26.10 E-GSM signalling

26.10.1 E-GSM signalling / general considerations

Section 26.10 only applies to E-GSM mobile stations.

Conformance requirements of section 26 fully apply to any mobile station (P-GSM, E-GSM or DCS) in the whole supported band of the mobile station.

Besides, as an E-GSM mobile station shall support the P-GSM band, it shall pass successfully every test of section 26 under the described GSM 900 conditions.

The purpose of this extra section is to test the different procedures which may be impacted when some channel uses E-GSM frequency(s).

26.10.2 E-GSM signalling / RR

26.10.2.1 E-GSM signalling / RR / Measurement

This test applies E-GSM mobile stations.

Conformance requirements of section 26.6.3 fully apply to any mobile station (P-GSM, E-GSM or DCS) in the whole supported band of the mobile station.

Besides, as an E-GSM mobile station shall support the P-GSM band, it shall pass successfully every test of section 26.6.3 under the described GSM 900 conditions.

The purpose of this extra section is to test the reporting of measurements in the case where cells use E-GSM frequency(s). Several coding formats may be used by the network in the SYSTEM INFORMATION message.

26.10.2.1.1 Conformance requirements

The MS shall continuously send MEASUREMENT REPORT messages on every SACCH blocks and the measurement valid indication shall be set to valid (0) within the second block at the latest. After 20 seconds the values in the MEASUREMENT REPORT message shall contain measurement results for the 6 th strongest cells belonging to the set of cells indicated either in SI5 and SI5bis messages or in SI5 and SI5ter messages.

References

GSM 04.08 sections 3.4.1.2 and 9.1.39, GSM 05.08 section 8.4.

26.10.2.1.2 Test purpose

To test that, when the SS gives information about neighbouring cells indicated either in SI5 and SI5bis messages or in SI5 and SI5ter messages, the MS reports appropriate results.

26.10.2.1.3 Method of test

Initial Conditions

System Simulator:

8 cells with the following settings:

Transmitter	Level	NCC	BSCC	ARFCN	Cell identity
Serving, S1	-60	1	3	002	0001H
Neighbour, N1	-85	1	5	990	0002H
Neighbour, N2	-80	1	7	1005	0003H
Neighbour, N3	-75	1	1	000	0004H
Neighbour, N4	-55	1	3	026	0005H
Neighbour, N5	-50	1	5	1020	0006H
Neighbour, N6	-45	1	7	038	0007H
Neighbour, N7	-40	1	1	1003	0008H

With the exception of the Cell Allocation, the rest of the parameters for all eight cells are the same as the default settings and default SYSTEM INFORMATION TYPE 1 to 4 message contents for cell A. The Cell Allocation for the serving cell is the same as the default setting for cell A. The Cell Allocations for the neighbour cells need have only one entry, consisting of the ARFCN of that cell's BCCH.

Mobile Station:

The MS is in the active state of a call (U10).

Related PICS/PIXIT Statements

Support for state U10 of the Call Control protocol.

Foreseen Final State of the MS

Active state of a call (U10).

Test Procedure

The test is performed for execution counter, c=1 to 9

For c=1 to 6, the following procedure applies .

With the MS having a call in progress, the SS sends SYSTEM INFORMATION TYPE 5, 5bis & 6 on the SACCH. The MS shall send MEASUREMENT REPORTs back to the SS, and it shall be indicated in these that measurement results for the 6 strongest present carriers of the supported band have been obtained.

For c=7 to 9, the following procedure applies :

With the MS having a call in progress, the SS sends SYSTEM INFORMATION TYPE 5, 5ter & 6 on the SACCH. The MS shall send MEASUREMENT REPORTs back to the SS, and it shall be indicated in these that measurement results for the 6 strongest present carriers of the supported band have been obtained.

Maximum Duration of Test

8 minutes, including 1 minute for any necessary operator actions.

Expected Sequence

This sequence is performed for execution counter, c= 1 to 9.

Since SYSTEM INFORMATION TYPE 5, SYSTEM INFORMATION TYPE 6 and MEASUREMENT REPORT are sent continuously, a table is not applicable in this test. The interval between 2 successive Layer 2 frames containing MEASUREMENT REPORTs shall not exceed one Layer 2 frame.

Specific Message Contents

SYSTEM INFORMATION TYPE 5:

Information Element	value/remark
Protocol Discriminator	RR management
Message Type	Sys Info 5.
Neighbour Cells Description	
- EXT IND	Information Element carries only a part of the BA.
- BA-IND	0 for c=1, use range 128 to encode the following frequencies: (26, 38) for c=2, use range 256 to encode the following frequencies (990, 1 003, 1 005) for c=3, use range 512 to encode the following frequencies (520, 990, 1 003, 1 005, 1 020) for c=4, use range 1 024 to encode the following frequencies (0, 26, 38, 990, 1 003, 1 005) for c=5, use variable Bitmap to encode the following frequencies (0, 26, 38) for c=6, use Bitmap 0 to encode the following frequencies (26) for c=7, use range 512 to encode the following frequencies : (520, 990, 1020) for c=8, use range 1024 to encode the following frequencies : (0, 26, 38, 990, 1005, 1020) for c=9, use range 256 to encode the following frequencies : (38)

SYSTEM INFORMATION TYPE 5bis:

Information Element	value/remark
Protocol Discriminator	RR management
Message Type	Sys Info 5bis.
Neighbour Cells Description	
- EXT IND	Information Element carries only a part of the BA.
- BA-IND	0 for c=1, use range 512 to encode the following frequencies: (520, 990, 1 003, 1 005, 1 020) for c=2, use range 128 to encode the following frequencies (0, 26, 38) for c=3, use range 256 to encode the following frequencies (0, 26, 38) for c=4, use range 1 024 to encode the following frequencies (520, 1 000, 1 020) for c=5, use variable Bitmap to encode the following frequencies (884, 990, 1 003, 1 005) for c=6, use range 512 to encode the following frequencies (520, 990, 1 003)

SYSTEM INFORMATION TYPE 5ter:

Information Element	value/remark
Protocol Discriminator	RR management
Additional Multiband information	
- multiband reporting	normal reporting of the six strongest cells, irrespective of the band used.
Message Type	Sys Info 5ter.
Neighbour Cells Description	
- EXT IND	Information Element carries only a part of the BA.
- BA-IND	0 for c=7, use range 1024 to encode the following frequencies (0,26,1003, 1005) for c=8, use variable bitmap to encode the following frequencies (1000,1003) for c=9,, use range 256 to encode the following frequencies (26, 1003, 1020)

SYSTEM INFORMATION TYPE 6:

Information Element	value/ remark
Protocol Discriminator	RR Management
Message Type	sys info 6
Cell Identity	default
LAI	default
Cell Options	
- Power Control Indicator	Power Control Indicator is set
- DTX Indicator	MS shall not use DTX
- Radio-Link-Time-out	default
PLMN permitted	only NCC 1 permitted

MEASUREMENT REPORT:

Information Element	value/remark
Protocol Discriminator	RR Management
Transaction Identifier	0000
Message Type	MEASUREMENT REPORT
Measurement Results	
BA-used	1
DTX-used	DTX was not used
RXLEV-FULL-SERVING-CELL	See note 1
RXLEV-SUB-SERVING-CELL	See note 1
MEAS-VALID	See note 3
RXQUAL-FULL-SERVING-CELL	See note 1
RXQUAL-SUB-SERVING-CELL	See note 1
NO-NCELL-M	n (see note 2)
RXLEV-NCELL-1	See note 1
BCCH-FREQ-NCELL-1	See note 2
BSIC-NCELL-1	Corresponds to that of BCCH-FREQ-NCELL-1
RXLEV-NCELL-2	See note 1
BCCH-FREQ-NCELL-2	See note 2
BSIC-NCELL-2	Corresponds to that of BCCH-FREQ-NCELL-2
RXLEV-NCELL-3	See note 1
BCCH-FREQ-NCELL-3	See note 2
BSIC-NCELL-3	Corresponds to that of BCCH-FREQ-NCELL-3
RXLEV-NCELL-4	See note 1
BCCH-FREQ-NCELL-4	See note 2
BSIC-NCELL-4	Corresponds to that of BCCH-FREQ-NCELL-4
RXLEV-NCELL-5	See note 1
BCCH-FREQ-NCELL-5	See note 2
BSIC-NCELL-5	Corresponds to that of BCCH-FREQ-NCELL-5
RXLEV-NCELL-6	See note 1
BCCH-FREQ-NCELL-6	See note 2
BSIC-NCELL-6	Corresponds to that of BCCH-FREQ-NCELL-6

NOTE 1: These actual values are not checked.

NOTE 2: ARFCN 2 is the serving cell carrier.

c=1 report on ARFCNs 2, 26, 38, 990, 1 003, 1 005, 1 020, n=6

c=2 report on ARFCNs 2, 26, 38, 990, 1 003, 1 005, 0, 1 020 stronger than 1 005 but not broadcasted in SYS INFO), n=6

c=3 report on ARFCNs 2, 20, 26, 38, 1 003, 1 005, 1 020, 0 (990 less strong, 520 DCS), n=6

c=4 report on ARFCNs 2, 26, 38, 990, 1 003, 1 005, 0 (1 000 less strong, 520 DCS, 1 020 not broadcasted in SYS INFO), n=6

c=5 report on ARFCNs 2, 26, 38, 990, 1 003, 1 005, 0 (884 DCS), n=6

c=6 report on 2, 26, 990, 1 003, n=6

c=7 report on ARFCNs 2, 26, 990, 1003, 1005, 1020, 0 (520 DCS), n=6

c=8 report on ARFCNs 2, 26, 38, 1003, 1005, 1020, 0 (990 and 1000 less strong), n=6

c=9 report on ARFCNs 2, 26,38, 1003, 1020, n=4.

NOTE 3: The Measurement Valid Indication shall be set to valid within the second SACCH block at the latest.

26.10.2.2 E-GSM signalling / RR / Immediate assignment

This section only applies to E-GSM mobile stations.

Conformance requirements of section 26.6.1 fully apply to any mobile station (P-GSM, E-GSM or DCS) in the whole supported band of the mobile station.

Besides, as an E-GSM mobile station shall support the P-GSM band, it shall pass successfully every test of section 26.6.1 under the described GSM 900 conditions.

The purpose of this extra section is to test the immediate assignment procedure in the case where the target channel is E-GSM frequency.

26.10.2.2.1 Conformance requirement

Following a PAGING REQUEST message, the MS shall correctly set up an RR connection on a supported channel described in the IMMEDIATE ASSIGNMENT message, using some E-GSM frequency.

Reference(s)

GSM 04.08 section 3.3.1.2.1.

26.10.2.2.2 Test purpose

To verify that the MS can correctly set up a dedicated control channel when E-GSM frequencies are used.

This tested for a SDCCH/8.

26.10.2.2.3 Method of test

Initial Conditions

System Simulator:

1 cell.
CCCH-CONF is set to "1 basic physical channel used for CCCH not combined with SDCCHs".
SYSTEM INFORMATION type 1 message contains the following frequencies in the Cell Channel Description IE: 0, 30, 40, 66, 80, 1 005, 1 010, 1 015 (use range 1 024 to encode).
BCCH carrier number 1 015.

Mobile Station:

The MS is in the "idle, updated" state, with a TMSI allocated.

Related PICS/PIXIT Statement(s)

None.

Foreseen Final State of the MS

"Idle, updated", with TMSI allocated.

Test Procedure

This test procedure is performed twice.

The System Simulator pages the MS and after the MS has responded with a CHANNEL REQUEST message the SS assigns an SDCCH channel using some E-GSM frequencies. The MS shall go to the correct channel and send a PAGING RESPONSE message. Then the SS initiates RR-release by sending a CHANNEL RELEASE message.

Maximum Duration of Test

15 seconds.

Expected Sequence

The sequence is performed for execution counter k=1,2.

Step	Direction	Message	Comments
1	SS -> MS	PAGING REQUEST TYPE 1	
2	MS -> SS	CHANNEL REQUEST	cause "answer to paging"
3	SS -> MS	IMMEDIATE ASSIGNMENT	Channel Type: see below
4	MS -> SS	PAGING RESPONSE	Shall be sent on the correct channel
5	SS -> MS	CHANNEL RELEASE	

Specific Message Contents

IMMEDIATE ASSIGNMENT

As default except:

Information element	remark/value
Channel description	
- Channel Type	SDCCH/8
- Timeslot number	arbitrary but not zero
- Training sequence code	arbitrary
- Hopping channel	k=1 Single RF k=2 RF hopping channel
- Channel Selector	k=1 ARFCN=1 015 k=2 MAIO = arbitrarily chosen HSN arbitrary chosen from the set (1,..63)
Mobile allocation	k=1 empty k=2 indicates the following frequencies (0, 80, 1 005, 1 010)

26.10.2.3 E-GSM signalling / RR / channel assignment procedure

This test is only applicable to an E-GSM mobile station.

Conformance requirements of section 26.6.4 fully apply to any mobile station (P-GSM, E-GSM or DCS) in the whole supported band of the mobile station.

