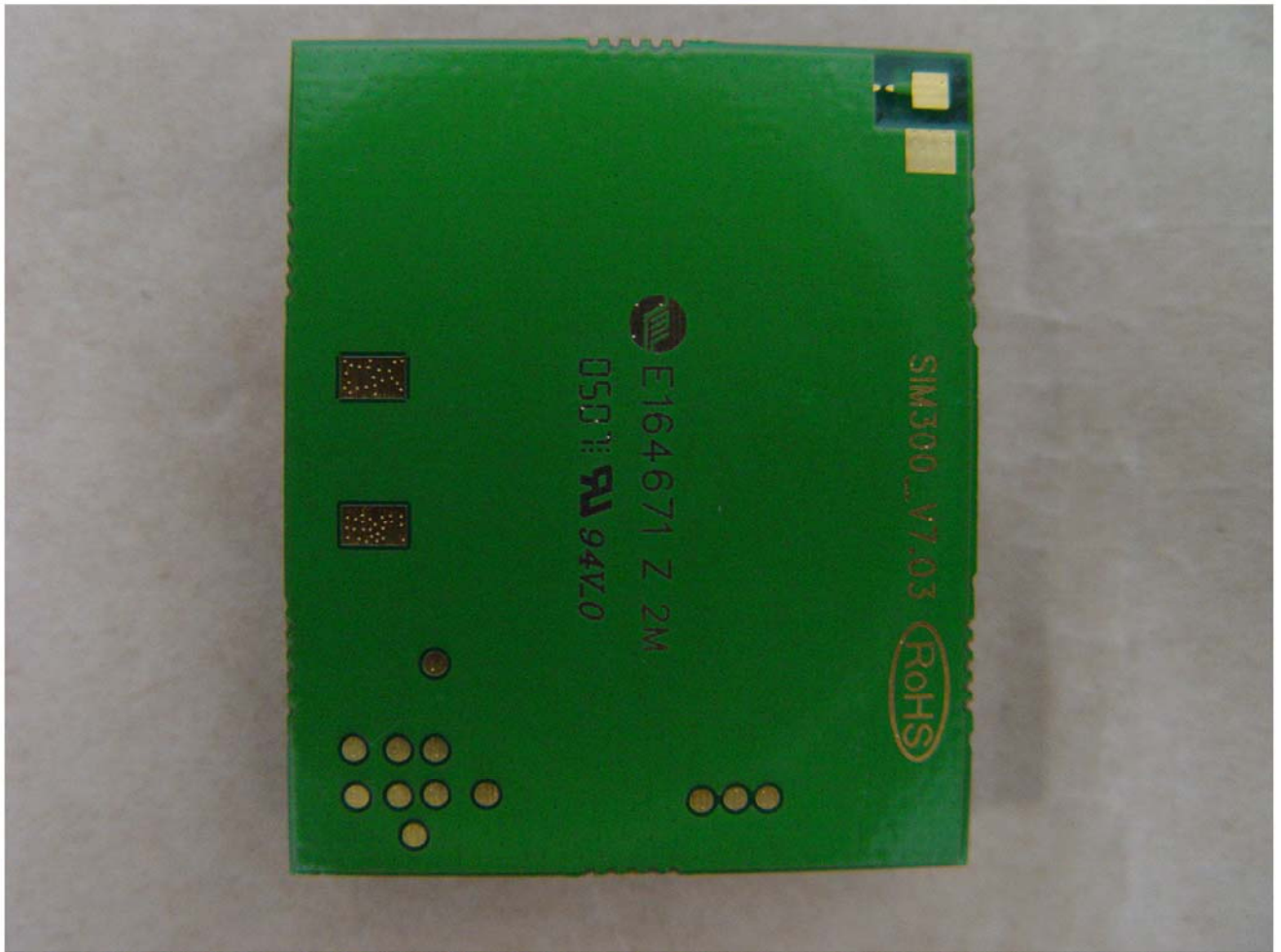
Appendix I: Photos of EUT

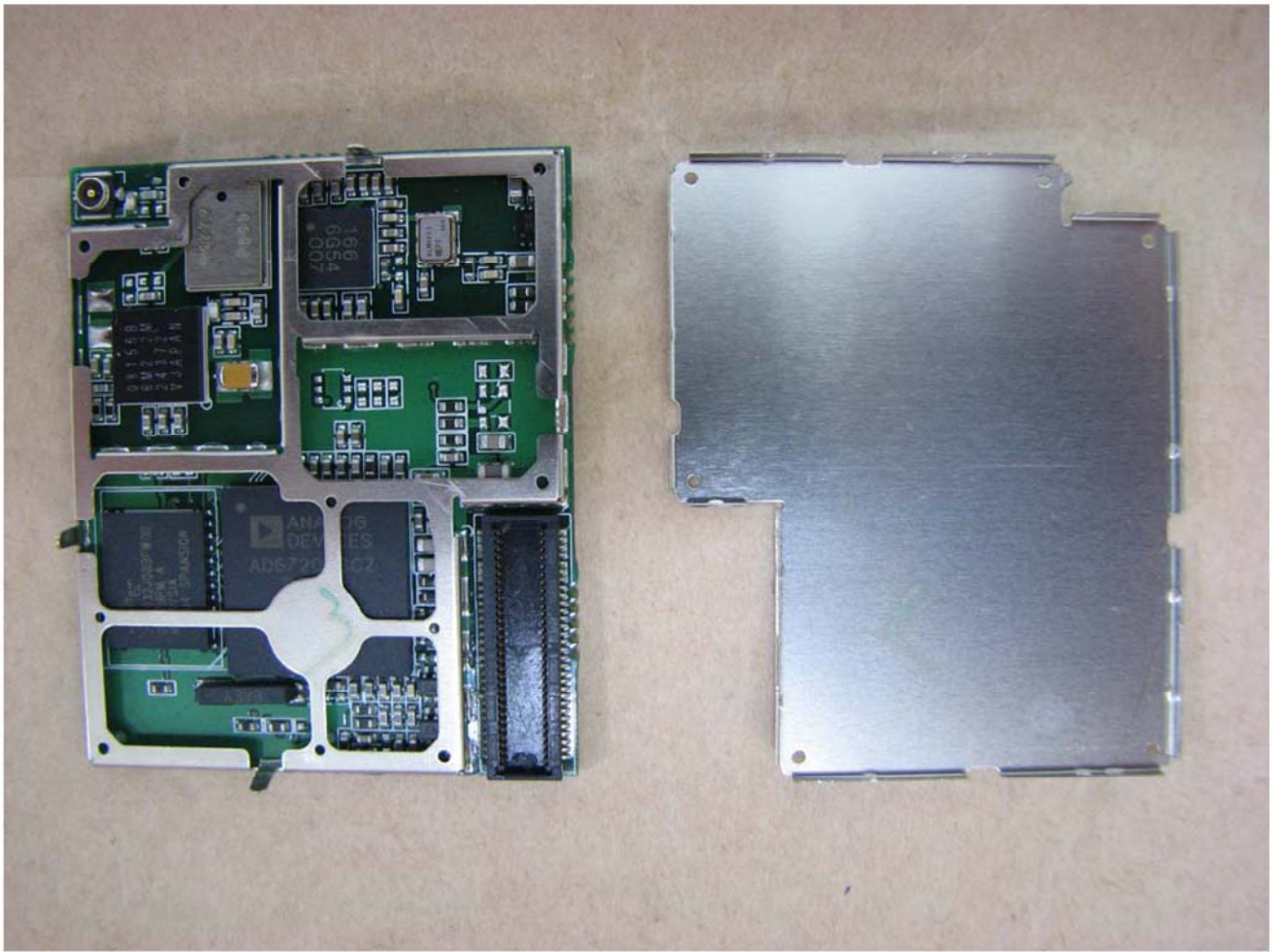


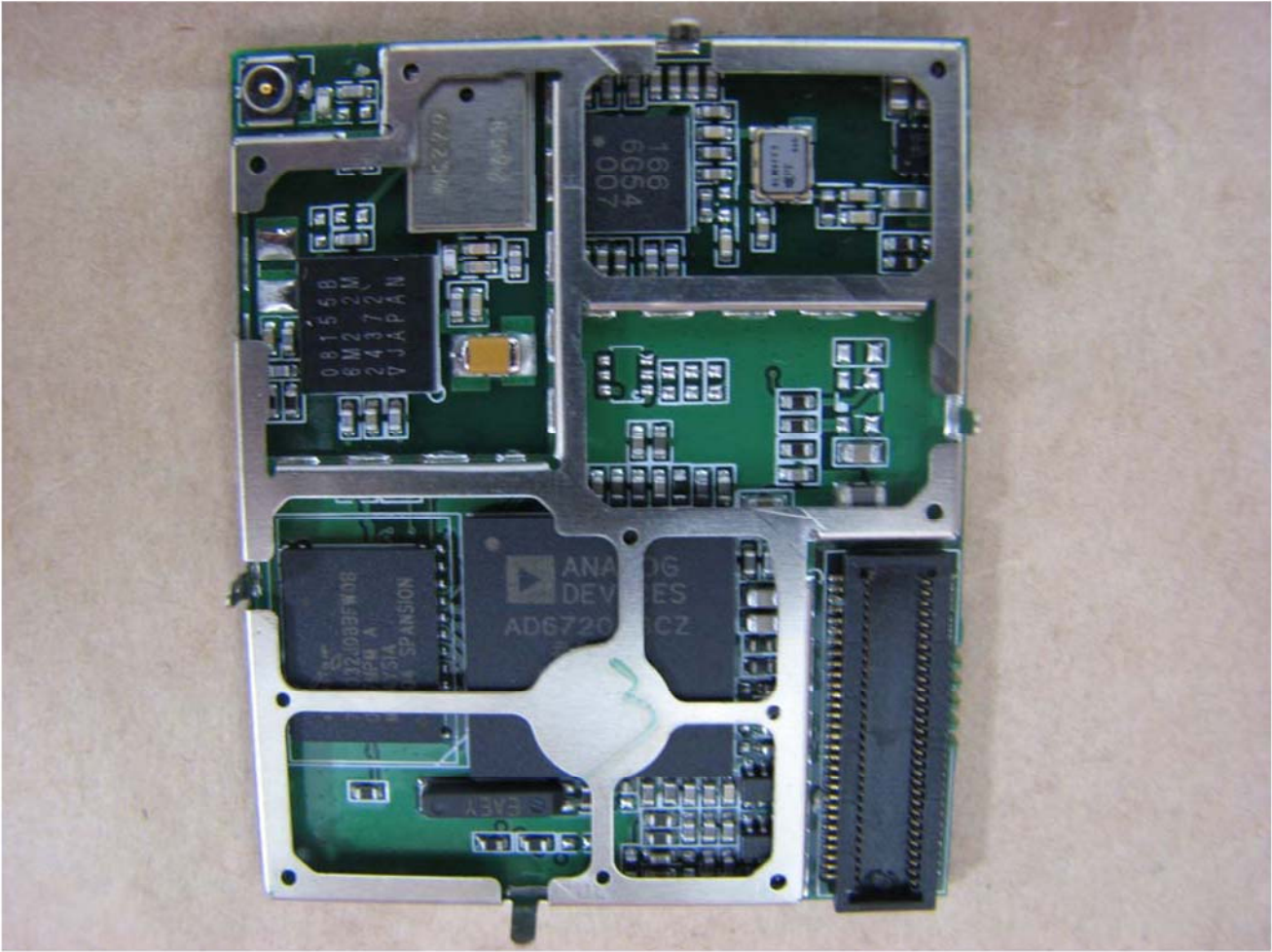












Appendix II: PICS/PIXIT information of the EUT

Table A.1: Types of Mobile Stations

Item	Release	Type of Mobile Station	Supported
1	Ph2	Standard GSM Band (P-GSM)	N
2	Ph2	Extended GSM Band (E-GSM), (including standard Band)	N
3	R96	R-GSM Band (including standard and E-GSM Band)	N
4	Ph2	DCS 1800 band	N
5	Ph2	Multiple-band, not simultaneously	Y
6	Ph2	Multiple-band, simultaneously	Y
7	Ph2	Small Mobile Station	Y
8	Ph2	GSM Power Class 2	N
9	Ph2	GSM Power Class 3	N
10	Ph2	GSM Power Class 4	N
11	Ph2	GSM Power Class 5	N
12	Ph2	DCS Power Class 1	N
13	Ph2	DCS Power Class 2	N
14	Ph2	DCS Power Class 3	N
15	R96	HSCSD Multislot MS	N
16	R99	GSM 450 band	N
17	R99	GSM 480 band	N
18	R98	PCS 1900 band	Y
19	R98	PCS Power Class 1	Y
20	R98	PCS Power Class 2	N
21	R98	PCS Power Class 3	N
22	R96	Multislot Class1 (HSCSD)	N
23	R96	Multislot Class2 (HSCSD)	N
24	R96	Multislot Class3 (HSCSD)	N
25	R96	Multislot Class4 (HSCSD)	N
26	R96	Multislot Class5 (HSCSD)	N
27	R96	Multislot Class6 (HSCSD)	N
28	R96	Multislot Class7 (HSCSD)	N
29	R96	Multislot Class8 (HSCSD)	N
30	R96	Multislot Class9 (HSCSD)	N
31	R96	Multislot Class10 (HSCSD)	N
32	R96	Multislot Class11 (HSCSD)	N
33	R96	Multislot Class12 (HSCSD)	N
34	R96	Multislot Class13 (HSCSD)	N
35	R96	Multislot Class14 (HSCSD)	N
36	R96	Multislot Class15 (HSCSD)	N
37	R96	Multislot Class16 (HSCSD)	N
38	R96	Multislot Class17 (HSCSD)	N
39	R96	Multislot Class18 (HSCSD)	N
40	R97	Multislot Class19 (HSCSD)	N
41	R97	Multislot Class20 (HSCSD)	N
42	R97	Multislot Class21 (HSCSD)	N
43	R97	Multislot Class22 (HSCSD)	N
44	R97	Multislot Class23 (HSCSD)	N
45	R97	Multislot Class24 (HSCSD)	N
46	R97	Multislot Class25 (HSCSD)	N
47	R97	Multislot Class26 (HSCSD)	N
48	R97	Multislot Class27 (HSCSD)	N
49	R97	Multislot Class28 (HSCSD)	N
50	R97	Multislot Class29 (HSCSD)	N
51	R97	GPRS Multislot operation	Y
52	R99	EGPRS capable of 8PSK in Uplink, of all Multislot classes	N
53	Rel-4	GSM 700 band	N
54	Rel-4	GSM 750 band	N
55	R99	GSM 850 band	Y
