RP-020778

TSG RAN Meeting #18 New Orleans, US, 3 - 6 December, 2002

TitleCRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.101SourceTSG RAN WG4Agenda Item7.4.3

RAN4 Tdoc	Spec	CR	R	Cat	Rel	Curr Ver	Title	Work Item
R4-021474	25.101	194		F	R99	3.11.0	Correction for TPC combining test case 1	TEI
R4-021475	25.101	196		Α	Rel-4	4.5.0	Correction for TPC combining test case 1	TEI
R4-021476	25.101	195		Α	Rel-5	5.4.0	Correction for TPC combining test case 1	TEI

3GPP TSG RAN WG4 (Radio) Meeting #25

R4-021474

Secaucus	, NJ,	USA	11 -	- 15	November, 200	2
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æ	25.101 CR 194 # rev * Current version: 3.11.0 *							
For <u>HELP</u> on u	sing 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: ដ	Correction for TPC combining test case 1							
Source: भ	RAN WG4							
Work item code: अ	TEI Date: # 26/11/2002							
Category: अ	FRelease: %R99Use 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 canRel-4(Release 4)be found in 3GPP TR 21.900.Rel-5(Release 5)Rel-6(Release 6)Rel-6							
Reason for change	2: % In TPC combining test case 1, no additional noise source (loc) is present. Therefore it was assumed that the received TPC command sequence would be error free. However two cells present in test interfere each other and introduce an error probability.							
Summary of chang	ge: # A probability for correct uplink power changes over the 4 consecutive slots is presented. It is added that the sequence of uplink power changes shall be as given in Table 8.27 more than 99% of the time. Isolated Impact Analysis: This change would not change UE implementation. It only corrects the test to account for neglected sources of interference.							
Consequences if not approved:	It is possible that correctly functioning UE will not pass the test due to non-zero error probability.							
Clauses affected:	¥ 8.7.2							
Other specs affected:	Y N X Other core specifications # X Test specifications # X O&M Specifications 34.121							
Other comments:	₭ Equivalent CRs in other Releases: CR196 cat. A to 25.101 v4.5.0, CR195 cat. A to 25.101 v5.4.0							

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.
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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.

8.7.2 Combining of TPC commands from radio links of different radio link sets

8.7.2.1 Minimum requirement

Test parameters are specified in Table 8.27. The delay profiles of the signals received from the different cells are the same but time-shifted by 10 chips.

For Test 1, the sequence of uplink power changes between adjacent slots shall be as shown in Table 8.28 over the 4 consecutive slots more than 99% of the time. Note that this case is without an additional noise source I_{oc} .

For Test 2, the Cell1 and Cell2 TPC patterns are repeated a number of times. If the transmitted power of a given slot is increased compared to the previous slot, then a variable "Transmitted power UP" is increased by one, otherwise a variable "Transmitted power DOWN" is increased by one. The requirements for "Transmitted power UP" and "Transmitted power DOWN" are shown in Table 8.28A.

Parameter	Unit	Test 1	Test 2	
Phase reference	-	P-CPICH		
DPCH_Ec/lor	dB	-12		
$\hat{I}_{_{or1}}$ and $\hat{I}_{_{or2}}$	dBm/3.84 MHz	-60		
I _{oc}	dBm/3.84 MHz	-	-60	
Power-Control-Algorithm	-	Algorithm 1		
Cell 1 TPC commands over 4 slots	-	{0,0,1,1}		
Cell 2 TPC commands over 4 slots	-	{0,1,0,1}		
Information data Rate	kbps	12.2		
Propagation condition	-	Static without AWGN source <i>I</i> _{oc}	Multi-path fading case 3	

Table 8.27: Parameters for TPC command combining

Table 8.28: Test requirements for Test 1

Test Number	Required power changes over the 4 consecutive slots
1	Down, Down, Down, Up

Table 8.28A: Requirements for Test 2

Test Number	Ratio (Transmitted power UP) / (Total number of slots)	Ratio (Transmitted power DOWN) / (Total number of slots)
2	≥0.25	≥0.5

