RP-030594

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

TitleCRs (Rel-4 and Rel-5 Category A) to TS 25.123SourceTSG RAN WG4Agenda Item7.5.4

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		Α	Rel-5	5.6.0	Test case for UE transmitted power for 1.28Mcps TDD	LCRTDD-RF

San Diego, USA 17 - 21 November 2003

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ж	25.	. <mark>123</mark>	CR	330	жrev	ж	Current vers	^{ion:} <mark>4.10.0</mark> ^{\$}	£
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Title: ж	Car	we et a			1001 0000				
ппе: ж	Cor	rection		ell re-selection	test case		FACH for 1,2		
Source: ೫	RA	N WG	4						
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Category: ж	F						Release: ¥	Rel-4	
category: a	Use			owing categories	S:		Use <u>one</u> of	the following releas	ses:
		F (cori A (cori		ds to a correctio	n in an ear	rlier releas		(GSM Phase 2) (Release 1996)	
				[:] feature), modification of f	eature)		R97	(Release 1997) (Release 1998)	
		D (edit	orial m	odification)	,		R99	(Release 1999)	
				ons of the above TR 21.900.	categories	s can		(Release 4) (Release 5)	
								(Release 6)	
Reason for change	e: %	Som	e mes	sage error exis	sts in cell	re-selecti	on test case ir	CELL_FACH fo	or
			Ncps 7						
Summary of chang	је: Ж	Clari	ficatior	n of message i	n cell re-s	election	test case in Cl	ELL_FACH for	
		1.28	Ncps 7	IDD.					
Consequences if	ж	The	est co	uldn't be corre	ctly perfo	rmed.			
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		imple	ementa	ation would be	affeted if	not beha	ving as indicat	ted in the CR.	
Clauses affected:	ж	A.5.4	.2						

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Other specs affected:	Y N % X Other core specifications % X Test specifications 34.122 X O&M Specifications 34.122
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 <u>http://www.3gpp.org/specs/CR.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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	initial Active cell		Cell1			
condition	Neighbour cells		Cell2, Cell3,Cell4, Cell5, Cell6			
final condition	Active cell		Cell2			
	HCS		Not used			
UE_	UE_TXPWR_MAX_RACH		UE_TXPWR_MAX_RACH d		21	The value shall be used for all cells in the test.
	Qrxlevmin		-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	1/2
Rate Matching attribute	256
Size of CRC	16

Parameter	Unit		Ce	II 1			Cell 2				Cell 3		
Timeslot Number		0 DWPTS			(C	DW	PTS	0		DW	PTS	
		T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
UTRA RF Channel			Char	nel 1			Channel 1				Channel 1		
Number													
PCCPCH_Ec/lor	dB	-3	-3			-3	-3			-3	-3		
DwPCH_Ec/lor	dB			0	0			0	0			0	0
OCNS_Ec/lor	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			C3:0; C1 ; C1,C6:			: 0; C2, 0 2, C5: 0					C2:0; C ; C3, C6	
Qhyst1 _s	dB		()			()				0	
Treselection			()			()				0	
Sintrasearch	dB		not	sent		not sent				not sent			
FACH measurement occasion info		not sent				not sent			not sent				
			Ce	II 4		Cell 5				Cell 6			
Timeslot		(0	DW	PTS	0 DWPTS			0 DWPTS				
		T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
UTRA RF Channel Number			Char	nel 1		Channel 1			Channel 1				
PCCPCH_Ec/lor	dB	-3	-3			-3	-3			-3	-3		
DwPCH_Ec/lor	dB			0	0			0	0			0	0
OCNS_Ec/lor	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			C2:0; C4		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				
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:

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

- 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	Active cell		Cell1	
condition	Neighbour cells		Cell2, Cell3,Cell4, Cell5, Cell6	
final condition	Active cell		Cell2	
	HCS		Not used	
UE_	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