Besides, as an E-GSM mobile station shall support the P-GSM band, it shall pass successfully every test of section 26.6.4 under the described GSM 900 conditions.

The purpose of this extra section is to test the assignment in the case where the allocated channel uses E-GSM frequency(s): in the case of frequency hopping several coding formats may be used by the network in the ASSIGNMENT COMMAND message.

26.10.2.3.1 Conformance requirements

1. Upon receipt of the ASSIGNMENT COMMAND message, the mobile station initiates a local end release of link layer connections, disconnects the physical channels, commands the switching to the assigned channels and initiates the establishment of lower layer connections (this includes the activation of the channels, their connection and the establishment of the main signalling links).

2. The MS shall apply the hopping frequencies specified in ASSIGNMENT COMMAND message in the mobile allocation or frequency list or frequency short list at the time accessing the new channel.

References

GSM 04.08, subclause 3.4.3.
GSM 04.08, subclause 9.1.2.

26.10.2.3.2 Test purpose

1. To verify that upon receipt of an ASSIGNMENT COMMAND, the MS switches to the channel defined in the ASSIGNMENT COMMAND, establishes the link and sends an ASSIGNMENT COMPLETE message.

2. To verify that an MS, having received an ASSIGNMENT COMMAND, is able in case of frequency hopping to decode the mobile allocation and frequency list correctly and applies the specified frequencies.

26.10.2.3.3 Method of test

Initial Conditions

System Simulator:
1 cell, default parameters.

Mobile Station:
The MS is in the "idle, updated" state with a TMSI allocated.

Related PICS/PIXIT Statements

- TCH supported (Y/N).
- The supported channel mode(s) need to be declared.

Foreseen Final State of the MS

"Idle, updated", with TMSI allocated.

Test Procedure

The test procedure is performed 2 times.

The SS pages the MS and allocates an SDCCH. Then a channel is assigned with ASSIGNMENT COMMAND. Each time the MS shall switch to the assigned channel, establish the link and send an ASSIGNMENT COMPLETE message.

The SS initiates the channel release procedure.

Maximum Duration of Test

3 min.

Expected Sequence

The test sequence is performed for execution counter k=1 to 2.

Step	Direction	Message	Comments
1	SS -> MS	PAGING REQUEST TYPE 1	
2	MS -> SS	CHANNEL REQUEST	
3	SS -> MS	IMMEDIATE ASSIGNMENT	Timeslot Number = n.
4	MS -> SS	PAGING RESPONSE	
5	SS -> MS	ASSIGNMENT COMMAND	See specific message contents Timeslot Number = (n+1) mod 8
6	MS -> SS	ASSIGNMENT COMPLETE	Sent on the correct channel after establishment of the main signalling link. Steps 5 and 6 are repeated cmax times, where cmax is the number of frequency formats allowed for each value of k. Use repetition counter c: See specific message content.
7	SS -> MS	CHANNEL RELEASE	The main signalling link is released.

Specific Message Contents

ASSIGNMENT COMMAND:

Information element	value/remark
Protocol Discriminator	RR
Skip indicator	0000
Message type	ASSIGNMENT COMMAND
Channel Description	
- Channel type	TCH/F + ACCHs if supported by the MS or SDCCH/8 if not
- Timeslot number	arbitrary
- Training sequence code	chosen arbitrarily
- Hopping	RF hopping channel
- MAIO	arbitrary
- HSN	arbitrarily chosen from the set (1,2...63)
Power Command	
- Power level	Arbitrarily chosen
For k=1	
Cell Channel Description IE is not included	
Frequency list	for c=1, use range 128 to encode the following frequencies: (1 005, 1 010, 1 015) for c=2, use range 256 to encode the following frequencies (73, 74, 75, 76, 77) for c=3, use range 512 to encode the following frequencies (980, 981, 982, 983) for c=4, use range 1 024 to encode the following frequencies (30, 40, 1 010, 1 015) for c=5, use variable Bitmap to encode the following frequencies (980, 991, 992, 993, 994, 1 015) with an encoding origin set to 980 for c=6, use Bitmap 0 to encode the following frequencies (20, 40, 66)
For k=2	
Cell Channel Description	for c=1, use range 128 to encode the following 13 frequencies: (980, 981, 982, 983, 990, 991, 992, 993, 994, 1 000, 1 005, 1 010, 1 015) for c=2, use range 256 to encode the following 13 frequencies (20, 40, 66, 73, 74, 75, 76, 77, 78, 79, 108, 114, 115) for c=3, use range 512 to encode the following 13 frequencies (980, 981, 982, 983, 990, 991, 992, 993, 994, 1 000, 1 005, 1 010, 1 015) for c=4, use range 1 024 to encode the following 8 frequencies (0, 30, 40, 66, 80, 1 005, 1 010, 1 015) for c=5, use variable Bitmap to encode the following frequencies (980, 981, 982, 983, 990, 991, 992, 993, 994, 1 000, 1 005, 1 010, 1 015) for c=6, use Bitmap 0 to encode the following 12 frequencies (20, 40, 66, 73, 74, 75, 76, 77, 78, 79, 108, 114)
For k = 2	
Mobile Allocation	indicates the following the frequencies: for c=1 (1 005, 1 010, 1 015) for c=2 (73, 74, 75, 76, 77) for c=3 (980, 981, 982, 983) for c=4 (0, 30, 40, 1 010, 1015) for c=5 (990, 991, 992, 993, 994) for c=6 (20, 40, 66)
Mode of the First channel	speech full rate version 1 for TCH/F except if speech is not supported: arbitrary from those supported
Starting Time	not included

26.10.2.4 E-GSM signalling / RR / Handover

This section only applies to E-GSM mobile stations.

Conformance requirements of section 26.6.5 fully apply to any mobile station (P-GSM, E-GSM or DCS) in the whole supported band of the mobile station.

Besides, as an E-GSM mobile station shall support the P-GSM band, it shall pass successfully every test of section 26.6.5 under the described GSM 900 conditions.

The purpose of this extra section is to test the handover in the case where the target channel uses E-GSM frequency(s): in the case of frequency hopping several coding formats may be used by the network in the HANDOVER COMMAND message.

26.10.2.4.1 E-GSM signalling / RR / Handover / Successful handover

26.10.2.4.1.1 Conformance requirements

The MS shall correctly apply the handover procedure from a channel without frequency hopping in the primary band to a channel with frequency hopping using P-GSM and E-GSM frequencies whatever the coding used for the frequency hopping description.

References

GSM 04.08, sections 3.4.4 and 9.1.15.

26.10.2.4.1.2 Test purpose

To check that the MS correctly performs a non-synchronized handover, from a non hopping primary band SDCCH to a hopping TCH or SDCCH using E-GSM frequencies, whatever the coding used for the hopping sequence description and that it activates the new channel correctly.