3GPP TSG RAN WG4 (Radio) Meeting #25

R4-021476

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		CHAN	GE REQI	JEST			CR-Form-v7
æ	25.	101 CR 195	ж rev	ж	Current vers	^{ion:} 5.4.0	ж
For <mark>HELP</mark> on u	sing th	is form, see bottom c	of this page or lo	ook at the	pop-up text	over the X sy	mbols.
Proposed change a	affects	s: UICC apps₩	MEX	Radio Ac	cess Networ	k 🔜 Core Ne	etwork
Title: ೫	Cor	ection for TPC com	nbining test ca	se 1			
Source: अ	RAN	WG4					
Work item code: अ	TEI				Date: ೫	26/11/2002	
Category: Ж	Α			Re	lease:	Rel-5	
	F A E C Detail	ne of the following cates (correction) (corresponds to a corre (addition of feature), (functional modification) (editorial modification) ed explanations of the a nd in 3GPP <u>TR 21.900</u> .	rection in an earli n of feature)) bove categories		2 R96 R97 R98 R99 Rel-4 Rel-5	the following rel (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 5) (Release 6)	
Reason for change	9: X	In TPC combining te Therefore it was assi error free. However t an error probability.	umed that the re	eceived T	PC comman	d sequence w	ould be
Summary of chang	ye:₩	A probability for corre presented. It is adde given in Table 8.27 m <u>Isolated Impact Anal</u> This change would n account for neglected	d that the sequenore than 99% ysis: ot change UE in	ence of up of the time mplement	olink power c e. tation. It only	hanges shall t	be as
Consequences if not approved:	ж	It is possible that cor error probability.	rectly funtioning	g UE will	not pass the	test due to no	n-zero
Clauses affected:	ж	8.7.2					
Other specs affected:	¥	Y N X Other core spe X Test specificati X O&M Specifica	ons	ж 34.12	21		
Other comments:	ж						

nents:	ж	
		Equivalent CRs in other Releases: CR194 cat. F to 25.101 v3.11.0, CR196 cat. A
		to 25.101 v4.5.0

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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.

8.7.2 Combining of TPC commands from radio links of different radio link sets

8.7.2.1 Minimum requirement

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3GPP TSG RAN WG4 (Radio) Meeting #25

R4-021475

Secaucus,	NJ,	USA	11 -	· 15	November, 2	2002
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æ	25.101 CR 196 * rev *	Current version: 4.5.0 [#]		
For <u>HELP</u> on u	sing this form, see bottom of this page or look at the	pop-up text over the X symbols.		
Proposed change	affects: UICC apps ೫ ME <mark>Ⅹ</mark> Radio Ac	ccess Network Core Network		
Title: ೫	Correction for TPC combining test case 1			
Source: ೫	RAN WG4			
Work item code: ℜ	TEI	Date: ೫ <mark>26/11/2002</mark>		
Category: ℜ	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 <u>TR 21.900</u> .	R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) Noise source (loc) is present. PC command sequence would be		
Summary of chang	e: # A probability for correct uplink power changes presented. It is added that the sequence of up given in Table 8.27 more than 99% of the tim <u>Isolated Impact Analysis:</u> This change would not change UE implement account for neglected sources of interference	plink power changes shall be as e. tation. It only corrects the test to		
Consequences if not approved:	# It is possible that correctly functioning UE will error probability.	not pass the test due to non-zero		
Clauses affected:	ж <mark>8.7.2</mark>			
Other specs affected:	Y N X Other core specifications X Test specifications X O&M Specifications	21		
Other comments:	# Equivalent CRs in other Releases: CR194 ca	t. F to 25.101 v3.11.0, CR195 cat. A		

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$\hat{I}_{_{or1}}$ and $\hat{I}_{_{or2}}$	dBm/3.84 MHz	-6	60
I _{oc}	dBm/3.84 MHz	-	-60
Power-Control-Algorithm	-	Algori	thm 1
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