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	1/2
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					Ce	II 2		Cell 3			
Timeslot Number		()	DW	PTS	(0	DW	PTS		0	DW	PTS
		T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
UTRA RF Channel Number		Channel 1			Channel 2					Channel 1			
PCCPCH_Ec/lor	dB	-3	-3			-3	-3			-3	-3		
DwPCH_Ec/lor	dB			0	0			0	0			0	0
OCNS Ec/lor	dB	-3	-3			-3	-3			-3	-3		
$\hat{I}_{or}/\bar{I}_{oc}$	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		2: 0; C1, C1, C5:0				: 0; C2, 0 C2, C5: 0				1: 0; C3, C3, C5: 0		
Qhyst1 _s	dBm		()			()			(0	
Treselection	S		()			()			(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			2	4			2	1				4	
Inter-frequency TDD measurement indicator		TRUE					TR	UE		TRUE			
Inter-frequency FDD measurement indicator		FALSE				FAI	SE		FALSE				
		Cell 4					Ce	II 5			Ce	ll 6	
Timeslot		()		PTS		0		PTS		0		PTS
		T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
UTRA RF Channel Number				nel <u>1</u>	1		Char	nel 2	1			nnel <u>2</u>	
PCCPCH_Ec/lor	dB	-3	-3			-3	-3			-3	-3		
DwPCH_Ec/lor	dB			0	0			0	0			0	0
OCNS_Ec/lor	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		1: 0; C4, C4, C5:0;				1: 0; C5, C5, C4:0			C6, C1: 0; C6, C2:0; C6,C3:0 C6, C4:0; C6:C5:0			
Qhyst1 _s	dB		()			()			(0	
Treselection	S		()			()		0			
Sintrasearch	dB		not	sent			not	sent		not sent			
Sintersearch	dB			sent						not sent			
FACH measurement occasion info				sent		not sent not sent				not sent			
FACH measurement occasion cycle length			2	4		4						4	
Inter-frequency TDD measurement		TRUE				TRUE				TRUE			
indicator Inter-frequency FDD measurement		FALSE			FALSE				FALSE				
indicator I _{oc}	dBm/ 1.28					-70							
Propagation	MHz						۵۱۸	/GN					
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:

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

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.

San Diego, USA 17 - 21 November 2003

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æ	25.	<mark>123</mark>	CR	331	жre	v	ж	Current versi	ion:	5.6.0	ж
For <u>HELP</u> on u	sing t	his for	m, see	bottom of th	is page	or look	at the	e pop-up text	over	the ೫ syr	nbols.
Proposed change a	affect	ts: (JICC a	pps #	ME	X Ra	dio A	ccess Networ	k <mark>–</mark>	Core Ne	etwork
Title: ೫	Cor	rectio	n to Ce	Il re-selection	n test ca	ase in C	ELL_	FACH for 1,2	8Mcp	s TDD	
Source: ೫	RA	N WG	4								
Work item code: #	LCF	RTDD	RF					Date: ೫	26/1	1/2003	
Category: # A Release: # Rel-5 Use one of the following categories: Use one of the following releases F (correction) 2 (GSM Phase 2) A (corresponds to a correction in an earlier release) R96 (Release 1996) B (addition of feature), R97 (Release 1997) C (functional modification of feature) R98 (Release 1998) D (editorial modification) R99 (Release 1999) Detailed explanations of the above categories can Rel-4 (Release 4) be found in 3GPP TR 21.900. Rel-5 (Release 5)							ases:				
Reason for change	e: #		e mess Mcps T		ists in c	ell re-se	electio	on test case in	n CEL	L_FACH	for
Summary of chang	<i>ie:</i> Ж		fication Mcps T		in cell i	re-selec	ction t	est case in CE	ELL_F	FACH for	
Consequences if not approved:	ж	The	test co	uldn't be corr	ectly pe	erforme	d.				
		Wou	ld not a		lementa			ving as indicat			he
Clauses affected:	ж	A.5.4	.2								

