TSG RAN Meeting #22   **RP-030594**
Maui, Hawaii, US, 9 - 12 December 2003

Title   **CRs (Rel-4 and Rel-5 Category A) to TS 25.123**
Source   **TSG RAN WG4**
Agenda Item   **7.5.4**

RAN4 Tdoc	Spec	CR	R	Cat	Rel	Curr Ver	Title	Work Item
R4-030903	25.123	330		F	Rel-4	4.10.0	Correction to Cell re-selection test case in CELL_FACH for 1,28Mcps TDD	LCRTDD-RF
R4-030904	25.123	331		A	Rel-5	5.6.0	Correction to Cell re-selection test case in CELL_FACH for 1,28Mcps TDD	LCRTDD-RF
R4-030905	25.123	332		F	Rel-4	4.10.0	Test case for UE transmitted power for 1.28Mcps TDD	LCRTDD-RF
R4-030906	25.123	333		A	Rel-5	5.6.0	Test case for UE transmitted power for 1.28Mcps TDD	LCRTDD-RF

CR-Form-v7

CHANGE REQUEST

| ⌘ | **25.123** CR **330** | ⌘ **rev** | | ⌘ | Current version: | **4.10.0** | ⌘ |

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐　　ME **X** Radio Access Network ☐　Core Network ☐

Title:	⌘	Correction to Cell re-selection test case in CELL_FACH for 1,28Mcps TDD
Source:	⌘	RAN WG4
Work item code:	⌘	LCRTDD-RF	**Date:** ⌘ 26/11/2003
Category:	⌘ **F**	**Release:** ⌘ Rel-4

Use <u>one</u> of the following categories:
F (correction)
A (corresponds to a correction in an earlier release)
B (addition of feature),
C (functional modification of feature)
D (editorial modification)
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use <u>one</u> of the following releases:
2　　　(GSM Phase 2)
R96　(Release 1996)
R97　(Release 1997)
R98　(Release 1998)
R99　(Release 1999)
Rel-4　(Release 4)
Rel-5　(Release 5)
Rel-6　(Release 6)

Reason for change:	⌘	Some message error exists in cell re-selection test case in CELL_FACH for 1.28Mcps TDD.
Summary of change:	⌘	Clarification of message in cell re-selection test case in CELL_FACH for 1.28Mcps TDD.
Consequences if not approved:	⌘	The test couldn't be correctly performed. **Isolated Impact Analysis:** Would not affect the implementation if behaving as indicated in the CR, the implementation would be affeted if not behaving as indicated in the CR.

Clauses affected:	⌘	A.5.4.2

	Y	N		
Other specs affected: ⌘		X	Other core specifications ⌘	
	X		Test specifications	34.122
		X	O&M Specifications	

Other comments:	⌘	Equivalent CRs in other Releases: CR331 cat. A to 25.123 v5.6.0

How to create CRs using this form:
Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

A.5.4 Cell Re-selection in CELL_FACH

A.5.4.2 1.28 Mcps TDD option

A.5.4.2.1 One frequency present in neighbour list

A.5.4.2.1.1 Test purpose and Environment

The purpose of this test is to verify the requirement for the cell re-selection delay in CELL_FACH state in the single carrier case reported in section -5.4.3.2.1.

The test parameters are given in Tables A.5.4.9 to A.5.4.12

Table A.5.4.9: General test parameters for Cell Re-selection in CELL_FACH

	Parameter	Unit	Value	Comment
initial condition	Active cell		Cell1	
	Neighbour cells		Cell2, Cell3,Cell4, Cell5, Cell6	
final condition	Active cell		Cell2	
HCS			Not used	
UE_TXPWR_MAX_RACH		dBm	21	The value shall be used for all cells in the test.
Qrxlevmin		dBm	-103	The value shall be used for all cells in the test.
Access Service Class (ASC#0) - Persistence value			1	Selected so that no additional delay is caused by the random access procedure. The value shall be used for all cells in the test.
T_{SI}		s	1.28	The value shall be used for all cells in the test.
T1		s	15	
T2		s	15	

Table A.5.4.10: Physical channel parameters for S-CCPCH.