This is tested in the following case:

E-GSM signalling / Handover / successful / call under establishment / non-synchronized /

- from SDCCH/8 to TCH/F if the MS supports a TCH

- from SDCCH/8 to SDCCH/8 if not

26.10.2.4.1.3 Method of test

Initial Conditions

System Simulator:
2 cells A and B with same LAI, default parameters;
except for Cell A: the broadcasted Cell Channel Description in SYSTEM INFORMATION type 1 message contains the following frequencies: 20, 40, 66, 73, 74, 75, 76, 77, 78, 79, 108, 114 (encoded using Bit Map 0 format).

Mobile Station:
The MS is in the "idle, updated" state, with a TMSI allocated and camped on cell A.

Related PICS/PIXIT Statements

Support of TCH (Y/N).
Support of speech (Y/N).
Support for state U10 of the Call Control protocol.

Foreseen Final State of the MS

"Idle, updated" with TMSI allocated and camped on cell B.

Test Procedure

The test procedure is performed 18 times.

A Mobile Originating Call is initiated on cell A. After the MS has sent the SETUP message (and before the last L2 frame carrying the SETUP message is acknowledged by the SS) the SS sends a HANDOVER COMMAND message, ordering the MS to switch to cell B.

The MS shall then begin to send access bursts on the new channel, a TCH/F if supported (see PICS/PIXIT) or an SDCCH if not, to cell B.

The SS observes the access bursts. After receiving n access bursts, n being randomly drawn between 10 and 20 for the TCH case, 2 and 5 for the SDCCH (see table 26.6-2 of section 26.6.5) , the SS sends one PHYSICAL INFORMATION message with a Timing Advance of 20 (see table 26.6-1 of section 26.6.5).

The MS shall activate the channel in sending and receiving mode. Then the MS shall establish a signalling link using the correct timing advance. The MS shall be ready to transmit a HANDOVER COMPLETE message before x ms after the end of the PHYSICAL INFORMATION message but not before a UA frame has been sent by the SS. The MS shall then again send the SETUP message to the SS, using the same value in the N(SD) field. Finally the SS sends a CHANNEL RELEASE to end the test.

The term "ready to transmit" is specified in GSM 04.13. The value of "x" depends upon the target channel:

case SDCCH/8 x = 750.

case TCH/F x=500.

Maximum Duration of Test

10 min.

Expected Sequence

The sequence is performed for execution counter k=1 to 3 and c=1 to 6.

Step	Direction	Message	Comments
1	--------	--------	A MO call is initiated on cell A
2	MS -> SS	CHANNEL REQUEST	Establ. Cause = "Originating call, NECI not set to 1
3	SS -> MS	IMMEDIATE ASSIGNMENT	see specific message contents
4	MS -> SS	CM SERVICE REQUEST	CM Service Type = Mobile Originating Call Establishment.
5	SS -> MS	CIPHERING MODE COMMAND	
6	MS -> SS	CIPHERING MODE COMPLETE	
7	MS -> SS	SETUP	Last L2 frame not acknowledged by the SS.
8	SS -> MS	HANDOVER COMMAND	see specific message contents
9	MS -> SS	HANDOVER ACCESS	Repeated on every burst of the uplink main DCCH until reception of PHYSICAL INFORMATION. Handover Reference as included in the HANDOVER COMMAND
10	SS -> MS	PHYSICAL INFORMATION	Sent after reception of n HANDOVER ACCESS. Timing Advance: 20
11	MS -> SS	SABM	Sent without information field
12	SS -> MS	UA	
13	MS -> SS	HANDOVER COMPLETE	This message shall be ready to be transmitted before "x" ms after the completion of step 10
14	MS -> SS	SETUP	Same N(SD) as in step 7.
15	SS -> MS	CHANNEL RELEASE	

Specific Message Contents

IMMEDIATE ASSIGNMENT

Information Element	Value/remark
As default message contents, except:	
Cell Description	
- BCCH carrier number	20
Channel Description	
- Channel type	TCH/F + ACCHs if supported by the MS or SDCCH/8 if not
- Timeslot number	arbitrary but not zero
- Training sequence code	chosen arbitrarily
- Hopping	RF hopping channel
- MAIO	arbitrary
- HSN	arbitrarily chosen from the set (1,2...63)
Mobile Allocation	indicates the following frequencies: (20, 66, 78)

HANDOVER COMMAND

Information Element	Value/remark
As default message contents, except:	
Cell Description	
- BCCH carrier number	40
Channel Description	
- Channel type	TCH/F + ACCHs if supported by the MS or SDCCH/8 if not
- Timeslot number	arbitrary but not zero
- Training sequence code	chosen arbitrarily
- Hopping	RF hopping channel
- MAIO	arbitrary
- HSN	arbitrarily chosen from the set (1,2...63)
Synchronization Indication IE is not included	
For k = 1,	
Cell Channel Description IE is not included	
Frequency short list	for c=1, use range 128 to encode the following frequencies: (1 005, 1 010, 1 015) for c=2, use range 256 to encode the following frequencies (73, 74, 75, 76, 77) for c=3, use range 512 to encode the following frequencies (980, 981, 982, 983) for c=4, use range 1 024 to encode the following frequencies (30, 40, 1 010, 1 015) for c=5, use variable Bitmap to encode the following frequencies (980, 991, 992, 993, 994, 1 015) for c=6, use Bitmap 0 to encode the following frequencies (20, 40, 66)
For k=2	
Cell Channel Description IE is not included	
Frequency list	for c=1, use range 128 to encode the following frequencies: (1 005, 1 010, 1 015) for c=2, use range 256 to encode the following frequencies (73, 74, 75, 76, 77) for c=3, use range 512 to encode the following frequencies (980, 981, 982, 983) for c=4, use range 1 024 to encode the following frequencies (30, 40, 1 010, 1 015) for c=5, use variable Bitmap to encode the following frequencies (980, 991, 992, 993, 994, 1 015) for c=6, use Bitmap 0 to encode the following frequencies (20, 40, 66)
For k=3	
Cell Channel Description	for c=1, use range 128 to encode the following 13 frequencies: (980, 981, 982, 983, 990, 991, 992, 993, 994, 1 000, 1 005, 1 010, 1 015) for c=2, use range 256 to encode the following 13 frequencies (20, 40, 66, 73, 74, 75, 76, 77, 78, 79, 108, 114, 115) for c=3, use range 512 to encode the following 13 frequencies (980, 981, 982, 983, 990, 991, 992, 993, 994, 1 000, 1 005, 1 010, 1 015) for c=4, use range 1 024 to encode the following 10 frequencies (0, 30, 40, 66, 80, 520, 975, 1 005, 1 010, 1 015) for c=5, use variable Bitmap to encode the following 13 frequencies (980, 981, 982, 983, 990, 991, 992, 993, 994, 1 000, 1 005, 1 010, 1 015) for c=6, use Bitmap 0 to encode the following 12 frequencies (20, 40, 66, 73, 74, 75, 76, 77, 78, 79, 108, 114)
For k = 3	