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Other space	۲ ж	N	Other core specifications #	
Other specs affected:	۳ X	× X	Other core specifications % Test specifications O&M Specifications	34.122
Other comments:	ж I	Equiv	valent CRs in other Releases: CR	330 cat. F to 25.123 v4.10.0

How to create CRs using this form:

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

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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	Active cell		Cell1					
condition	Neighbour cells		Cell2, Cell3,Cell4, Cell5, Cell6					
final condition	Active cell		Cell2					
	HCS		Not used					
UE_	UE_TXPWR_MAX_RACH		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	1/2
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 DWF			0		DW	PTS	
		T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
UTRA RF Channel Number			Char	nnel 1			Char	nnel 1			Channel 1		
PCCPCH_Ec/lor	dB	-3	-3			-3	-3			-3	-3		
DwPCH_Ec/lor	dB			0	0			0	0			0	0
OCNS_Ec/lor	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			C3:0; C1); C1,C6:			: 0; C2, 0 2, C5: 0				1: 0; C3, C3, C5: 0		
Qhyst1 _s	dB		(C			()				0	
Treselection))				0	
Sintrasearch	dB		not	sent		not sent				not sent			
FACH measurement occasion info			not	sent		not sent			not sent				
			Cell 4				Ce	II 5			Ce	ll 6	
Timeslot		(0	DW	PTS	(0	DW	PTS		0	DW	PTS
		T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
UTRA RF Channel Number			Char	nnel 1		Channel 1			Channel 1				
PCCPCH_Ec/lor	dB	-3	-3			-3	-3			-3	-3		
DwPCH_Ec/lor	dB			0	0			0	0			0	0
OCNS_Ec/lor	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			C2:0; C4			1: 0; C5, C5, C4:0;			C6, C1: 0; C6, C2:0; C6,C3:0 C6, C4:0; C6, C5:0			
Qhyst1 _s	dB)))	-	0			
Treselection		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:

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

- 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	Active cell		Cell1					
condition	Neighbour cells		Cell2, Cell3,Cell4, Cell5, Cell6					
final condition	Active cell		Cell2					
	HCS		Not used					
UE_	UE_TXPWR_MAX_RACH		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.				
Tsi		S	1.28	The value shall be used for all cells in the test.				
	T1		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
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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	1/2
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		()	DW	PTS	(0	DW	PTS	0 DWPTS			
		T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
UTRA RF Channel Number			Char	nel 1		Channel 2				Channel 1			
PCCPCH_Ec/lor	dB	-3	-3			-3	-3			-3	-3		
DwPCH_Ec/lor	dB			0	0			0	0			0	0
OCNS Ec/lor	dB	-3	-3			-3	-3			-3	-3		
$\hat{I}_{or}/\bar{I}_{oc}$	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		2: 0; C1, C1, C5:0				: 0; C2, 0 C2, C5: 0				1: 0; C3, C3, C5: 0		
Qhyst1 _s	dBm		()			()			(0	
Treselection	S		()			()			(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			2	4			2	1				4	
Inter-frequency TDD measurement indicator			TRUE			TRUE				TRUE			
Inter-frequency FDD measurement indicator		FALSE			FALSE				FALSE				
			Ce	II 4			Ce	II 5			Ce	ll 6	
Timeslot		()		PTS	0 DWPTS			0 DWPTS			PTS	
		T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
UTRA RF Channel Number				nel <u>1</u>	1		Char	nel 2	1			nnel <u>2</u>	
PCCPCH_Ec/lor	dB	-3	-3			-3	-3			-3	-3		
DwPCH_Ec/lor	dB			0	0			0	0			0	0
OCNS_Ec/lor	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		1: 0; C4, C4, C5:0;			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	
Treselection	S		()		0				0			
Sintrasearch	dB		not	sent		not sent				not sent			
Sintersearch	dB			sent		not sent				not sent			
FACH measurement occasion info				sent		not sent				not sent			
FACH measurement occasion cycle length			2	4		4				4			
Inter-frequency TDD measurement		TRUE			TRUE				TRUE				
indicator Inter-frequency FDD measurement		FALSE			FALSE				FALSE				
indicator I _{oc}	dBm/ 1.28							70		<u> </u>			
Propagation	MHz						۵۱۸	/GN					
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:

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

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.