Parameter	Unit	Level
Channel bit rate	kbps	35.2
Channel symbol rate	ksps	17.6
Slot Format #	-	0; 2
Frame allocation	-	Continuous frame allocation
Midamble allocation	-	Common Midamble

Table A.5.4.11: Transport channel parameters for S-CCPCH

Parameter	FACH
Transport Channel Number	1
Transport Block Size	240
Transport Block Set Size	240
Transmission Time Interval	20 ms
Type of Error Protection	Convolution Coding
Coding Rate	½
Rate Matching attribute	256
Size of CRC	16

Table A.5.4.12: Cell specific test parameters for Cell Re-selection in CELL_FACH

Parameter	Unit	Cell 1				Cell 2				Cell 3			
Timeslot Number		0		DWPTS		0		DWPTS		0		DWPTS	
		T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
UTRA RF Channel Number		Channel 1				Channel 1				Channel 1			
PCCPCH_Ec/Ior	dB	-3	-3			-3	-3			-3	-3		
DwPCH_Ec/Ior	dB			0	0			0	0			0	0
OCNS_Ec/Ior	dB	-3	-3			-3	-3			-3	-3		
$\hat{I}_{or}/I_{oc}$	dB	9	7	9	7	7	9	7	9	-1	-1	-1	-1
PCCPCH RSCP	dBm	-64	-66			-66	-64			-74	-74		
Qoffset1$_{s,n}$	dB	C1, C2: 0; C1, C3:0; C1,C4:0 C1, C5:0; C1,C6:0				C2, C1: 0; C2, C3:0; C2,C4:0 C2, C5: 0; C2, C6:0				C3, C1: 0; C3, C2:0; C3,C4:0 C3, C5: 0; C3, C6:0			
Qhyst1$_s$	dB	0				0				0			
Treselection		0				0				0			
Sintrasearch	dB	not sent				not sent				not sent			
FACH measurement occasion info		not sent				not sent				not sent			
		Cell 4				**Cell 5**				**Cell 6**			
Timeslot		**0**		**DWPTS**		**0**		**DWPTS**		**0**		**DWPTS**	
		T1	**T2**	**T1**	**T2**	**T1**	**T2**	**T1**	**T2**	**T1**	**T2**	**T1**	**T2**
UTRA RF Channel Number		Channel 1				Channel 1				Channel 1			
PCCPCH_Ec/Ior	dB	-3	-3			-3	-3			-3	-3		
DwPCH_Ec/Ior	dB			0	0			0	0			0	0
OCNS_Ec/Ior	dB	-3	-3			-3	-3			-3	-3		
$\hat{I}_{or}/I_{oc}$	dB	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
PCCPCH RSCP	dBm	-74	-74			-74	-74			-74	-74		
Qoffset**1**$_{s,n}$	dB	C4, C1: 0; C4, C2:0; C4,C3:0 C4, C5:0; C4, C6:0				C5, C1: 0; C5, C2:0; C5,C3:0 C5, C4:0; C5, C6:0				C6, C1: 0; C6, C2:0; C6,C3:0 C6, C4:0; C6, C5:0			
Qhyst1$_s$	dB	0				0				0			
Treselection		0				0				0			
Sintrasearch	dB	not sent				not sent				not sent			
FACH measurement occasion info		not sent				not sent				not sent			
I_{oc}	dBm/1.28 MHz	-70											
Propagation Condition		AWGN											

Note: S-CCPCH is located in an other downlink TS than TS0.

A.5.4.2.1.2   Test Requirements

The cell re-selection delay is defined as the time from the beginning of time period T2, to the moment when the UE camps on Cell 2, and starts to send SYNCH-UL sequence in the UpPTS for sending the ~~RRC CONNECTION REQUEST to perform a~~ CELL UPDATE message with cause value "cell reselection" in cell 2.

The cell re-selection delay shall be less than 1.6 s.

The rate of correct ~~tests~~ cell reselections observed during repeated tests shall be at least 90%.

NOTE:

The cell re-selection delay can be expressed as:

$$T_{\text{reselection, intra}} = T_{\text{Measurement Period Intra}} + T_{\text{IU}} + 20 + T_{\text{SI}} + T_{\text{RA}} \text{ ms}$$

where:

$T_{\text{Measurement Period Intra}}$ Specified in 8.4A.2.2.2 gives 200ms for this test case.

T_{SI} Time required for receiving all the relevant system information data according to the reception procedure and the RRC procedure delay of system information blocks defined in 25.331 for a UTRAN cell (ms). 1280 ms is assumed in this test case.

T_{RA} The additional delay caused by the random access procedure described in TS25.224. In this test case the persistence value is 1 thus T_{RA} is set to 35ms in the test case.

This gives a total of 1.545s, allow 1.6s in the test case.