Mobile Allocation	indicates the following the frequencies: for c=1 (1 005, 1 010, 1 015) for c=2 (73, 74, 75, 76, 77) for c=3 (980, 981, 982, 983) for c=4 (30, 40, 1 010, 1 015) for c=5 (990, 991, 992, 993, 994) for c=6 (20, 40, 66)
Mode of the First channel	if SDCCH/8: signalling if TCH/F: speech full rate version 1 if speech is supported, otherwise arbitrary from those supported

26.10.2.4.2 E-GSM signalling / RR / Handover / layer 1 failure

26.10.2.4.2.1 Conformance requirements

During a handover from a channel in the E-GSM band to a channel in the P-GSM band, or the contrary, the MS shall correctly return to the old channel in the case of an handover failure caused by a layer 1 failure on the target cell.

References

GSM 04.08 section 3.4.4.

26.10.2.4.2.2 Test purpose

To check that the MS correctly returns to the old channel in the case of an handover failure caused by a layer 1 failure on the target cell, even if the origin is in the P-GSM band and the target in the E-GSM band.

26.10.2.4.2.3 Method of test

Initial Conditions

System Simulator:
2 cells with same LAI, default parameters.

Mobile Station:
The MS is in the active state (U10) of a call on a P-GSM channel of cell A. power level = 10.

Related PICS/PIXIT Statements

Supported rate(s) of TCH: TCH/F.

Supported mode(s).

Support for state U10 of the Call Control protocol.

Foreseen Final State of the MS

The active state (U10) of a mobile call (on cell A), used power level 10.

Test Procedure

The MS is in the active state (U10) of a call on a P-GSM channel of cell A (used power level 10). The SS sends a HANDOVER COMMAND on the main DCCH. The MS shall begin to send access bursts at the commanded power level on the new DCCH to cell B (power level 12). With the exception of normal BCCH signalling, the SS does not transmit anything on cell B (thus causing a time-out of T3124). The MS shall re-establish the old link on cell A and send a HANDOVER FAILURE within 3 seconds from the transmission of HANDOVER COMMAND, using the old power level.

Maximum Duration of Test

1 min.

Expected Sequence

Step	Direction	Message	Comments
1	SS -> MS	HANDOVER COMMAND	to an E-GSM channel see specific message contents
2	MS -> SS	HANDOVER ACCESS	Several messages are sent, all with correct Handover References.
3	MS -> SS	HANDOVER FAILURE	Sent on old channel, RR cause value = “Abnormal release, unspecified", "Abnormal release, channel unacceptable", "Abnormal release, timer expired", "Abnormal release, no activity on the radio path" or "Protocol error unspecified". Layer 1 header has the same power level as the layer 1 header in step 1. Shall be sent within 3 seconds from the transmission of HANDOVER COMMAND.

Specific Message Contents

HANDOVER COMMAND

Information Element	Value/remark
As default message contents, except:	
Cell Description	
- BCCH carrier number	40
Channel Description	
- Channel type	TCH/F + ACCHs if supported by the MS
- Timeslot number	arbitrary but not zero
- Training sequence code	chosen arbitrarily
- Hopping	RF hopping channel
- MAIO	arbitrary
- HSN	chosen randomly from the set (1,2...63)
Synchronization Indication IE is not included	
Cell Channel Description IE is not included	
Frequency short list	use range 128 to encode the following frequencies: (1 005, 1 010, 1 015)
Mode of the first channel	Full rate speech version 1 if supported. If not, arbitrary from those supported except signalling.

26.10.2.5 E-GSM signalling / RR / Frequency Redefinition

This section only applies to E-GSM mobile stations.

Conformance requirements of section 26.6.6 fully apply to any mobile station (P-GSM, E-GSM or DCS) in the whole supported band of the mobile station.

Besides, as an E-GSM mobile station shall support the P-GSM band, it shall pass successfully every test of section 26.6.6 under the described GSM 900 conditions.

The purpose of this extra section is to test the frequency redefinition procedure in the case where the target channel uses E-GSM frequency(s): in the case of frequency hopping several coding formats may be used by the network in the FREQUENCY REDEFINITION message.

26.10.2.5.1 Conformance requirements

1) To verify that the MS, after receiving a FREQUENCY REDEFINITION message, correctly starts using the new frequencies, and hopping sequence when some E-GSM frequencies are used.

2) The last received Cell Channel Description information element is used to decode the Mobile Allocation IE received on the FREQUENCY REDEFINITION message.

References

GSM 04.08, 3.4.5 and 9.1.13.

26.10.2.5.2 Test purpose

1) To verify that the MS, after receiving a FREQUENCY REDEFINITION message, starts using the new frequencies and hopping sequence when some E-GSM frequencies are used.

2) To check that the last received Cell Channel Description information element is used to decode the Mobile Allocation IE received in the FREQUENCY REDEFINITION message.

26.10.2.5.3 Method of test

Initial conditions

System Simulator:
1 cell; default parameters.

Mobile Station:
The MS is in "idle, updated" state with TMSI allocated.

Related PICS/PIXIT statement(s)

- Support of a TCH (Y/N)

Foreseen final state of the MS

"Idle, updated", with TMSI allocated.

Test procedure

The test procedure is performed six times.

The System Simulator pages the MS and after the MS has responded with a CHANNEL REQUEST, the simulator assigns a TCH/F if supported otherwise a SDCCH/8. Then the SS sends to MS a FREQUENCY REDEFINITION. The MS shall then use the new frequencies/hopping sequence.

Maximum duration of test

3 min.

Expected sequence

The sequence is performed for execution counter c=1 to 6.

Step	Direction	Message	Comments
1	SS->MS	PAGING REQUEST TYPE 1	
2	MS->SS	CHANNEL REQUEST	
3	SS->MS	IMMEDIATE ASSIGNMENT	Hopping channel, Channel type = TCH/F if a TCH is supported otherwise, Channel type=SDCCH/8.
4	MS->SS	PAGING RESPONSE	Sent on the correct channel after establishment of the main signalling link
5	SS->MS	FREQUENCY REDEFINITION	See specific message contents.
6	-----	----------	The SS checks that the MS is transmitting on the correct frequencies.
7	SS->MS	CHANNEL RELEASE	The main signalling link is released.