56	R99	Support of UTRAN Radio Access Technology	N
57	R97	Support of GPRS Multislot class on the uplink	Y

58	R99	Support of COMPACT	N
59	R99	DTM Multislot Class 1	N
60	R99	DTM Multislot Class 5	N
61	R99	DTM Multislot Class 9	N
62	R99	Support of dynamic allocation in DTM	N
63	R99	Support of UTRAN FDD	N
64	R99	Support of UTRAN TDD	N
65	R98	Support of Conventional GPS	N
66	R99	EGPRS Multislot operation	N
67	R97	GPRS Multislot Class1	N
68	R97	GPRS Multislot Class2	N
69	R97	GPRS Multislot Class3	N
70	R97	GPRS Multislot Class4	N
71	R97	GPRS Multislot Class5	N
72	R97	GPRS Multislot Class6	N
73	R97	GPRS Multislot Class7	N
74	R97	GPRS Multislot Class8	N
75	R97	GPRS Multislot Class9	N
76	R97	GPRS Multislot Class10	Y
77	R97	GPRS Multislot Class11	N
78	R97	GPRS Multislot Class12	N
79	R97	GPRS Multislot Class13	N
80	R97	GPRS Multislot Class14	N
81	R97	GPRS Multislot Class15	N
82	R97	GPRS Multislot Class16	N
83	R97	GPRS Multislot Class17	N
84	R97	GPRS Multislot Class18	N
85	R97	GPRS Multislot Class19	N
86	R97	GPRS Multislot Class20	N
87	R97	GPRS Multislot Class21	N
88	R97	GPRS Multislot Class22	N
89	R97	GPRS Multislot Class23	N
90	R97	GPRS Multislot Class24	N
91	R97	GPRS Multislot Class25	N
92	R97	GPRS Multislot Class26	N
93	R97	GPRS Multislot Class27	N
94	R97	GPRS Multislot Class28	N
95	R97	GPRS Multislot Class29	N
96	R99	EGPRS Multislot Class1	N
97	R99	EGPRS Multislot Class2	N
98	R99	EGPRS Multislot Class3	N
99	R99	EGPRS Multislot Class4	N
100	R99	EGPRS Multislot Class5	N
101	R99	EGPRS Multislot Class6	N
102	R99	EGPRS Multislot Class7	N
103	R99	EGPRS Multislot Class8	N
104	R99	EGPRS Multislot Class9	N
105	R99	EGPRS Multislot Class10	N
106	R99	EGPRS Multislot Class11	N
107	R99	EGPRS Multislot Class12	N
108	R99	EGPRS Multislot Class13	N
109	R99	EGPRS Multislot Class14	N
110	R99	EGPRS Multislot Class15	N
111	R99	EGPRS Multislot Class16	N
112	R99	EGPRS Multislot Class17	N
113	R99	EGPRS Multislot Class18	N
114	R99	EGPRS Multislot Class19	N
115	R99	EGPRS Multislot Class20	N
116	R99	EGPRS Multislot Class21	N
117	R99	EGPRS Multislot Class22	N
118	R99	EGPRS Multislot Class23	N
119	R99	EGPRS Multislot Class24	N