A.5.4.2.2 Two frequency present in neighbour list

A.5.4.2.2.1 Test Purpose and Environment

The purpose of this test is to verify the requirement for the cell re-selection delay in CELL_FACH state in section 5.4.3.2.2. The test parameters are given in Tables A.5.4.13 to A.5.4.16

Table A.5.4.13: General test parameters for Cell Re-selection in CELL_FACH

Parameter		Unit	Value	Comment
initial condition	Active cell		Cell1	
	Neighbour cells		Cell2, Cell3,Cell4, Cell5, Cell6	
final condition	Active cell		Cell2	
HCS			Not used	
UE_TXPWR_MAX_RACH		dBm	21	The value shall be used for all cells in the test.
Qrxlevmin		dBm	-103	The value shall be used for all cells in the test.
Access Service Class (ASC#0) - Persistence value			1	Selected so that no additional delay is caused by the random access procedure. The value shall be used for all cells in the test.
T_{SI}		s	1.28	The value shall be used for all cells in the test.
T1		s	15	
T2		s	15	

Table A.5.4.14: Physical channel parameters for S-CCPCH.

Parameter	Unit	Level
Channel bit rate	kbps	35.2
Channel symbol rate	ksps	17.6
Slot Format #	-	0; 2
Frame allocation	-	Continuous frame allocation
Midamble allocation	-	Common Midamble

Table A.5.4.15: Transport channel parameters for S-CCPCH

Parameter	FACH
Transport Channel Number	1
Transport Block Size	240
Transport Block Set Size	240
Transmission Time Interval	20 ms
Type of Error Protection	Convolution Coding
Coding Rate	½
Rate Matching attribute	256
Size of CRC	16

Table A.5.4.16: Cell specific test parameters for Cell re-selection in CELL_FACH state

Parameter	Unit	Cell 1				Cell 2				Cell 3			
Timeslot Number		0		DWPTS		0		DWPTS		0		DWPTS	
		T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
UTRA RF Channel Number		Channel 1				Channel 2				Channel 1			
PCCPCH_Ec/Ior	dB	-3	-3			-3	-3			-3	-3		
DwPCH_Ec/Ior	dB			0	0			0	0			0	0
OCNS_Ec/Ior	dB	-3	-3			-3	-3			-3	-3		
$\hat{I}_{or}/I_{oc}$	dB	10	4	10	4	4	10	4	10	-1	-1	-1	-1
PCCPCH RSCP	dBm	-63	-69			-69	-63			-74	-74		
Qoffset1$_{s,n}$	dB	C1, C2: 0; C1, C3:0; C1,C4:0 C1, C5:0; C1,C6:0				C2, C1: 0; C2, C3:0; C2,C4:0 C2, C5: 0; C2:C6:0				C3, C1: 0; C3, C2:0; C3,C4:0 C3, C5: 0; C3:C6:0			
Qhyst1$_s$	dBm	0				0				0			
Treselection	s	0				0				0			
Sintrasearch	dB	not sent				not sent				not sent			
Sintersearch	dB	not sent				not sent				not sent			
FACH measurement occasion info		not sent				not sent				not sent			
FACH measurement occasion cycle length		4				4				4			
Inter-frequency TDD measurement indicator		TRUE				TRUE				TRUE			
Inter-frequency FDD measurement indicator		FALSE				FALSE				FALSE			

Parameter	Unit	Cell 4				Cell 5				Cell 6			
Timeslot		0		DWPTS		0		DWPTS		0		DWPTS	
		T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
UTRA RF Channel Number		Channel 1				Channel 2				Channel 2			
PCCPCH_Ec/Ior	dB	-3	-3			-3	-3			-3	-3		
DwPCH_Ec/Ior	dB			0	0			0	0			0	0
OCNS_Ec/Ior	dB	-3	-3			-3	-3			-3	-3		
$\hat{I}_{or}/I_{oc}$	dB	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
PCCPCH RSCP	dBm	-74	-74			-74	-74			-74	-74		
Qoffset1$_{s,n}$	dB	C4, C1: 0; C4, C2:0; C4,C3:0; C4, C5:0; C4:C6:0				C5, C1: 0; C5, C2:0; C5,C3:0 C5, C4:0; C5:C6:0				C6, C1: 0; C6, C2:0; C6,C3:0 C6, C4:0; C6:C5:0			
Qhyst1$_s$	dB	0				0				0			
Treselection	s	0				0				0			
Sintrasearch	dB	not sent				not sent				not sent			
Sintersearch	dB	not sent				not sent				not sent			
FACH measurement occasion info		not sent				not sent				not sent			
FACH measurement occasion cycle length		4				4				4			
Inter-frequency TDD measurement indicator		TRUE				TRUE				TRUE			
Inter-frequency FDD measurement indicator		FALSE				FALSE				FALSE			
I_{oc}	dBm/ 1.28 MHz	-70											
Propagation Condition		AWGN											

Note: S-CCPCH is located in an other downlink TS than TS0..