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ж	25	. <mark>123</mark>	CR	332	жrev	,	ж	Current vers	^{ion:} 4.10.	<mark>0</mark> *
For <u>HELP</u> on	using	this for	m, see	bottom of this	s page c	or look	at the	e pop-up text	over the % s	symbols.
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Title:	<mark>ж Те</mark>	st case	e for UE	E transmitted p	oower fo	r 1.28	Acps	TDD		
Source:	೫ <mark>R</mark> /	<mark>N WG</mark>	4							
Work item code:	<mark>೫ LC</mark>		-RF					Date: ೫	26/11/2003	3
Category:	Deta	F (con A (con B (add C (fun D (edi ailed exp	rection) respond dition of ctional torial m planatio	owing categories of to a correction feature), modification of odification) ns of the above <u>TR 21.900</u> .	on in an e feature)		lease	2) R96 R97 R98 R99	Rel-4 the following r (GSM Phase (Release 199 (Release 199 (Release 199 (Release 4) (Release 5) (Release 6)	2) 6) 7) 8)

Reason for change: ೫	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 #	The requirement on the UE transmitted power measurement will not be tested.
not approved:	
	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
Other specs affected:	Y N X Other core specifications % X Test specifications 34.122 X O&M Specifications 34.122
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 <u>http://www.3gpp.org/specs/CR.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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

<u>Unit</u>	C	<u>ell 1</u>			
	<u>0</u>	<u>DwPTS</u>			
	Channel 1				
<u>dB</u>	<u>-3</u>				
<u>dB</u>		<u>0</u>			
<u>dB</u>	<u>3</u>				
I _{oc} <u>dBm/1.28</u> MHz		<u>-70</u>			
PCCPCH RSCP. Note 1 dBm -70					
Propagation Condition AWGN					
NOTE 1: PCCPCH RSCP level has been calculated from other parameters for					
	dB dB dB dBm/1.28 MHz dBm RSCP level h	0 Cha dB -3 dB 3 dB 3 dB 3 dB 3 dB 3 dBm/1.28 3 dBm 3 dBm 3			

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.

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%.

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	CHANGE REQUEST								
ж	25.12	3 CR <mark>3</mark>	<mark>333</mark> #	rev	ж	Current versi	^{on:} 5.6.0	ж	
For <u>HELP</u> 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:	ж <mark>Тest ca</mark>	se for UE	transmitted pov	wer for 1	I.28Mcps	TDD			
Source:	<mark>೫ RAN W</mark>	G4							
Work item code:	# LCRTD	D-RF				Date: ೫	26/11/2003		
Category:	F (c A (c B (a C (fi D (e Detailed e	orrection) orresponds addition of f unctional m ditorial mo	nodification of fea dification) s of the above ca	ture)		2 R96 R97 R98 R99 Rel-4 Rel-5	Rel-5 the following reli (GSM Phase 2) (Release 1996) (Release 1998) (Release 1999) (Release 4) (Release 5) (Release 6)		

Reason for change: ೫	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
Other specs affected:	Y N % X V N X Test specifications 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.

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<u>Unit</u>	C	<u>ell 1</u>			
	<u>0</u>	<u>DwPTS</u>			
	Channel 1				
<u>dB</u>	<u>-3</u>				
<u>dB</u>		<u>0</u>			
<u>dB</u>	<u>3</u>				
I _{oc} <u>dBm/1.28</u> MHz		<u>-70</u>			
PCCPCH RSCP. Note 1 dBm -70					
Propagation Condition AWGN					
NOTE 1: PCCPCH RSCP level has been calculated from other parameters for					
	dB dB dB dBm/1.28 MHz dBm RSCP level h	0 Cha dB -3 dB 3 dB 3 dB 3 dB 3 dB 3 dBm/1.28 3 dBm 3 dBm 3			

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.

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%.