120	R99	EGPRS Multislot Class25	N
121	R99	EGPRS Multislot Class26	N
122	R99	EGPRS Multislot Class27	N
123	R99	EGPRS Multislot Class28	N
124	R99	EGPRS Multislot Class29	N
125	R99	GSM 850 Power Class 2	N
126	R99	GSM 850 Power Class 3	N
127	R99	GSM 850 Power Class 4	Y
128	R99	GSM 850 Power Class 5	N
129	R99	8-PSK GSM Power Class E1	N
130	R99	8-PSK GSM Power Class E2	N
131	R99	8-PSK GSM Power Class E3	N
132	R99	8-PSK DCS Power Class E1	N
133	R99	8-PSK DCS Power Class E2	N
134	R99	8-PSK DCS Power Class E3	N
135	R99	8-PSK PCS Power Class E1	N
136	R99	8-PSK PCS Power Class E2	N
137	R99	8-PSK PCS Power Class E3	N
138	R99	8-PSK GSM 850 Power Class E1	N
139	R99	8-PSK GSM 850 Power Class E2	N
140	R99	8-PSK GSM 850 Power Class E3	N
141	Ph2	GSM850 and GSM1800 Band Interworking	N
142	Ph2	GSM900 and GSM1900 Band Interworking	N
143	Ph2	GSM850 and GSM900 Band Interworking	N
144	R99	DTM/EGPRS Multislot Class 1	N
145	R99	DTM/EGPRS Multislot Class 5	N
146	R99	DTM/EGPRS Multislot Class 9	N
147	R99	Support of singleslot allocation in DTM/EGPRS	N
148	R99	DTM/GPRS Multislot Class 11	N
149	Rel-5	GPRS Multislot Class30	N
150	Rel-5	GPRS Multislot Class31	N
151	Rel-5	GPRS Multislot Class32	N
152	Rel-5	GPRS Multislot Class33	N
153	Rel-5	GPRS Multislot Class34	N
154	Rel-5	GPRS Multislot Class35	N
155	Rel-5	GPRS Multislot Class36	N
156	Rel-5	GPRS Multislot Class37	N
157	Rel-5	GPRS Multislot Class38	N
158	Rel-5	GPRS Multislot Class39	N
159	Rel-5	GPRS Multislot Class40	N
160	Rel-5	GPRS Multislot Class41	N
161	Rel-5	GPRS Multislot Class42	N
162	Rel-5	GPRS Multislot Class43	N
163	Rel-5	GPRS Multislot Class44	N
164	Rel-5	GPRS Multislot Class45	N
165	Rel-5	EGPRS Multislot Class30	N
166	Rel-5	EGPRS Multislot Class31	N
167	Rel-5	EGPRS Multislot Class32	N
168	Rel-5	EGPRS Multislot Class33	N
169	Rel-5	EGPRS Multislot Class34	N
170	Rel-5	EGPRS Multislot Class35	N
171	Rel-5	EGPRS Multislot Class36	N
172	Rel-5	EGPRS Multislot Class37	N
173	Rel-5	EGPRS Multislot Class38	N
174	Rel-5	EGPRS Multislot Class39	N
175	Rel-5	EGPRS Multislot Class40	N
176	Rel-5	EGPRS Multislot Class41	N
177	Rel-5	EGPRS Multislot Class42	N
178	Rel-5	EGPRS Multislot Class43	N
179	Rel-5	EGPRS Multislot Class44	N
180	Rel-5	EGPRS Multislot Class45	N
181		(void)	

182	Rel-7	GSM 710 band	N
183	Rel-7	T GSM 810 band	N
184	Rel-4	DTM/EGPRS Multislot Class 11	N
185	Rel-6	T-GSM 380 band	N
186	Rel-6	T-GSM 410 band	N
187	Rel-6	T-GSM 900 band	N
188	R99	EGPRS Multislot Operation in Uplink Direction	N

Table A.1b: MS Feature Release Supported

Item	Release	Mobile Station Feature	Values	
			Allowed	Supported
1	R97	Release of GPRS supported.	R97	N
			R98	Y
			R99	N
			R4	N
			R5	N
2	R98	Release of AMR supported.	R98	Y
			R99	N
			R4	N
			R5	N
3	R99	Release of EGPRS supported.	R99	N
			R4	N
			R5	N

Table A.2: Mobile Station Features

Item	Release	Mobile Station Feature	Supported
1	Ph2	Display of Called Number	Y
2	Ph2	Indication of Call Progress Signals	Y
3	Ph2	Country / PLMN Indication	Y
4	Ph2	Country / PLMN Selection	Y
5	Ph2	Keypad	Y
6	Ph2	IMEI	Y
7	Ph2	Short Message Overflow Indication	Y
8	Ph2	DTE /DCE Interface	Y
9	Ph2	ISDN "S" Interface	Y
10	Ph2	International Access Function	N
11	Ph2	Service Indicator	Y
12	Ph2	Autocalling restriction capabilities	N
13	Ph2	Dual Tone Multi Frequency function	Y
14	Ph2	Subscription Identity Management	Y
15	Ph2	On / Off switch	Y
16	Ph2	Subaddress	Y
17	Ph2	Support of Encryption A5/1	Y
18		(void)	
19	Ph2	Short Message Service Cell Broadcast DRX	Y
20	Ph2	Abbreviated Dialling	Y
21	Ph2	Fixed Number Dialling	Y
22	Ph2	Barring of Outgoing Calls	Y
23	Ph2	DTMF Control Digits Separator	Y
24	Ph2	Selection of Directory No in Short Messages	Y
25	Ph2	Last Numbers Dialed	Y
26	Ph2	At least one autocalling feature	N
27	Ph2	Alphanumeric display	Y
28	Ph2	Other means of display	Y
29	Ph2	Speech indicator	Y
30	R96	Support of the extended Short message cell broadcast channel	N
31	R96	Support of Additional Call Set-up MMI Procedures	Y
32	R96	Network Identity and Timezone	Y
33	Ph2	Ciphering Indicator	Y
34	R96	Network's indication of alerting in the MS \$(NI Alert in MS)\$	Y
35	R96	ME-SIM lock	Y
36	R96	Service Dialling Numbers	Y

37	R99	Extended timing advance	Y
38	R98	Support of SoLSA	N
39	R96	Audible Indication of Service Tones	Y
40	Ph2	Autocalling_Cause 27 Implemented in Cat 3	N
41	R97	Support of GPRS	Y
42	R99	Support of EGPRS	N
43	R98	Support of GPRS Encryption	Y
44	Ph2	Control of Supplementary Services	Y
45	Ph2	Short message	Y
46	Ph2	Emergency calls capabilities	Y
47	R97	GPRS operation mode class A	N
48	R97	GPRS operation mode class B	Y
49	R97	GPRS operation mode class C	N
50	R99	MS supporting SMS over GPRS	Y
51		(void)	
52		(void)	
53	R99	Support of ECSD	N
54	R97	GPRS test mode A	N
55	R97	GPRS test mode B	Y
56	-----	EGPRS test mode	N
57	R98	Support of MS-Assisted E-OTD	N
58	R97	Non-zero value of Non_DRX_Timer	N
59	R98	Support of MS-Based GPS	N
60	R98	Support of MS-Assisted GPS	N
61	R98	Privacy Option Supported	N
62	R99	Support of DTM	N
63	R98	Support MS Assisted EOTD Performance for GMSK	N
64	R99	Support MS Assisted EOTD Performance for 8PSK	N
65	R99 only	Support of EGPRS Packet Access enhancement	N
66		(void)	
67	R99	support of MT SMS over GPRS	N
68		(void)	
69	R99	Support of DTM/EGPRS	N
70	R99	Support of Extended dynamic allocation	N
71	Rel-6	Support of GAN	N
72	Rel-4	Support of GERAN FEATURE PACKAGE 1	N
73	Rel-6	Support of Encryption A5/3	N
74	Rel-4	Support of Fine Time Assistance	N
75	Rel-6	Support of Encryption GEA2	N
76	Rel-6	Support of Encryption GEA3	N

Table A.3: Teleservices

Item	Release	Teleservice	Supported
1	Ph2	Telephony	Y
2	Ph2	Emergency Call	Y
3	Ph2	Short Message MT/PP	Y
4	Ph2	Short Message MO/PP	Y
5	Ph2	SMS Cell Broadcast	Y
6	Ph2	Teleservice Alternate Speech and G3 fax	N
7	Ph2	Teleservice Automatic G3 fax	Y
8	R96	Voice Group Call Service (VGCS)	N
9	R96	Voice Broadcast Service (VBS)	N
10	R96	SMS description	N