A.5.4.2.2.2   Test Requirements

The cell re-selection delay is defined as the time from the beginning of time period T2, to the moment when the UE camps on Cell 2, and starts to send SYNCH-UL sequence in the UpPTS for sending the ~~RRC CONNECTION REQUEST to perform a~~ CELL UPDATE message with cause value "cell reselection" in cell 2.

The cell re-selection delay shall be less than 2 s.

The rate of correct ~~tests~~ cell reselections observed during repeated tests shall be at least 90%.

NOTE: The cell re-selection delay can be expressed as:

$$T_{reselection,\,inter} = T_{measurement\,inter} + T_{IU} + 20 + T_{SI} + T_{RA} \text{ ms},$$

where:

$T_{measurement\,inter}$ is specified in 8.4A.2.3.2 gives 480ms for this test case.

T_{SI} Time required for receiving all the relevant system information data according to the reception procedure and the RRC procedure delay of system information blocks defined in 25.331 for a UTRAN cell (ms). 1280 ms is assumed in this test case.

T_{RA} The additional delay caused by the random access procedure described in TS25.224. In this test case the persistence value is 1 thus T_{RA} is set to 35ms in the test case.

This gives a total of 1.825s, allow 1.9s in the test case.

CR-Form-v7

CHANGE REQUEST

| | ⌘ | **25.123** CR **331** | ⌘ **rev** | | ⌘ | Current version: | **5.6.0** | ⌘ |

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐   ME **X** Radio Access Network ☐   Core Network ☐

Title: ⌘	Correction to Cell re-selection test case in CELL_FACH for 1,28Mcps TDD	
Source: ⌘	RAN WG4	
Work item code: ⌘	LCRTDD-RF	***Date:*** ⌘ 26/11/2003
Category: ⌘ **A**		***Release:*** ⌘ Rel-5

Use one of the following categories:
F (correction)
A (corresponds to a correction in an earlier release)
B (addition of feature),
C (functional modification of feature)
D (editorial modification)
Detailed explanations of the above categories can
be found in 3GPP TR 21.900.

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change: ⌘	Some message error exists in cell re-selection test case in CELL_FACH for 1.28Mcps TDD.
Summary of change: ⌘	Clarification of message in cell re-selection test case in CELL_FACH for 1.28Mcps TDD.
Consequences if not approved: ⌘	The test couldn't be correctly performed. **Isolated Impact Analysis:** Would not affect the implementation if behaving as indicated in the CR, the implementation would be affeted if not behaving as indicated in the CR.

Clauses affected: ⌘	A.5.4.2

	Y	N		⌘	
Other specs affected: ⌘		X	Other core specifications	⌘	
	X		Test specifications		34.122
		X	O&M Specifications		

Other comments: ⌘	Equivalent CRs in other Releases: CR330 cat. F to 25.123 v4.10.0

How to create CRs using this form:
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3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

A.5.4 Cell Re-selection in CELL_FACH

A.5.4.2 1.28 Mcps TDD option

A.5.4.2.1 One frequency present in neighbour list

A.5.4.2.1.1 Test purpose and Environment

The purpose of this test is to verify the requirement for the cell re-selection delay in CELL_FACH state in the single carrier case reported in section -5.4.3.2.1.

The test parameters are given in Tables A.5.4.9 to A.5.4.12

Table A.5.4.9: General test parameters for Cell Re-selection in CELL_FACH

	Parameter	Unit	Value	Comment
initial condition	Active cell		Cell1	
	Neighbour cells		Cell2, Cell3,Cell4, Cell5, Cell6	
final condition	Active cell		Cell2	
HCS			Not used	
UE_TXPWR_MAX_RACH		dBm	21	The value shall be used for all cells in the test.
Qrxlevmin		dBm	-103	The value shall be used for all cells in the test.
Access Service Class (ASC#0) - Persistence value			1	Selected so that no additional delay is caused by the random access procedure. The value shall be used for all cells in the test.
T_{SI}		s	1.28	The value shall be used for all cells in the test.
T1		s	15	
T2		s	15	

Table A.5.4.10: Physical channel parameters for S-CCPCH.