Specific Message Contents

FREQUENCY REDEFINITION

Information Element	Value/remark
As default message contents, except:	
Channel Description	
- Channel type	Same as in IMMEDIATE ASSIGNMENT
- Timeslot number	Same as in IMMEDIATE ASSIGNMENT
- Training sequence code	Same as in IMMEDIATE ASSIGNMENT
- Hopping	RF hopping channel
- MAIO	arbitrary
- HSN	Same as in IMMEDIATE ASSIGNMENT
Cell Channel Description	for c=1, use range 128 to encode the following 13 frequencies: (980, 981, 982, 983, 990, 991, 992, 993, 994, 1 000, 1 005, 1 010, 1 015) for c=2, use range 256 to encode the following 13 frequencies (20, 40, 66, 73, 74, 75, 76, 77, 78, 79, 108, 114, 115) for c=3, use range 512 to encode the following 13 frequencies (980, 981, 982, 983, 990, 991, 992, 993, 994, 1 000, 1 005, 1 010, 1 015) for c=4, use range 1 024 to encode the following 8 frequencies (0, 30, 40, 66, 80, 1 005, 1 010, 1 015) for c=5, use variable Bitmap to encode the following frequencies (980, 981, 982, 983, 990, 991, 992, 993, 994, 1 000, 1 005, 1 010, 1 015) for c=6, not present (the mobile station will use the last Cell Channel Description IE received, i.e. the one broadcast in the SYSTEM INFORMATION TYPE 1 message).
Mobile Allocation	indicates the following frequencies: for c=1 (1 005, 1 010, 1 015) for c=2 (73, 74, 75, 76, 77) for c=3 (980, 981, 982, 983) for c=4 (30, 40, 1 010, 1 015) for c=5 (990, 991, 992, 993, 994) for c=6 (30, 50, 70)
Starting time	indicates (current frame number + 100 frames) mod 42432

26.10.3 E-GSM signalling / Structured procedure

Conformance requirements of section 26.9 fully apply to any mobile station (P-GSM, E-GSM or DCS) in the whole supported band of the mobile station.

Besides, as an E-GSM mobile station shall support the P-GSM band, it shall pass successfully every test of section 26.9 under the described GSM 900 conditions.

The purpose of these tests is to verify that the MS performs certain elementary procedures of the RR, MM, and CC protocol correctly within a structured procedure. This tested here in an E-GSM context to evaluate the global behaviour of an E-GSM mobile station using its specific frequency capability.

One mobile originated call and one emergency call are performed.

In one of the different cases the different following situations occur: early and late assignments, call release initiated by the network and by the MS.

26.10.3.1 E-GSM signalling / Structured procedure / Mobile originated call

26.10.3.1.1 Conformance requirement

1) An MS in MM state "idle, updated" and in RR idle mode with a TMSI assigned, when made to initiate a call for a selected teleservice that is supported by the MS , shall start to initiate an immediate assignment procedure by sending the CHANNEL REQUEST message with correct establishment cause.

2) Upon receipt of the ASSIGNMENT COMMAND message, the Mobile Station initiates a local end release of link layer connections, disconnects the physical channels, commands the switching to the assigned channels and initiates the establishment of lower layer connections (this includes the activation of the channels, their connection and the establishment of the data links). After the main signalling link is successfully established, the MS returns an ASSIGNMENT COMPLETE message, specifying cause "normal event", to the network on the main DCCH.

3,4) The call control entity of the Mobile Station in the "call initiated" state, in the "mobile originating call proceeding" state or in the "call delivered" state, shall, upon receipt of a CONNECT message:
- attach the user connection to the radio path;
- return a CONNECT ACKNOWLEDGE message.

References

Conformance requirement 1: GSM 04.08 section 3.3.1.
Conformance requirement 2: GSM 04.08 sections 3.4.3.1 and 3.4.3.2.
Conformance requirement 3: GSM 04.08 section 3.4.3.
Conformance requirement 4: GSM 04.08 section 5.2.1.1.6.
Conformance requirement 5: GSM 02.07.
Conformance requirement 6: GSM 04.08 sections 5.2.1.1.6 and 5.1.3.

26.10.3.1.2 Test purpose

1) To verify that the MS in MM state "idle, updated" and in RR idle mode with a TMSI assigned, when made to initiate a call for a selected teleservice that is supported by the MS as declared in a PICS/PIXIT statement, starts to initiate an immediate assignment procedure by sending the CHANNEL REQUEST message.

2) To verify that subsequently after receipt of an IMMEDIATE ASSIGNMENT message allocating an SDCCH, after completion of establishment of the main signalling link, after having sent a CM SERVICE REQUEST message, after having successfully performed authentication and cipher mode setting procedures, after having sent a SETUP message, after having received a CALL PROCEEDING message followed by an ALERTING message and an ASSIGNMENT COMMAND message allocating an appropriate TCH, the MS sends an ASSIGNMENT COMPLETE message.

3) To verify that subsequently, after the suite of actions specified in test purposes 1 and 2, the MS after receiving a CONNECT message returns a CONNECT ACKNOWLEDGE message.

4) To verify that after the suite of actions specified in test purposes 1 and 2, the MS after receiving a CONNECT message attaches the user connection to the radio path. (This is checked by verifying that there is a point in time after transmission of the first L2 frame containing the (complete) CONNECT message, where the MS is sending appropriate speech or data frames whenever it does not have to transmit or acknowledge an I frame on layer 2 of the FACCH.)

26.10.3.1.3 Method of test

Related PICS/PIXIT statements

- Interface to the human user (p1 = Y/N).
- Way to display the called number (only applicable if the MS has an interface to the human user).
- Way to indicate alerting (only applicable if the MS supports the feature).
- Way to make the MS accept an incoming call after alerting (possibly dependent on teleservice and configuration).
- Supported teleservices.
- Classmark.

Initial Conditions

System Simulator:
1 cell, default parameters.

Mobile Station:
The MS is in MM-state "idle, updated" with valid TMSI and CKSN.

Foreseen Final State of the MS

The MS is in MM state “idle updated”.

Test procedure

The following test is performed for one teleservice supported by the MS:

A teleservice is selected that is supported by the MS; if the MS supports speech, the selected teleservice is speech. If necessary, the MS is configured for that teleservice.

The MS is made to initiate a call. The call is established with late assignment. The release of the call is initiated by the MS.

Maximum Duration of Test

1 minute.