Table A.4: Bearer Services

Item	Release	Bearer Service	Supported
1	Ph2	Data circuit duplex async. 300 bit/s	Y
2	Ph2	Data circuit duplex async. 1 200 bit/s	Y
3	Ph2	Data circuit duplex async. 1 200/75 bit/s	N
4	Ph2	Data circuit duplex async. 2 400 bit/s	Y
5	Ph2	Data circuit duplex async. 4 800 bit/s	Y
6	Ph2	Data circuit duplex async. 9 600 bit/s	Y

7	Ph2	Data circuit duplex sync. 1 200 bit/s	N
8	Ph2	Data circuit duplex sync. 2 400 bit/s	N
9	Ph2	Data circuit duplex sync. 4 800 bit/s	N
10	Ph2	Data circuit duplex sync. 9 600 bit/s	N
11	Ph2	PAD Access 300 bit/s	N
12	Ph2	PAD Access 1 200 bit/s	N
13	Ph2	PAD Access 1 200/75 bits/s	N
14	Ph2	PAD Access 2 400 bit/s	N
15	Ph2	PAD Access 4 800 bit/s	N
16	Ph2	PAD Access 9 600 bit/s	N
17	Ph2	Packet Access 2 400 bit/s	N
18	Ph2	Packet Access 4 800 bit/s	N
19	Ph2	Packet Access 9 600 bit/s	N
20	Ph2	Alternate Speech/Data	N
21	Ph2	Speech Followed by Data	N
22	R97	GPRS	Y
23	Rel-6	Bluetooth data rate	N
24	Rel-6	WLAN data rate	N

Table A.5: Supplementary Services

Item	Release	Supplementary Service	Supported
1	Ph2	Calling Line Identification Presentation	Y
2	Ph2	Calling Line Identification Restriction	Y
3	Ph2	Connected Line Identification Presentation	Y
4	Ph2	Connected Line Identification Restriction	Y
5	Ph2	Call Forwarding Unconditional	Y
6	Ph2	Call Forwarding on Mobile Subscriber Busy	Y
7	Ph2	Call Forwarding on No Reply	Y
8	Ph2	Call Forwarding on Mobile Subscriber Not Reachable	Y
9	Ph2	Call Waiting	Y
10	Ph2	Call Hold	Y
11	Ph2	Multi Party Service	Y
12	Ph2	Closed User Group	Y
13	Ph2	Advice of Charge (Information)	Y
14	Ph2	Advice of Charge (Charging)	Y
15	Ph2	Barring of All Outgoing Calls	Y
16	Ph2	Barring of Outgoing International Calls	Y
17	Ph2	Barring of Outgoing International Calls except those directed to the Home PLMN Country	Y
18	Ph2	Barring of All Incoming Calls	Y
19	Ph2	Barring of Incoming Calls when Roaming Outside the Home PLMN Country	Y
20	Ph2	Unstructured SS Data	Y
21	R96	enhanced Multi-Level Precedence and Pre-emption service (eMLPP)	N
22	R96	Call Deflection	N
23	R96	User-to-User signalling	Y
24	R96	Explicit Call Transfer	N
25	R96	Implicit UUS1	N
26	R98	Sending of implicit UUS1 in the ALERTING message	N
27	R98	Sending of implicit UUS1 in the CONNECT message	N
28	R99	Follow Me	N
29	Rel-4	User-to-Dispatcher Information	N
30	Rel-4	Compressed User-to-Dispatcher	N
31	R97	Completion of Calls to Busy SS	N
32	R97	Completion of Calls to Busy Requests	N
33	R97	Support of Private Numbering Plan SS	N
34	R97	Support of Private Numbering Plan , Numbering Plans	N
35	R97	Name Identification SS	N

Table A.6: Groups for possible bearer capabilities

Item	Release	Bearer Capability Group	Supported
1	Ph2(R96)	Bearer Service 21(20) .. 26, unrestricted digital information transfer capability	Y
2	Ph2(R96)	Bearer Service 21(20) .. 26, 3.1 kHz audio ex-PLMN information transfer capability	Y
3	Ph2(R96)	Bearer Service 31(30) .. 34, unrestricted digital information transfer capability; Non-X.32 Cases (BS 31 .. BS 34)	N
4	Ph2(R96)	Bearer Service 31(30) .. 34, unrestricted digital information transfer capability; X.32 Cases	N
5	Ph2(R96)	Bearer Service 31(30) .. 34, 3.1 kHz audio ex-PLMN information transfer capability; Non-X.32 Cases	N
6	Ph2(R96)	Bearer Service 31(30) .. 34, 3.1 kHz audio ex-PLMN information transfer capability; X.32 Cases	N
7	Ph2(R96)	Bearer Service 41(40)..46, PAD Access Asynchronous	N
8	Ph2(R96)	Bearer Service 51(50)..53, Data Packet Duplex Synchronous	N
9	Ph2	Bearer Service 61, Alternate Speech/Data, "Speech"	N
10	Ph2	Bearer Service 61, Alternate Speech/Data, .3.1 kHz audio ex-PLMN information transfer capability; Asynchronous	N
11	Ph2	Bearer Service 61, Alternate Speech/Data, .3.1 kHz audio ex-PLMN information transfer capability; Synchronous	N
12	Ph2	Bearer Service 81, Speech followed by Data, "Speech"	N
13	Ph2	Bearer Service 81, Speech followed by Data, .3.1 kHz audio ex-PLMN information transfer capability; Asynchronous	N
14	Ph2	Bearer Service 81, Speech followed by Data, .3.1 kHz audio ex-PLMN information transfer capability; Synchronous	N
15	Ph2	Teleservice 11..12, Speech	Y
16	Ph2	Teleservice 61, Alternate Speech and Facsimile group 3; "Speech"	N
17	Ph2	Teleservice 61, Alternate Speech and Facsimile group 3; Facsimile group 3	N
18	Ph2	Teleservice 62, Automatic Facsimile group 3	Y

Table A.7: Bearer Service 20..26, UDI/RDI

Item	Release	Bearer Capability Elements	Values Allowed	Supported
1	Ph2	Signalling Access Protocol (SAP)	I.440	Y
			X.28nond	N
2	Ph2	Connection Element (CE)	NT	Y
			bothNT	Y
			T	Y
			bothT	Y
3	Ph2	User Info Layer 2 Protocol (UIL2P)	ISO6429	Y
			ICOPnoFICt	Y
			NAV	Y
4	Ph2	Number of Data Bits(NDB)	7 bits	Y
			8 bits	Y
5	Ph2	Parity Information (NPB)	odd	N
			even	N
			0	N
			1	N
			none	Y
6	Ph2	Number of Stop Bits (NSB)	1 bit	Y
			2 bits	Y
7	Ph2	Radio Channel Requirement (RCR)	dualHR	Y
			FR	N
			dualFR	N
8	Ph2	Intermediate Rate (IR)	8 kbps	N
			16 kbps	Y
9	Ph2	User Rate (UR)	0.3	N
			1.2	N
			2.4	N
			4.8	N
			9.6	Y
			1.2/0.075	N

10	R96	Fixed Network User Rate (FNUR)	9.6	Y
			14.4	Y
			19.2	N
			28.8	N
			38.4	N
			48	N
			56	N
			NAV	N
11	R96	Wanted Air Interface User Rate (WAIUR)	9.6	Y
			14.4	Y
			19.2	N
			28.8	N
			38.4	N
			43.2	N
			57.6	N
			NAV	N
12	R96	User Initiated Modification Indication (UIMI)	not req.	N
			upto1	N
			upto2	N
			upto3	N
			upto4	N
			NAV	Y
13	R96	Maximum number of Traffic Channels (MaxNumTCH)	1	Y
			2	N
			3	N
			4	N
			NAV	N
10a		all allowed combinations according to GSM 07.01 B.1.2.1 (3GPP TS 27.001) implemented (if not, provide detailed description)		N

Table A.8: Bearer Service 20..26, 3.1 kHz

Item	Release	Bearer Capability Elements	Values Allowed	Supported
1	Ph2	Signalling Access Protocol (SAP)	I.440	Y
			X.28nond	N
2	Ph2	Connection Element (CE)	NT	Y
			bothNT	Y
			T	Y
			bothT	Y
			NAV	Y
3	Ph2	User Info Layer 2 Protocol (UIL2P)	ISO6429	Y
			ICOPnoFICt	Y
			NAV	Y
4	Ph2	Number of Data Bits(NDB)	7 bits	Y
			8 bits	Y
5	Ph2	Parity Information (NPB)	odd	N
			even	N
			0	N
			1	N
			none	Y
6	Ph2	Number of Stop Bits (NSB)	1 bit	Y
			2 bits	Y
7	Ph2	Radio Channel Requirement (RCR)	dualHR	N
			FR	N
			dualFR	Y
8	Ph2	Intermediate Rate (IR)	8 kbps	N
			16 kbps	Y
9	Ph2	User Rate (UR)	0.3	N
			1.2	N
			2.4	N
			4.8	N
			9.6	Y
			1.2/0.075	N