Parameter	Unit	Level
Channel bit rate	kbps	35.2
Channel symbol rate	ksps	17.6
Slot Format #	-	0; 2
Frame allocation	-	Continuous frame allocation
Midamble allocation	-	Common Midamble

Table A.5.4.11: Transport channel parameters for S-CCPCH

Parameter	FACH
Transport Channel Number	1
Transport Block Size	240
Transport Block Set Size	240
Transmission Time Interval	20 ms
Type of Error Protection	Convolution Coding
Coding Rate	½
Rate Matching attribute	256
Size of CRC	16

Table A.5.4.12: Cell specific test parameters for Cell Re-selection in CELL_FACH

Parameter	Unit	Cell 1				Cell 2				Cell 3			
Timeslot Number		0		DWPTS		0		DWPTS		0		DWPTS	
		T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
UTRA RF Channel Number		Channel 1				Channel 1				Channel 1			
PCCPCH_Ec/Ior	dB	-3	-3			-3	-3			-3	-3		
DwPCH_Ec/Ior	dB			0	0			0	0			0	0
OCNS_Ec/Ior	dB	-3	-3			-3	-3			-3	-3		
$\hat{I}_{or}/I_{oc}$	dB	9	7	9	7	7	9	7	9	-1	-1	-1	-1
PCCPCH RSCP	dBm	-64	-66			-66	-64			-74	-74		
Qoffset1$_{s,n}$	dB	C1, C2: 0; C1, C3:0; C1,C4:0 C1, C5:0; C1,C6:0				C2, C1: 0; C2, C3:0; C2,C4:0 C2, C5: 0; C2, C6:0				C3, C1: 0; C3, C2:0; C3,C4:0 C3, C5: 0; C3, C6:0			
Qhyst1$_s$	dB	0				0				0			
Treselection		0				0				0			
Sintrasearch	dB	not sent				not sent				not sent			
FACH measurement occasion info		not sent				not sent				not sent			
		Cell 4				**Cell 5**				**Cell 6**			
Timeslot		**0**		**DWPTS**		**0**		**DWPTS**		**0**		**DWPTS**	
		T1	**T2**	**T1**	**T2**	**T1**	**T2**	**T1**	**T2**	**T1**	**T2**	**T1**	**T2**
UTRA RF Channel Number		Channel 1				Channel 1				Channel 1			
PCCPCH_Ec/Ior	dB	-3	-3			-3	-3			-3	-3		
DwPCH_Ec/Ior	dB			0	0			0	0			0	0
OCNS_Ec/Ior	dB	-3	-3			-3	-3			-3	-3		
$\hat{I}_{or}/I_{oc}$	dB	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
PCCPCH RSCP	dBm	-74	-74			-74	-74			-74	-74		
Qoffset**1**$_{s,n}$	dB	C4, C1: 0; C4, C2:0; C4,C3:0 C4, C5:0; C4, C6:0				C5, C1: 0; C5, C2:0; C5,C3:0 C5, C4:0; C5, C6:0				C6, C1: 0; C6, C2:0; C6,C3:0 C6, C4:0; C6, C5:0			
Qhyst1$_s$	dB	0				0				0			
Treselection		0				0				0			
Sintrasearch	dB	not sent				not sent				not sent			
FACH measurement occasion info		not sent				not sent				not sent			
I_{oc}	dBm/1.28 MHz	-70											
Propagation Condition		AWGN											

Note: S-CCPCH is located in an other downlink TS than TS0.

A.5.4.2.1.2   Test Requirements

The cell re-selection delay is defined as the time from the beginning of time period T2, to the moment when the UE camps on Cell 2, and starts to send SYNCH-UL sequence in the UpPTS for sending the ~~RRC CONNECTION REQUEST to perform a~~ CELL UPDATE message with cause value "cell reselection" in cell 2.

The cell re-selection delay shall be less than 1.6 s.

The rate of correct ~~tests~~ cell reselections observed during repeated tests shall be at least 90%.

NOTE:

The cell re-selection delay can be expressed as:

$$T_{reselection, intra} = T_{Measurement \ Period \ Intra} + T_{IU} + 20 + T_{SI} + T_{RA} \ ms$$

where:

$T_{Measurement \ Period \ Intra}$ Specified in 8.4A.2.2.2 gives 200ms for this test case.

T_{SI} Time required for receiving all the relevant system information data according to the reception procedure and the RRC procedure delay of system information blocks defined in 25.331 for a UTRAN cell (ms). 1280 ms is assumed in this test case.

T_{RA} The additional delay caused by the random access procedure described in TS25.224. In this test case the persistence value is 1 thus T_{RA} is set to 35ms in the test case.

This gives a total of 1.545s, allow 1.6s in the test case.