Expected Sequence

Step	Direction	Message	Comments
1	MS		The "called number" is entered
3	MS		
4	MS -> SS	CHANNEL REQUEST	Establishment cause is "originating call and the network does not set the NECI bit to 1".
5	SS -> MS	IMMEDIATE ASSIGNMENT	
6	MS -> SS	CM SERVICE REQUEST	Message is contained in SABM.
7	SS -> MS	AUTHENTICATION REQUEST	
8	MS -> SS	AUTHENTICATION RESPONSE	SRES specifies correct value.
9	SS -> MS	CIPHERING MODE COMMAND	SS starts deciphering after sending the message.
10	MS -> SS	CIPHERING MODE COMPLETE	Shall be sent enciphered. All following messages shall be sent enciphered.
11	SS		SS starts ciphering.
12	MS -> SS	SETUP	
13	SS -> MS	CALL PROCEEDING	
14	SS -> MS	ALERTING	
15	MS		Depending on the PICS, an alerting indication is given.
16	SS -> MS	ASSIGNMENT COMMAND	
17	MS -> SS	ASSIGNMENT COMPLETE	
18	SS -> MS	CONNECT	
19	MS -> SS	CONNECT ACKNOWLEDGE	
20	MS		The appropriate bearer channel is through connected in both directions.
21	MS		If the call is a data call, the TCH shall be through connected in both directions.
22	MS		The MS is made to release the call.
23	MS -> SS	DISCONNECT	
24	SS -> MS	RELEASE	
25	MS -> SS	RELEASE COMPLETE	
26	SS -> MS	CHANNEL RELEASE	The main signalling link is released.

Specific Message Contents:

None.

26.10.3.2 E-GSM signalling / Structured procedures / emergency call

Emergency call establishment can be initiated by an MS whether location updating has been successful or not and whether a SIM is inserted into the MS or not; but only if the MS is equipped for speech.

This section is only applicable to an MS supporting speech.

26.10.3.2.1 Conformance requirement

1) The MS in the "idle, updated" state, as after a successful location update, after the number 112 has been entered by user, shall send a CHANNEL REQUEST message with correct establishment cause ("emergency call").

2) After assignment of a dedicated channel the first layer message sent by the MS on the assigned dedicated channel shall be a CM SERVICE REQUEST message specifying the correct IMEI and a non-available CKSN, with CM Service Type "emergency call establishment".

3) After cipher mode setting acceptance by the network, the MS shall send an EMERGENCY SETUP message.

4),5) The emergency call shall be correctly established. The assignment procedure shall be correctly performed.

After receipt of a CONNECT ACKNOWLEDGE message during correct establishment of the emergency call the TCH shall be through connected in both directions if an appropriate TCH is available.

7) The call shall be cleared correctly.

Requirement Reference:

For conformance requirement 1 and 2:
GSM 04.08 section 3.3.1, GSM 04.08 section 5.2.1, GSM 04.08 section 4.5.1.5., GSM 02.30 section 4.

For conformance requirement 3:
GSM 04.08, section 5.2.1.2.

For conformance requirements 4 and 5:
GSM 04.08, sections 5.2.1.1 and 3.4.3.

For conformance requirement 6:
GSM 04.08, sections 5.2.1.1.6 and 5.1.3.

For conformance requirement 7:
GSM 04.08, section 5.4.

26.10.3.2.2 Test purpose

1) To verify that the MS in the "idle, no IMSI" state (no SIM inserted) when made to call the number 112, sends a CHANNEL REQUEST message with establishment cause "emergency call".

2) To verify that after assignment of a dedicated channel the first layer message sent by the MS on the assigned dedicated channel is a CM SERVICE REQUEST message specifying the correct CKSN and TMSI, with CM Service Type "emergency call establishment".

3) To verify that after receipt of a CM SERVICE ACCEPT message from the SS, the MS sends an EMERGENCY SETUP message.

4) To verify that subsequently, the SS having sent a CALL PROCEEDING message and then an ALERT message and having initiated the assignment procedure, the MS performs correctly that assignment procedure.

5) To verify subsequent correct performance of a connect procedure.

6) To verify that subsequently the MS has through connected the TCH in both directions.

7) To verify that the call is cleared correctly.

This is tested in the following case:

Structured procedures / emergency call / idle, no IMSI / accept case.

26.10.3.2.3 Method of test

Related PICS/PIXIT Statements

- Speech supported (Y/N).

- Classmark.

Initial Conditions

System Simulator:

1 cell, default parameters except:
BCCH ARFCN = 990.

Mobile Station:
The MS is in MM-state "idle, no IMSI", no SIM inserted.

Foreseen Final State of the MS

The MS is in MM-state "idle, no IMSI", no SIM inserted.

Test procedure

The MS is made to initiate an emergency call. The call is established without authentication, without ciphering, with early assignment. Having reached the active state, the call is cleared by the SS.

Maximum Duration of Test

1 minute.

Expected Sequence

Step	Direction	Message	Comments
1	MS		The "called number" 112 is entered
2	MS -> SS	CHANNEL REQUEST	Establishment cause is "emergency call".
3	SS -> MS	IMMEDIATE ASSIGNMENT	
4	MS -> SS	CM SERVICE REQUEST	Message is contained in SABM. The CM service type IE indicates "emergency call establishment". The mobile identity IE specifies the IMEI of the MS. The cipher key sequence number IE indicates "no key is available". The mobile station classmark IE is as specified by the manufacturer in a PICS/PIXIT statement.
5	SS -> MS	CM SERVICE ACCEPT	
6	MS -> SS	EMERGENCY SETUP	
7	SS -> MS	CALL PROCEEDING	
8	SS -> MS	ASSIGNMENT COMMAND	The rate of the channel is one indicated by the EMERGENCY SETUP message.
9	MS -> SS	ASSIGNMENT COMPLETE	
10	SS -> MS	ALERTING	
11	SS -> MS	CONNECT	
12	MS -> SS	CONNECT ACKNOWLEDGE	
13	MS		The TCH is through connected in both directions.
14	SS -> MS	DISCONNECT	
15	MS -> SS	RELEASE	
16	SS -> MS	RELEASE COMPLETE	
17	SS -> MS	CHANNEL RELEASE	The main signalling link is released.

Specific Message Contents:

None.

26.10.3.3 Default contents of messages

Same as in 26.9.7 except for the following:

ASSIGNMENT COMMAND

Information element	Value/remark
Description of the first channel	describes non-hopping Bm+ACCHs or Lm+ACCHs as appropriate for the test ARFCN = 990
Power Command -	Chosen arbitrarily but within the range supported by the MS.
Frequency list	Omitted
Cell channel description	Omitted
Mode of the first channel	appropriate for one bearer capability chosen for the test
Description of the second channel	Omitted
Mode of the second channel	Omitted
Mobile allocation	Omitted
Starting time	Omitted
Cipher mode setting	Omitted

IMMEDIATE ASSIGNMENT

Information element	Value/remark
Page mode	Normal paging
Channel description	describes a valid SDCCH+SACCH in non-hopping mode ARFCN = 40
Request reference Random access information N51, N32, N26	As received from MS Corresponding to frame number of the CHANNEL REQUEST
Timing advance	Arbitrary
Mobile allocation	Empty (L=0)
Starting time	Omitted

26.10.4 E-GSM signalling / Default message contents

Default SYSTEM INFORMATION:

NOTE: SYSTEM INFORMATION 7, and SYSTEM INFORMATION 8 messages are not used.