10	Ph2	Modem Type (MT)	V.21	Y
			V.22	Y
			V.22bis	Y
			V.26ter	Y
			V.32	Y
			V.23	Y
			auto	Y
11	R96	Fixed Network User Rate (FNUR)	9.6	Y
			14.4	Y
			19.2	N
			28.8	N
			NAV	N
12	R96	Wanted Air Interface User Rate (WAIUR)	9.6	Y
			14.4	Y
			19.2	N
			28.8	N
			38.4	N
13	R96	Acceptable channel codings (ACC)	43.2	N
			4.8	N
			9.6	Y
			14.4	Y
			NAV	N
14	R96	User Initiated Modification Indication (UIMI)	not req.	N
			upto1	N
			upto2	N
			upto3	N
			upto4	N
15	R96	Maximum number of Traffic Channels (MaxNumTCH)	NAV	Y
			1	Y
			2	N
			3	N
			4	N
11a		all allowed combinations according to GSM 07.01 B.1.2.2 (3GPP TS 27.001) implemented (if not, provide detailed description)	NAV	N

Table A.9: Bearer Service 30..34, UDI, Non-X.32

Item	Release	Bearer Capability Elements	Values Allowed	Supported
1	Ph2	Signalling Access Protocol (SAP)	I.440	N
			X.21	N
2	Ph2	Radio Channel Requirement (RCR)	dualHR	N
			FR	N
			dualFR	N
3	Ph2	Intermediate Rate (IR)	8 kbps	N
			16 kbps	N
4	Ph2	User Rate (UR)	1.2	N
			2.4	N
			4.8	N
			9.6	N
5	R96	Fixed Network User Rate (FNUR)	9.6	N
			14.4	N
			19.2	N
			28.8	N
			38.4	N
			48	N
			56	N
6	R96	Acceptable channel codings (ACC)	NAV	N
			4.8	N
			9.6	N
			14.4	N
			NAV	N

7	R96	Maximum number of Traffic Channels (MaxNumTCH)	1	N
			2	N
			3	N
			4	N
			NAV	N
5a		all allowed combinations according GSM 07.01 A2 1.3.1.1 (3GPP TS 27.001) implemented (if not, provide detailed description)		N

Table A.10: Bearer Service 30..34, UDI, X 32

Item	Release	Bearer Capability Elements	Values Allowed	Supported
1	Ph2	Radio Channel Requirement (RCR)	dualHR	N
			FR	N
			dualFR	N
2	Ph2	Intermediate Rate (IR)	8 kbps	N
			16 kbps	N
3	Ph2	User Rate (UR)	2.4	N
			4.8	N
			9.6	N
4	Ph2(R96)	User Info Layer 2 Protocol (UIL2P)	X.25	N
			(X.75)	N
5	Ph2(R96)	Rate Adaptation (RA)	X.31Flag	N
			(V.120)	N
6	R96	Fixed Network User Rate (FNUR)	9.6	N
			14.4	N
			19.2	N
			28.8	N
			38.4	N
			48	N
			56	N
			NAV	N
7	R96	Wanted Air Interface User Rate (WAIUR)	9.6	N
			14.4	N
			19.2	N
			28.8	N
			38.4	N
			43.2	N
			57	N
			NAV	N
8	R96	User Initiated Modification Indication (UIMI)	not req	N
			upto1	N
			upto2	N
			upto3	N
			upto4	N
			NAV	N
9	R96	Acceptable channel codings (ACC)	4.8	N
			9.6	N
			14.4	N
			NAV	N
10	R96	Maximum number of Traffic Channels (MaxNumTCH)	1	N
			2	N
			3	N
			4	N
			NAV	N
4a		all allowed combinations according to GSM 07.01 B.1.3.1.2 (3GPP TS 27.001) implemented (if not, provide detailed description)		N

Table A.10a: Bearer Service 30..34, UDI, 48 kbps and 56 kbps bit transparent

Item	Release	Bearer Capability Elements	Values Allowed	Supported
1	Ph2	Signalling Access Protocol (SAP)	I.440	N
			X.21	N
2	R96	Fixed Network User Rate (FNUR)	48	N
			56	N

3		all allowed combinations according to GSM 07.01 B.1.3.1.4 (3GPP TS 27.001) implemented (if not, provide detailed description)		N
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Table A.10b: Bearer Service 30..34, UDI, 64 kbps bit transparent

Item	Release	Bearer Capability Elements	Values Allowed	Supported
1	Ph2	Signalling Access Protocol (SAP)	I.440	N
			X.21	N
2	R96	Acceptable channel codings (ACC)	9.6	N
			14.4	N
3	R96	Maximum number of Traffic Channels (MaxNumTCH)	5	N
			6	N
4		all allowed combinations according to GSM 07.01 B.1.3.1.5 (3GPP TS 27.001) implemented (if not, provide detailed description)		N

Table A.11: Bearer Service 30..34, 3.1 kHz, Non-X 32

Item	Release	Bearer Capability Elements	Values Allowed	Supported
1	Ph2	Radio Channel Requirement (RCR)	dualHR	N
			FR	N
			dualFR	N
2	Ph2	Intermediate Rate (IR)	8 kbps	N
			16 kbps	N
3	Ph2	User Rate (UR)	1.2	N
			2.4	N
			4.8	N
			9.6	N
4	Ph2	Modem Type (MT)	V.22	N
			V.22bis	N
			V.26ter	N
			V.32	N
5	R96	Other Modem Type (OMT)	no other MT	N
			V.34	N
			NAV	N
6	R96	Fixed Network User Rate (FNUR)	9.6	N
			14.4	N
			19.2	N
			28.8	N
			NAV	N
7	R96	Acceptable channel codings (ACC)	4.8	N
			9.6	N
			14.4	N
			NAV	N
8	R96	Maximum number of Traffic Channels (MaxNumTCH)	1	N
			2	N
			3	N
			4	N
			NAV	N
5a		all allowed combinations according to GSM 07.01 B.1.3.2.1 (3GPP TS 27.001) implemented (if not, provide detailed description)		N

Table A.12: Bearer Service 30..34, 3.1kHz, X 32

Item	Release	Bearer Capability Elements	Values Allowed	Supported
1	Ph2	Connection Element (CE)	NT	N
			bothNT	N
			T	N
			bothT	N
2	Ph2	Radio Channel Requirement (RCR)	dualHR	N
			FR	N
			dualFR	N
3	Ph2	Intermediate Rate (IR)	8 kbps	N
			16 kbps	N

4	Ph2	User Rate (UR)	2.4	N
			4.8	N
			9.6	N
5	Ph2	Modem Type (MT)	V.22bis	N
			V.26ter	N
			V.32	N
6	R96	Other Modem Type (OMT)	no other MT	N
			V.34	N
			NAV	N
7	R96	Fixed Network User Rate (FNUR)	9.6	N
			14.4	N
			19.2	N
			28.8	N
			NAV	N
8	R96	Wanted Air Interface User Rate (WAIUR)	9.6	N
			14.4	N
			19.2	N
			28.8	N
			NAV	N
9	R96	Acceptable channel codings (ACC)	4.8	N
			9.6	N
			14.4	N
			NAV	N
10	R96	User Initiated Modification Indication (UIMI)	not req.	N
			upto1	N
			upto2	N
			upto3	N
			upto4	N
			NAV	N
11	R96	Maximum number of Traffic Channels (MaxNumTCH)	1	N
			2	N
			3	N
			4	N
			NAV	N
6a		all allowed combinations according to GSM 07.01 B.1.3.2.2 (3GPP TS 27.001) implemented (if not, provide detailed description)		N

Table A.13: Bearer Service 40..46, PAD Access

Item	Release	Bearer Capability Elements	Values Allowed	Supported
1	Ph2	Connection Element (CE)	NT	N
			bothNT	N
			T	N
			bothT	N
2	Ph2	User Info Layer 2 Protocol (UIL2P)	ISO6429	N
			COPnoFICt	N
			NAV	N
3	Ph2	Number of Data Bits(NDB)	7 bits	N
			8 bits	N
4	Ph2	Parity Information (NPB)	odd	N
			even	N
			0	N
			1	N
			none	N
5	Ph2	Number of Stop Bits (NSB)	1 bit	N
			2 bits	N
6	Ph2	Radio Channel Requirement (RCR)	dualHR	N
			FR	N
			dualFR	N
7	Ph2	Intermediate Rate (IR)	8 kbps	N
			16 kbps	N