A.5.4.2.2 Two frequency present in neighbour list

A.5.4.2.2.1 Test Purpose and Environment

The purpose of this test is to verify the requirement for the cell re-selection delay in CELL_FACH state in section 5.4.3.2.2. The test parameters are given in Tables A.5.4.13 to A.5.4.16

Table A.5.4.13: General test parameters for Cell Re-selection in CELL_FACH

	Parameter	Unit	Value	Comment
initial condition	Active cell		Cell1	
	Neighbour cells		Cell2, Cell3,Cell4, Cell5, Cell6	
final condition	Active cell		Cell2	
	HCS		Not used	
UE_TXPWR_MAX_RACH		dBm	21	The value shall be used for all cells in the test.
Qrxlevmin		dBm	-103	The value shall be used for all cells in the test.
Access Service Class (ASC#0) - Persistence value			1	Selected so that no additional delay is caused by the random access procedure. The value shall be used for all cells in the test.
T_{SI}		s	1.28	The value shall be used for all cells in the test.
T1		s	15	
T2		s	15	

Table A.5.4.14: Physical channel parameters for S-CCPCH.

Parameter	Unit	Level
Channel bit rate	kbps	35.2
Channel symbol rate	ksps	17.6
Slot Format #	-	0; 2
Frame allocation	-	Continuous frame allocation
Midamble allocation	-	Common Midamble

Table A.5.4.15: Transport channel parameters for S-CCPCH

Parameter	FACH
Transport Channel Number	1
Transport Block Size	240
Transport Block Set Size	240
Transmission Time Interval	20 ms
Type of Error Protection	Convolution Coding
Coding Rate	½
Rate Matching attribute	256
Size of CRC	16

Table A.5.4.16: Cell specific test parameters for Cell re-selection in CELL_FACH state

Parameter	Unit	Cell 1				Cell 2				Cell 3			
Timeslot Number		0		DWPTS		0		DWPTS		0		DWPTS	
		T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
UTRA RF Channel Number		Channel 1				Channel 2				Channel 1			
PCCPCH_Ec/Ior	dB	-3	-3			-3	-3			-3	-3		
DwPCH_Ec/Ior	dB			0	0			0	0			0	0
OCNS_Ec/Ior	dB	-3	-3			-3	-3			-3	-3		
$\hat{I}_{or}/I_{oc}$	dB	10	4	10	4	4	10	4	10	-1	-1	-1	-1
PCCPCH RSCP	dBm	-63	-69			-69	-63			-74	-74		
Qoffset1$_{s,n}$	dB	C1, C2: 0; C1, C3:0; C1,C4:0 C1, C5:0; C1,C6:0				C2, C1: 0; C2, C3:0; C2,C4:0 C2, C5: 0; C2:C6:0				C3, C1: 0; C3, C2:0; C3,C4:0 C3, C5: 0; C3:C6:0			
Qhyst1$_s$	dBm	0				0				0			
Treselection	s	0				0				0			
Sintrasearch	dB	not sent				not sent				not sent			
Sintersearch	dB	not sent				not sent				not sent			
FACH measurement occasion info		not sent				not sent				not sent			
FACH measurement occasion cycle length		4				4				4			
Inter-frequency TDD measurement indicator		TRUE				TRUE				TRUE			
Inter-frequency FDD measurement indicator		FALSE				FALSE				FALSE			
		Cell 4				Cell 5				Cell 6			
Timeslot		0		DWPTS		0		DWPTS		0		DWPTS	
		T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
UTRA RF Channel Number		Channel 1				Channel 2				Channel 2			
PCCPCH_Ec/Ior	dB	-3	-3			-3	-3			-3	-3		
DwPCH_Ec/Ior	dB			0	0			0	0			0	0
OCNS_Ec/Ior	dB	-3	-3			-3	-3			-3	-3		
$\hat{I}_{or}/I_{oc}$	dB	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
PCCPCH RSCP	dBm	-74	-74			-74	-74			-74	-74		
Qoffset1$_{s,n}$	dB	C4, C1: 0; C4, C2:0; C4,C3:0; C4, C5:0; C4:C6:0				C5, C1: 0; C5, C2:0; C5,C3:0 C5, C4:0; C5:C6:0				C6, C1: 0; C6, C2:0; C6,C3:0 C6, C4:0; C6:C5:0			
Qhyst1$_s$	dB	0				0				0			
Treselection	s	0				0				0			
Sintrasearch	dB	not sent				not sent				not sent			
Sintersearch	dB	not sent				not sent				not sent			
FACH measurement occasion info		not sent				not sent				not sent			
FACH measurement occasion cycle length		4				4				4			
Inter-frequency TDD measurement indicator		TRUE				TRUE				TRUE			
Inter-frequency FDD measurement indicator		FALSE				FALSE				FALSE			
I_{oc}	dBm/ 1.28 MHz	-70											
Propagation Condition		AWGN											

Note: S-CCPCH is located in an other downlink TS than TS0..