SYSTEM INFORMATION type 1 message

Information elements	Value/Remark
Cell Channel Description For Cell A - Format identifier - Cell Allocation ARFCN For Cell B - Format identifier - Cell Allocation ARFCN	 Bit Map 0 Channel Numbers 20, 30, 50 and 70. Bit Map 0 Channel Numbers 10, 12, 40, 60, 62, 63
RACH Control parameters	see below
SI1 Rest octets	see below

SYSTEM INFORMATION type 2 message

Information elements	Value/Remark
BCCH frequency list	
For cell A	
- Format identifier	bit map 0
- BCCH Allocation Sequence	0
- BCCH Allocation ARFCN	Channels numbers 10, 20, 80, 90, 100, 110 and 120
- EXT-IND	This IE does not carry the complete BA
For cell B	
- Format identifier	bit map 0
- BCCH Allocation Sequence	0
- BCCH Allocation ARFCN	Channels numbers 10, 36, 40, 114, 118
- EXT-IND	This IE does not carry the complete BA
NCC permitted	see below
RACH control parameters	see below

SYSTEM INFORMATION type 2bis message

Information elements	Value/Remark
Extended BCCH frequency list	
For cell A	
- Format identifier	range 256
- BCCH Allocation Sequence	0
- BCCH Allocation ARFCN	988, 990, 1 003
- EXT-IND	This IE does not carry the complete BA
For cell B	
- Format identifier	range 128
- BCCH Allocation Sequence	0
- BCCH Allocation ARFCN	Channels numbers 1 005, 1 010, 1 015
- EXT-IND	This IE does not carry the complete BA
RACH control parameters	see below
SI 2bis rest octets	see below

SYSTEM INFORMATION type 3 message

Information elements	Value/Remark
Cell identity	see below
LAI	see below
Control channel description	see below
Cell options	see below
Cell Selection parameters	see below
RACH control parameter	see below
SI3 Rest octets	see below

SYSTEM INFORMATION type 4 message

Information elements	Value/Remark
LAI	see below
Cell selection parameters	see below
RACH control parameters	see below
CBCH Channel Description	see below
CBCH MA	see below
SI4 Rest octets	see below

SYSTEM INFORMATION type 5 message

Information elements	Value/Remark
BCCH frequency list	
For cell A	
- Format identifier	bit map 0
- BCCH Allocation Sequence	0
- BCCH Allocation ARFCN	Channels numbers 10, 20, 80, 90, 100, 110 and 120
- EXT-IND	This IE does not carry the complete BA
For cell B	
- Format identifier	Bit map 0
- BCCH Allocation Sequence	0
- BCCH Allocation ARFCN	Channels numbers 10, 36, 40, 114, 118
- EXT-IND	This IE does not carry the complete BA

SYSTEM INFORMATION type 5bis message

Information elements	Value/Remark
Extension of BCCH frequency list description	
For cell A	
- Format identifier	Range 256
- BCCH Allocation Sequence	0
- BCCH Allocation ARFCN	Channels numbers 988, 990, 1 003
- EXT-IND	This IE does not carry the complete BA
For cell B	
- Format identifier	range 128
- BCCH Allocation Sequence	0
- BCCH Allocation ARFCN	Channels numbers 1 005, 1 010, 1 015
- EXT-IND	This IE does not carry the complete BA

SYSTEM INFORMATION type 6 message

Information elements	Value/Remark
Cell identity	see below
LAI	see below
Cell options	see below
NCC permitted	see below

Common contents of information elements in SYSTEM INFORMATION TYPE 1 to 6 messages

(CBCH) Channel Description	Not present
(CBCH) Mobile Allocation	Not present
Cell Identity	
- Cell Identity Value	0001H for cell A, 0002H for cell B
Cell Options	
- Power Control Indicator	Power Control Indicator is not set
- DTX Indicator	MS shall not use DTX
- Radio-Link-Time-out	8 SACCH blocks
Cell Selection Parameters	
- Cell-Reselect-Hysteresis	12 dB
- MX-TXPWR-MAX-CCH	Minimum level
- ACS	No addition cell parameters are present in SYSTEM INFORMATION messages 7 and 8.
- NECI	New establishment causes not supported
- RXLEV-ACCESS-MIN	Minimum level
Control Channel Description	
- Attach-Detach allowed	No Attach/Detach
- BS-AG-BLKS-RES	0 blocks reserved for access grant
- CCCH-CONF	1 basic physical channel used for CCCH, combined with SDCCHs
- BS-PA-MFRMS	5 multiframe periods for transmission of paging messages
- T3212 Time-out value	Infinite
L2 pseudo length	
- System information 1	21
- System information 2	22
- System information 2bis	21
- System information 3	18
- System information 4	12
Location Area Identification	
- Mobile Country Code	001 decimal
- Mobile Network Code	01 decimal
- Location Area Code	0001H
Message Type	
- System information 1	00011001
- System information 2	00011010
- System information 2bis	00000010
- System information 3	00011011
- System information 4	00011100
- System information 5	00011101
- System information 5bis	00000101
- System information 6	00011110
NCC Permitted	0000 0010
RACH Control Parameters	
- Max Retrans	Max 1 retrans
- Tx-integer	5 slots used
- Cell Barred for Access	Cell is not barred
- Call Reestablishment Allowed	Not allowed
- Access Control Class	Access is not barred
- Emergency Call allowed	Yes
SI 1 rest octets	Not used (all bits are set to spare)
SI 2 rest octets	Not used (all bits are set to spare)
SI 3 rest octets	Not used (all bits are set to spare)
SI 4 rest octets	Not used (all bits are set to spare)

Default settings for cell A:

Downlink input level	63 dBmicroVolt emf
Uplink output power	minimum supported by the MS's power class
Propagation profile	static
BCCH/CCCH carrier number	20

Default settings for cell B:

Downlink input level	53 dBmicroVolt emf
Uplink output power	minimum supported by the MS's power class
Propagation profile	static
BCCH/CCCH carrier number	10

Default message contents for other messages

For sections 26.10.1 to 26.10.2.5	same as in 26.6.14
For section 26.10.3	same as in 26.9.7