8	Ph2	User Rate (UR)	0.3	N
			1.2	N
			2.4	N
			4.8	N
			9.6	N
			1.2/0.075	N
9	R96	Fixed Network User Rate (FNUR)	9.6	N
			14.4	N
			19.2	N
			28.8	N
			38.4	N
			48	N
			56	N
			NAV	N
10	R96	Wanted Air Interface User Rate (WAIUR)	9.6	N
			14.4	N
			19.2	N
			28.8	N
			38.4	N
			43.2	N
			57.6	N
			NAV	N
11	R96	Acceptable channel codings (ACC)	4.8	N
			9.6	N
			14.4	N
			NAV	N
12	R96	User Initiated Modification Indication (UIMI)	not req.	N
			upto1	N
			upto2	N
			upto3	N
			upto4	N
			NAV	N
13	R96	Maximum number of Traffic Channels (MaxNumTCH)	1	N
			2	N
			3	N
			4	N
			NAV	N
9a		all allowed combinations according to GSM 07.01 B.1.4 (3GPP TS 27.001) implemented (if not, provide detailed description)		N

Table A.14: Bearer Service 50..53, Data Packet Duplex Synchronous

Item	Release	Bearer Capability Elements	Values Allowed	Supported
1	Ph2	Radio Channel Requirement (RCR)	dualHR	N
			FR	N
2	Ph2	Intermediate Rate (IR)	dualFR	N
			8 kbps	N
3	Ph2	User Rate (UR)	16 kbps	N
			0.3	N
			1.2	N
			2.4	N
			4.8	N
			9.6	N
4	R96	Fixed Network User Rate (FNUR)	1.2/0.075	N
			9.6	N
			14.4	N
			19.2	N
			28.8	N
			38.4	N
			48	N
			56	N
			NAV	N

5	R96	Wanted Air Interface User Rate (WAIUR)	9.6	N
			14.4	N
			19.2	N
			28.8	N
			38.4	N
			43.2	N
			57.6	N
6	R96	Acceptable channel codings (ACC)	NAV	N
			4.8	N
			9.6	N
			14.4	N
7	R96	User Initiated Modification Indication (UIMI)	NAV	N
			not req.	N
			upto1	N
			upto2	N
			upto3	N
			upto4	N
8	R96	Maximum number of Traffic Channels (MaxNumTCH)	NAV	N
			1	N
			2	N
			3	N
			4	N
4a		all allowed combinations according to GSM 07.01 B.1.5 (3GPP TS 27.001) implemented (if not, provide detailed description)	NAV	N

Table A.15: Bearer Service 61, Alternate Speech/Data, "Speech"

Item	Release	Bearer Capability Elements	Values Allowed	Supported
1	Ph2	Radio Channel Requirement (RCR)	dualHR	N
			FR	N
			dualFR	N

Table A.16: Bearer Service 61, Alternate Speech/Data, 3.1kHz, Async

Item	Release	Bearer Capability Elements	Values Allowed	Supported
1	Ph2	Connection Element (CE)	NT	N
			bothNT	N
			T	N
			bothT	N
2	Ph2	User Info Layer 2 Protocol (UIL2P)	ISO6429	N
			COPnoFICt	N
			NAV	N
3	Ph2	Number of Data Bits (NDB)	7 bits	N
			8 bits	N
4	Ph2	Parity Information (NPB)	odd	N
			even	N
			0	N
			1	N
			none	N
5	Ph2	Number of Stop Bits (NSB)	1 bit	N
			2 bits	N
6	Ph2	Radio Channel Requirement (RCR)	dualHR	N
			FR	N
			dualFR	N
7	Ph2	Intermediate Rate (IR)	8 kbps	N
			16 kbps	N
8	Ph2	User Rate (UR)	0.3	N
			1.2	N
			2.4	N
			4.8	N
			9.6	N
			1.2/0.075	N

9	R96	Modem Type (MT)	V.21	N
			V.22	N
			V.22bis	N
			V.26ter	N
			V.32	N
			V.23	N
			auto1	N
10		all allowed combinations according to GSM 07.01 B.1.6.2.1 (3GPP TS 27.001) implemented (if not, provide detailed description)		N

Table A.17: Bearer Service 61, Alternate Speech/Data, 3.1kHz, Sync

Item	Release	Bearer Capability Elements	Values Allowed	Supported
1	Ph2	Radio Channel Requirement (RCR)	dualHR	N
			FR	N
			dualFR	N
2	Ph2	Intermediate Rate (IR)	8 kbps	N
			16 kbps	N
3	Ph2	User Rate (UR)	1.2	N
			2.4	N
			4.8	N
			9.6	N
4	R96	Modem Type (MT)	V.22	N
			V.22bis	N
			V.26ter	N
			V.32	N
5		all allowed combinations according to GSM 07.01 B.1.6.2.2 (3GPP TS 27.001) implemented (if not, provide detailed description)		N

Table A.18: Bearer Service 81, Speech followed by Data, "Speech"

Item	Release	Bearer Capability Elements	Values Allowed	Supported
1	Ph2	Radio Channel Requirement (RCR)	dualHR	N
			FR	N
			dualFR	N

Table A.19: Bearer Service 81, Speech followed by Data, 3.1kHz, Async

Item	Release	Bearer Capability Elements	Values Allowed	Supported
1	Ph2	Connection Element (CE)	NT	N
			bothNT	N
			T	N
			bothT	N
2	Ph2	User Info Layer 2 Protocol (UIL2P)	ISO6429	N
			COPnoFICt	N
			NAV	N
3	Ph2	Number of Data Bits(NDB)	7 bits	N
			8 bits	N
4	Ph2	Parity Information (NPB)	odd	N
			even	N
			0	N
			1	N
			none	N
5	Ph2	Number of Stop Bits (NSB)	1 bit	N
			2 bits	N
6	Ph2	Radio Channel Requirement (RCR)	dualHR	N
			FR	N
			dualFR	N
7	Ph2	Intermediate Rate (IR)	8 kbps	N
			16 kbps	N

8	Ph2	User Rate (UR)	0.3	N
			1.2	N
			2.4	N
			4.8	N
			9.6	N
			1.2/0.075	N
9	R96	Modem Type (MT)	V.21	N
			V.22	N
			V.22bis	N
			V.26ter	N
			V.32	N
			V.23	N
10		all allowed combinations according to GSM 07.01 B.1.7.2.1 (3GPP TS 27.001) implemented (if not, provide detailed description)	auto1	N
				N

Table A.20: Bearer Service 81, Speech followed by Data, 3.1kHz, Sync

Item	Release	Bearer Capability Elements	Values Allowed	Supported
1	Ph2	Radio Channel Requirement (RCR)	dualHR	N
			FR	N
			dualFR	N
2	Ph2	Intermediate Rate (IR)	8 kbps	N
			16 kbps	N
3	Ph2	User Rate (UR)	1.2	N
			2.4	N
			4.8	N
			9.6	N
4	R96	Modem Type (MT)	V.22	N
			V.22bis	N
			V.26ter	N
			V.32	N
5		all allowed combinations according GSM 07.01 B.1.7.2.2 (3GPP TS 27.001) implemented (if not, provide detailed description)		N

Table A.21: Teleservice 11..12, Speech

Item	Release	Bearer Capability Elements	Values Allowed	Supported
1	Ph2	Radio Channel Requirement (RCR)	dualHR	N
			FR	Y
			dualFR	Y

Table A.22: Alternate Speech and Facsimile group 3, Speech

Item	Release	Bearer Capability Elements	Values Allowed	Supported
1	Ph2	Radio Channel Requirement (RCR)	dualHR	N
			FR	N
			dualFR	N

Table A.23: Alternate Speech and Facsimile group 3, Facsimile group 3

Item	Release	Bearer Capability Elements	Values Allowed	Supported
1	Ph2	Connection Element (CE)	NT	Y
			bothNT	Y
			T	Y
			bothT	Y
2	Ph2	User Info Layer 2 Protocol (UIL2P)	X.25	Y
			NAV	Y
3	Ph2	Intermediate Rate (IR)	8 kbps	Y
			16 kbps	Y

4	Ph2	User Rate (UR)	2.4	Y
			4.8	Y
			9.6	Y
5		all allowed combinations according GSM 07.01 B.1.10.2 (3GPP TS 27.001) implemented (if not, provide detailed description)		N