A.5.4.2.2.2   Test Requirements

The cell re-selection delay is defined as the time from the beginning of time period T2, to the moment when the UE camps on Cell 2, and starts to send SYNCH-UL sequence in the UpPTS for sending the ~~RRC CONNECTION REQUEST to perform a~~ CELL UPDATE message with cause value "cell reselection" in cell 2.

The cell re-selection delay shall be less than 2 s.

The rate of correct ~~tests~~ cell reselections observed during repeated tests shall be at least 90%.

NOTE: The cell re-selection delay can be expressed as:

$$T_{reselection,\,inter} = T_{measurement\,inter} + T_{IU} + 20 + T_{SI} + T_{RA}\ ms,$$

where:

$T_{measurement\,inter}$ is specified in 8.4A.2.3.2 gives 480ms for this test case.

T_{SI} Time required for receiving all the relevant system information data according to the reception procedure and the RRC procedure delay of system information blocks defined in 25.331 for a UTRAN cell (ms). 1280 ms is assumed in this test case.

T_{RA} The additional delay caused by the random access procedure described in TS25.224. In this test case the persistence value is 1 thus T_{RA} is set to 35ms in the test case.

This gives a total of 1.825s, allow 1.9s in the test case.

CR-Form-v7

CHANGE REQUEST

⌘ **25.123** CR **332** ⌘ **rev** ⌘ Current version: **4.10.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐   ME **X** Radio Access Network ☐   Core Network ☐

Title: ⌘	Test case for UE transmitted power for 1.28Mcps TDD
Source: ⌘	RAN WG4
Work item code: ⌘	LCRTDD-RF *Date:* ⌘ 26/11/2003

Category: ⌘ **F**	*Release:* ⌘ Rel-4

Use <u>one</u> of the following categories:
F (correction)
A (corresponds to a correction in an earlier release)
B (addition of feature),
C (functional modification of feature)
D (editorial modification)
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use <u>one</u> of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change: ⌘	No test case is specified for UE transmitted power measurement for 1,28Mcps TDD.
Summary of change: ⌘	Introduction of 1.28Mcps TDD test case for UE transmitted power measurement.
Consequences if not approved: ⌘	The requirement on the UE transmitted power measurement will not be tested. **Isolated Impact Analysis:** The change doesn't affect the function or the requirement of UE. Would not affect the implementation if behaving as indicated in the CR, the implementation would be affeted if not behaving as indicated in the CR.

Clauses affected: ⌘	A.9.2.11

	Y	N			
Other specs affected: ⌘		X	Other core specifications ⌘		
	X		Test specifications	34.122	
		X	O&M Specifications		

Other comments: ⌘	Equivalent CRs in other Releases: CR333 cat. A to 25.123 v5.6.0

How to create CRs using this form:
Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

A.9.2.11 UE transmitted power

NOTE: This section is included for consistency with numbering in section 9, currently no test covering requirements in sections 9.1.1.11 exists.

A.9.2.11.1 Test purpose and Environment

The purpose of the test is to verify that the UE transmitted power measurement accuracy is within the specified limits. This test will verify the requirements in section 9.1.2.1.

The test parameters are given in Table A.9.21 and A.9.22 below. In the measurement control information it shall be indicated to the UE that periodic reporting of the UE transmitted power measurement shall be used.

The DL DPCH shall be transmitted in timeslot 4 and the UL DPCH shall be transmitted in timeslot 2.

Table A.9.21: General test parameters for UE transmitted power

Parameter	Unit	Value	Comment
DCH parameters		DL Reference Measurement Channel 12.2 kbps	As specified in TS 25.102 section A.2.2
Power Control		On	
Target quality value on DTCH	BLER	0.01	

Table A.9.22: Cell Specific parameters for UE transmitted power

Parameter	Unit	Cell 1	
Timeslot Number		0	DwPTS
UTRA RF Channel Number		Channel 1	
PCCPCH_Ec/Ior	dB	-3	
DwPCH_Ec/Ior	dB		0
$\hat{I}_{or}/I_{oc}$	dB	3	
I_{oc}	dBm/1.28 MHz	-70	
PCCPCH RSCP, Note 1	dBm	-70	
Propagation Condition		AWGN	
NOTE 1: PCCPCH RSCP level has been calculated from other parameters for information purposes. They are not settable parameters themselves.			

A.9.2.11.1.1 Test procedure

1)   Set the UE power and Maximum allowed UL TX power to the maximum power for that UE power class specified in section 9.1.2.1.