Table A.24: Teleservice 62, Automatic G3 fax

Item	Release	Bearer Capability Elements	Values Allowed	Supported
1	Ph2	Connection Element (CE)	NT	Y
			bothNT	Y
			T	Y
			bothT	Y
2	Ph2	User Info Layer 2 Protocol (UIL2P)	X.25	Y
			NAV	N
3	Ph2	Intermediate Rate (IR)	8 kbps	Y
			16 kbps	Y
4	Ph2	User Rate (UR)	2.4	Y
			4.8	Y
			9.6	Y
5		all allowed combinations according to GSM 07.01 B.1.11 (3GPP TS 27.001, annex B) implemented (if not, provide detailed description)		N

Table A.25: Additional Information

Item	Release	Additional Information	Supported
1	Ph2	at least one half rate service	Y
2	Ph2	full rate speech mode	Y
3	Ph2	half rate speech mode	Y
4	Ph2	at least one data service	Y
5	Ph2	at least one full rate data service	Y
6	Ph2	at least one half rate data service	N
7	Ph2	at least one non transparent data service	Y
8	Ph2	at least one transparent data service	Y
9	Ph2	only transparent data service	N
10	Ph2	at least one asynchronous data service	Y
11	Ph2	at least one asynchronous non transparent data service	Y
12	Ph2	2.4 k full rate data mode	Y
13	Ph2	2.4 k half rate data mode	N
14	Ph2	4.8 k full rate data mode	Y
15	Ph2	4.8 k half rate data mode	N
16	Ph2	9.6 k full rate data mode	Y
17	Ph2	non transparent service with full rate channel at a user rate of 4.8 kbit/s	N
18	Ph2	at least one bearer capability	Y
19	Ph2	at least one MT circuit switched basic service	Y
20	Ph2	at least one MO circuit switched basic service	Y
21	Ph2	only SDCCH	N
22	Ph2	at least one service on traffic channel supported	Y
23	Ph2	dual rate channel types	Y
24	Ph2	only full rate channel type	N
25	Ph2	at least one teleservice	Y
26	Ph2	CC protocol for at least one BC	Y
27	Ph2	only circuit switched basic service supported by the mobile is emergency call	N
28	Ph2	Fax Error Correction Mode	Y
29	Ph2	at least one supplementary service	Y
30	Ph2	non call related supplementary service	Y
31	Ph2	at least one short message service	Y
32	Ph2	(SMS) reply procedure	Y
33	Ph2	replace SMS	Y
34	Ph2	display of received SMS	Y
35	Ph2	SMS status report capabilities	Y
36	Ph2	Storing of short messages in the SIM	Y
37	Ph2	Storing of short messages in the ME	N

38	Ph2	detach on power down	Y
39	Ph2	detach on SIM remove	N
40	Ph2	SIM removable without power down	N
41	Ph2	ID-1 SIM	N
42	Ph2	Plug-In SIM	Y
43	Ph2	Disable PIN feature	Y
44	Ph2	PIN2 feature	Y
45	Ph2	Feature requiring entry of PIN2	Y
46	Ph2	Chars 0-9, *, # supported	Y
47	Ph2	A, B, C, D chars. supported	N
48	Ph2	automatically enter automatic selection of PLMN mode	N
49	Ph2	alerting indication to the user	Y
50	R98	Appl. Layer is always running	Y
51	Ph2	Immediate connect supported for all circuit switched basic services	N
52	Ph2	In-Call modification	N
53	Ph2	follow-on request procedure	Y
54	Ph2	refusal of call	Y
55	Ph2	RF amplification	N
56	Ph2	Number of B-party number for autocalling is greater than the number of entries in the blacklist	N
57	Ph2	Handset MS supporting speech	N
58	Ph2	MT2 Configuration	Y
59	Ph2	MT2 Configuration or any other possibility to send data over Um interface	Y
60	Rel-4	Permanent Antenna Connector	Y
61	Ph2	Pseudo-synchronized handover supported	Y
62	R96	5V only SIM/ME interface	N
63	R96	3V only SIM/ME interface	N
64	R96	3V/5V SIM/ME interface	N
65	Ph2	Enhanced full rate speech supported	Y
66a	Ph2	RLP supports non default parameters	Y
66b	R96	Support of listening to voice broadcast calls (VBS listening)	N
67	R96	Support of originating voice broadcast call (VBS originating)	N
68	R96	Support of listening to voice group calls (VGCS listening)	N
69	R96	Support of talking in voice group calls (VGCS talking)	N
70	R96	Support of originating voice group call (VGCS originating)	N
71	R96	Support reduced NCH monitoring	N
72	R96	14.4 k data mode	Y
73	Ph2	Implementation of cause number 27 of busy autocalling in category 2	N
74	Ph2	Implementation of cause number 27 of busy autocalling in category 3	N
75	Ph2	Support of immediate connect	N
76	Ph2 *	Artificial ear type 1 (* Phase 2 up to and including Release 4)	N
77	Ph2	Artificial ear type 3.2, Low leak option	N
78	R96	Artificial ear type 3.4	N
79	R98	Speech supported for Full rate version 3 (FR AMR).	Y
80	R96	NCH monitoring in group receive mode	N
81	R96	NCH monitoring in group transmit mode	N
82	R96	NCH monitoring in dedicated mode	N
83	R97	Support of one PDP context activation	Y
84	R97	Support of more than one PDP context activation	N
85	R97	Support of more than one PDP context activation simultaneously on the same SAPI	N
86	R97	Support of GPRS data compression	Y
87	R98	Support of GPRS header compression	Y
88	R97	Support of Network requested PDP context activation	N
89	R97	Support for user settings of minimum QoS	Y
90	R97	Automatic GPRS attach procedure at switch-on/power-on	Y
91	R97	MMI controlled attach/detach procedures for non-GPRS services	N
92	R97	Automatic attach procedure when MS identity cannot be derived by the network	Y
93	R98	Automatic MM IMSI attach procedure at switch-on / power-on	Y
94	R96	Support of SIM Application Toolkit	Y
95	R98	1.8V only SIM/ME interface	N
96	R98	1.8V/3V SIM/ME interface	Y
97	Ph2	Multiple SM MO/PP on same RR link	N
98	Ph2	Support of stored list cell selection	Y

99	Ph2	at least one service not support immediate connection	Y
100	Ph2	Void	
101	Ph2	Void	
102	Ph2	EFR_EmgCallSetup message contains the bearer capability	Y
103	Ph2	Support of MonitorPCH_GroupTransmitMode	N
104	Rel-4	Integral_Antenna Connector	N
105	R97	User requested combined GPRS and non-GPRS detached without powering off	Y
106	R97	User requested non-GPRS detached	N
107	Ph2	Artificial ear type 3.2, High leak option	N
108	R96	Artificial ear type 3.3	N
109	Ph2	Support of Multiple SMS	N
110	R97	Cell Reselection after T3184 Expiry	N
111	R97	GPRS attach attempted automatically due to outstanding request	Y
112	R98	Speech supported for Half rate version 3	Y
113	R5	AMR LoopBack I	Y
114	R99	TTY services	N
115	R99	Support of Secondary PDP Context Activation	N
116	Phase2	Support of MO SMS Concatenation	Y
117	Phase2	Support of MT SMS Concatenation	Y
118	R97	NITZ Supported	Y
119	R97	Handling of Real Time (for NITZ)	N
120	R97	Deletion of NITZ parameters supported	N
121	R97	Re-attach automatically when the network commands a detach with no cause value	N
122	R98	Support of GPRS header compression algorithm type RFC 1144	N
123	R99	Support of GPRS header compression algorithm type RFC 2507	N
124	Rel-6	Support of ROHC algorithm type RFC 3241	N
125	Rel-6	Support of ROHC algorithm type RFC 3242	N
126	Rel-6	Support of ROHC algorithm type RFC 3408	N
127	Rel-6	Support of of ROHC algorithm type RFC 3095	N
128	R97	The way to trigger transferring of new user data in a different PDP context while an uplink transfer is in progress	N
129	Rel-6	Support of DARP phase 1	N
130	R99	Support of Card Application	N
131	Rel-5	Support of GSM speech half rate version 6 (O-TCH/AHS)	N
132	R99	MS with improved receiver performance	N
133	Rel-5	Support of GSM speech full rate version 4 (O-TCH/WFS)	N
134	R97	Verification for correct repetition of new password	N
135	R99	MS using reduced interslot dynamic range in multislot configurations	N

Table A.25.1 Additional Information (requiring values)

Item	Release	SAT Mechanism	Value allowed	Value	Supported
1	R98	AMR C/I normalization factor (units: dB)	0 ... ¥	1	Y
2	R98	Loop C delay (round trip delay, in number of TDMA frames)	1 ... ¥	4	Y

Table A.1(STK): Options of 3GPP TS 11.10-4 (2004-06)