2)   Send continuously Up power control commands to the UE during the entire test.

3)   Measure the output power of the UE. The output power shall be averaged over the one transmit timeslot.

4)   Check that the reported UE transmitted power is within the specified range.

5)   Decrease the Maximum allowed UL TX power with 1dB and signal the new value to the UE.

6)   Repeat from step 3) until the entire specified range for the UE transmitted power measurement has been tested, i.e. the accuracy requirement for the UE transmitted power measurement is specified 10dB below the maximum power for the UE power class specified in section 9.1.2.1.

A.9.2.11.2 Test requirements

The UE transmitted power measurement accuracy shall meet the requirements in section 9.1.2.1.

The rate of correct measurements observed during repeated tests shall be at least 90%.

CR-Form-v7

CHANGE REQUEST

| ⌘ | **25.123** CR **333** | ⌘**rev** | | ⌘ | Current version: | **5.6.0** | ⌘ |

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐   ME **X** Radio Access Network ☐   Core Network ☐

Title: ⌘	Test case for UE transmitted power for 1.28Mcps TDD		
Source: ⌘	RAN WG4		
Work item code: ⌘	LCRTDD-RF	***Date:*** ⌘	26/11/2003
Category: ⌘ **A**		***Release:*** ⌘	Rel-5

Use <u>one</u> of the following categories:
F (correction)
A (corresponds to a correction in an earlier release)
B (addition of feature),
C (functional modification of feature)
D (editorial modification)
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use <u>one</u> of the following releases:
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R99   (Release 1999)
Rel-4   (Release 4)
Rel-5   (Release 5)
Rel-6   (Release 6)

Reason for change: ⌘	No test case is specified for UE transmitted power measurement for 1,28Mcps TDD.
Summary of change: ⌘	Introduction of 1.28Mcps TDD test case for UE transmitted power measurement.
Consequences if not approved: ⌘	The requirement on the UE transmitted power measurement will not be tested. **Isolated Impact Analysis:** The change doesn't affect the function or the requirement of UE. Would not affect the implementation if behaving as indicated in the CR, the implementation would be affeted if not behaving as indicated in the CR.

Clauses affected: ⌘	A.9.2.11

	Y	N		
Other specs affected: ⌘		X	Other core specifications ⌘	
	X		Test specifications	34.122
		X	O&M Specifications	

Other comments: ⌘	Equivalent CRs in other Releases: CR332 cat. F to 25.123 v4.10.0

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A.9.2.11 UE transmitted power

NOTE: ~~This section is included for consistency with numbering in section 9, currently no test covering requirements in sections 9.1.1.11 exists.~~

A.9.2.11.1 Test purpose and Environment

The purpose of the test is to verify that the UE transmitted power measurement accuracy is within the specified limits. This test will verify the requirements in section 9.1.2.1.

The test parameters are given in Table A.9.21 and A.9.22 below. In the measurement control information it shall be indicated to the UE that periodic reporting of the UE transmitted power measurement shall be used.

The DL DPCH shall be transmitted in timeslot 4 and the UL DPCH shall be transmitted in timeslot 2.

Table A.9.21: General test parameters for UE transmitted power

Parameter	Unit	Value	Comment
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Table A.9.22: Cell Specific parameters for UE transmitted power

Parameter	Unit	Cell 1	
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UTRA RF Channel Number		Channel 1	
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DwPCH_Ec/Ior	dB		0
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I_{oc}	dBm/1.28 MHz	-70	
PCCPCH RSCP, Note 1	dBm	-70	
Propagation Condition		AWGN	
NOTE 1: PCCPCH RSCP level has been calculated from other parameters for information purposes. They are not settable parameters themselves.			

A.9.2.11.1.1 Test procedure

1)   Set the UE power and Maximum allowed UL TX power to the maximum power for that UE power class specified in section 9.1.2.1.

2)   Send continuously Up power control commands to the UE during the entire test.

3)   Measure the output power of the UE. The output power shall be averaged over the one transmit timeslot.

4)   Check that the reported UE transmitted power is within the specified range.

5)   Decrease the Maximum allowed UL TX power with 1dB and signal the new value to the UE.

6)   Repeat from step 3) until the entire specified range for the UE transmitted power measurement has been tested, i.e. the accuracy requirement for the UE transmitted power measurement is specified 10dB below the maximum power for the UE power class specified in section 9.1.2.1.

A.9.2.11.2 Test requirements

The UE transmitted power measurement accuracy shall meet the requirements in section 9.1.2.1.

The rate of correct measurements observed during repeated tests shall be at least 90%.