Item	Release	Option	Supported
1	R99	Capability Configuration parameter	Y
2	R99	Sustained text	Y
3	R99	UCS2 coding scheme for Entry	N
4	R99	Extended Text String	Y
5	R99	Help information	Y
6	R99	Icons	N
7	R99	Class A: Dual Slot	N
8	R99	Detachable reader	N
9	R99	Class B: RUN AT	Y
10	R99	Class C: LAUNCH BROWSER	Y
11	R99	Class D: Soft keys	N
12	R99	Class E: B.I.P	Y
13	R99	Screen sizing parameters	N
14	R99	Screen Resizing	N

15	R99	UCS2 coding scheme for Display	N
16	R99	Mobile supporting GPRS	Y
17	R99	Mobile supporting UDP	Y
18	R99	Mobile supporting TCP	Y
19	R99	Redial in Set Up Call	Y
20	R99	Mobile decision to respond with "No response from user" in finite time	Y
21	R99	Class E: B.I.P related to GPRS	Y
22	R99	Mobile supporting Called Party Subaddress	Y
23		Mobile supporting fixed dialing numbers	N
24		Mobile supporting barred dialing numbers	N
25		Mobile supporting "+CIMI" in combination with Run AT Command	N
26		UCS2 in Cyrillic	N
27		Mobile supporting '9EXX' response code for SIM data download error	N
28		Mobile supporting Envelope Call Control always sent to the SIM during automatic redial mode	N
29		Mobile supporting 2nd alpha identifier in SET UP CALL	N
30		Mobile supporting Open Channel (GPRS) not containing a Network Access Name TLV when no default Access Point Name is set in the terminal configuration	N
31		Preferred buffer size supported by the terminal for Open Channel command is greater than 0 byte and less than 65535 bytes	N
32		Terminal supports Dual Transfer Mode (allowing GPRS connection and call at the same time)	N
33		Terminal supports Long ForwardToNumber	N
34		Terminal executes User confirmation phase before sending PDP context activation request	N

Table E.1 of 3GPP TS 11.10.4: TERMINAL PROFILE support (2004-06)

Item	Release	Terminal Profile	Supported
1	R96	Profile Download	Y
2	R96	SMS-PP data download	Y
3	R96	Cell Broadcast data download	Y
4	R96	Menu selection	Y
5	R97	'9EXX' response code for SIM data download error	Y
6	R98	Timer expiration	Y
7	R98	USSD string data object supported in Call Control	N
8	R99	Envelope Call Control always sent to the SIM during automatic redial mode	N
9	R96	Command result	Y
10	R96	Call Control by SIM	Y
11	R97	Cell identity included in Call Control by SIM	Y
12	R98	MO short message control by SIM	Y
13	R97	Handling of the alpha identifier	Y
14	R97	UCS2 Entry supported	Y
15	R97	UCS2 Display supported	N
16	R98	Display of the extension text	N
17	R96	DISPLAY TEXT	Y
18	R96	GET INKEY	Y
19	R96	GET INPUT	Y
20	R96	MORE TIME	Y
21	R96	PLAY TONE	Y
22	R96	POLL INTERVAL	Y
23	R96	POLLING OFF	Y
24	R96	REFRESH	Y
25	R96	SELECT ITEM	Y
26	R96	SEND SHORT MESSAGE	Y
27	R96	SEND SS	Y
28	R98	SEND USSD	Y
29	R96	SET UP CALL	Y
30	R96	SET UP MENU	Y
31	R96	PROVIDE LOCAL INFORMATION (LOCI & IMEI)	Y
32	R97	PROVIDE LOCAL INFORMATION (NMR)	N
33	R98	SET UP EVENT LIST	Y
34	R98	Event: MT call	Y
35	R98	Event: Call connected	Y
36	R98	Event: Call disconnected	Y
37	R98	Event: Location status	Y

38	R98	Event: User activity	Y
39	R98	Event: Idle screen available	Y
40	R98	Event: Card reader status	N
41	R99	Event: Language selection	Y
42	R99	Event: Browser Termination	Y
43	R99	Event: Data available	Y
44	R99	Event: Channel status	Y
45	R96	RFU	N
46	R96	RFU	N
47	R96	RFU	N
48	R96	RFU	N
49	R98	POWER ON CARD	N
50	R98	POWER OFF CARD	N
51	R98	PERFORM CARD APDU	N
52	R98	GET READER STATUS(Card reader status)	N
53	R99	GET READER STATUS(Card reader identifier)	N
54	R96	RFU	N
55	R96	RFU	N
56	R96	RFU	N
57	R98	TIMER MANAGEMENT(start, stop)	Y
58	R98	TIMER MANAGEMENT(get current value)	Y
59	R98	PROVIDE LOCAL INFORMATION (date, time and time zone)	Y
60	R98	Binary choice in GET INKEY	N
61	R98	SET UP IDLE MODE TEXT	Y
62	R98	RUN AT COMMAND (i.e. class "b" is supported)	Y
63	R98	2nd alpha identifier in SET UP CALL	N
64	R98	2nd capability configuration parameter	N
65	R98	Sustained DISPLAY TEXT	N
66	R98	SEND DTMF command	Y
67	R98	PROVIDE LOCAL INFORMATION - BCCH	N
68	R99	PROVIDE LOCAL INFORMATION (language)	Y
69	R99	PROVIDE LOCAL INFORMATION (Timing Advance)	Y
70	R99	LANGUAGE NOTIFICATION	Y
71	R99	LAUNCH BROWSER	Y
72	R96	RFU	N
73	R99	Soft keys support for SELECT ITEM	N
74	R99	Soft Keys support for SET UP MENU	N
75	R96	RFU	N
76	R96	RFU	N
77	R96	RFU	N
78	R96	RFU	N
79	R96	RFU	N
80	R96	RFU	N
81	R99	Maximum number of soft keys available ('FF' = RFU)	N
82	R99	Maximum number of soft keys available ('FF' = RFU)	N
83	R99	Maximum number of soft keys available ('FF' = RFU)	N
84	R99	Maximum number of soft keys available ('FF' = RFU)	N
85	R99	Maximum number of soft keys available ('FF' = RFU)	N
86	R99	Maximum number of soft keys available ('FF' = RFU)	N
87	R99	Maximum number of soft keys available ('FF' = RFU)	N
88	R99	Maximum number of soft keys available ('FF' = RFU)	N
89	R99	OPEN CHANNEL	Y
90	R99	CLOSE CHANNEL	Y
91	R99	RECEIVE DATA	Y
92	R99	SEND DATA	Y
93	R99	GET CHANNEL STATUS	Y
94	R96	RFU	N
95	R96	RFU	N
96	R96	RFU	N
97	R99	CSD supported by ME	Y
98	R99	GPRS supported by ME	Y
99	R96	RFU	N

100	R96	RFU	N
101	R96	RFU	N
102	R99	Number of channels supported by ME	N
103	R99	Number of channels supported by ME	N
104	R99	Number of channels supported by ME	N
105	R99	Number of characters supported down the ME	N
106	R99	Number of characters supported down the ME	N
107	R99	Number of characters supported down the ME	N
108	R99	Number of characters supported down the ME	N
109	R99	Number of characters supported down the ME	N
110	R96	RFU	N
111	R96	RFU	N
112	R99	Screen Sizing Parameters	N
113	R99	Number of characters supported across the ME display	N
114	R99	Number of characters supported across the ME display	N
115	R99	Number of characters supported across the ME display	N
116	R99	Number of characters supported across the ME display	N
117	R99	Number of characters supported across the ME display	N
118	R99	Number of characters supported across the ME display	N
119	R99	Number of characters supported across the ME display	N
120	R99	Variable size fonts Supported	N
121	R99	Display can be resized	N
122	R99	Text Wrapping supported	N
123	R99	Text Scrolling supported	N
124	R96	RFU	N
125	R96	RFU	N
126	R99	Width reduction when in a menu	N
127	R99	Width reduction when in a menu	N
128	R99	Width reduction when in a menu	N
129	R99	TCP	Y
130	R99	UDP	Y
131	R96	RFU	N
132	R96	RFU	N
133	R96	RFU	N
134	R96	RFU	N
135	R96	RFU	N
136	R96	RFU	N
137	R96	RFU	N
138	R96	RFU	N
139	R96	RFU	N
140	R96	RFU	N
141	R96	RFU	N
142	R96	RFU	N
143	R96	RFU	N
144	R96	RFU	N
145	R99	Protocol Version	N
146	R99	Protocol Version	N
147	R99	Protocol Version	N
148	R99	Protocol Version	N
149	R96	RFU	N
150	R96	RFU	N
151	R96	RFU	N
152	R96	RFU	N

PIXIT – Protocol Implementation Extra Information for Testing

Power Supply

Nominal testing voltage	4.00	V
Maximal testing voltage	4.40	V
Minimal testing voltage	3.60	V