RP-020279

TSG RAN Meeting #16 Marco Island, FL, USA, 4 - 7 June 2002

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

RAN4 Tdoc	Spec	Curr Ver	New Ver	CR	R	Cat	Ph	Title	Acronym
R4-020833	25.101	3.10.0	3.11.0	165		F	R99	Addition of a set of Compressed mode reference pattern 2 parameters for FDD-TDD test cases in 25.133	TEI
R4-020892	25.101	4.4.0	4.5.0	170		A	Rel-4	Addition of a set of Compressed mode reference pattern 2 parameters for FDD-TDD test cases in 25.133	TEI
R4-020893	25.101	5.2.0	5.3.0	171		A	Rel-5	Addition of a set of Compressed mode reference pattern 2 parameters for FDD-TDD test cases in 25.133	TEI
R4-020960	25.101	3.10.0	3.11.0	167	1	F	R99	Control and monitoring function of UE requirement	TEI
R4-020961	25.101	4.4.0	4.5.0	168	1	Α	Rel-4	Control and monitoring function of UE requirement	TEI
R4-020962	25.101	5.2.0	5.3.0	169	1	Α	Rel-5	Control and monitoring function of UE requirement	TEI
R4-021025	25.101	3.10.0	3.11.0	178		F	R99	Compressed mode performance requirements	TEI
R4-021026	25.101	4.4.0	4.5.0	179		Α	Rel-4	Compressed mode performance requirements	TEI
R4-021027	25.101	5.2.0	5.3.0	180		Α	Rel-5	Compressed mode performance requirements	TEI

R4-020833

3GPP TSG RAN WG4 Meeting #23 Gyeongju, Korea 13th -17th May, 2002

		CH	IANGE RE	EQUEST		CR-Form-v4					
ж	25	.101 CR	165 ^ж	ev #	Current versior	^{n:} 3.10.0 [#]					
For <u>HELP</u> on	For HELP on using this form, see bottom of this page or look at the pop-up text over the # symbols.										
Proposed change affects: # (U)SIM ME/UE X Radio Access Network Core Network											
Title: ទ		dition of a set of t cases in 25.13	-	ode reference p	pattern 2 param	neters for FDD-TDD					
Source:	₭ <mark>RA</mark>	N WG4									
Work item code: 9	₩ TEI				Date: ೫ 🦯	17/5/2002					
Category: ३	Deta	one of the followin F (correction) A (corresponds to B (addition of fea C (functional modil D (editorial modil iled explanations bund in 3GPP <u>TR 2</u>	o a correction in a ture), dification of feature ication) of the above categ	n earlier release, ə)	Use <u>one</u> of the 2 (G R96 (R R97 (R R98 (R R99 (R REL-4 (R	R99 e following releases: SM Phase 2) elease 1996) elease 1997) elease 1998) elease 1999) elease 4) elease 5)					
Reason for chang	уе: Ж	test cases in 2	5.133 do not inc	lude a pattern	set compatible	ntly provided A.5 for with the required er to properly test					
						ttern set must be t cases in 25.133.					
Summary of chan	ige: #		mode reference requirements is		mpatible with T						
Consequences if not approved:	ж	reference patter Isolated impact This CR provid cases in 25.13 25.133. The ac	des a compresse	and will therefo ed mode refere ne correction at ference pattern	nce pattern set nce pattern set	t for FDD-TDD test of these test cases in					
Clauses affected:	· ¥	•		· · · ·							
Other specs affected:	ж	Other core s Test specifi O&M Specif		ж							
Other comments:	ж ж	25.133.	s in other Relea			TDD test cases in /4.4.0, CR171 cat. A					

How to create CRs using this form:

- 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 DL reference compressed mode parameters

Parameters described in Table A.21 are used in some test specified in TS 25.101 while parameters described in Table A.22 are used in some tests specified in TS 25.133.

Set 1 parameters in Table A.21 are applicable when compressed mode by spreading factor reduction is used in downlink. Set 2 parameters in Table A.21 are applicable when compressed mode by puncturing is used in downlink.

Parameter	Set 1	Set 2	Note
TGSN (Transmission Gap Starting Slot Number)	11	11	
TGL1 (Transmission Gap Length 1)	7	7	
TGL2 (Transmission Gap Length 2)	-	-	Only one gap in use.
TGD (Transmission Gap Distance)	0	0	Only one gap in use.
TGPL1 (Transmission Gap Pattern Length)	4	4	
TGPL2 (Transmission Gap Pattern Length)	-	-	Only one pattern in use.
TGPRC (Transmission Gap Pattern Repetition Count)	NA	NA	Defined by higher layers
TGCFN (Transmission Gap Connection Frame Number):	NA	NA	Defined by higher layers
UL/DL compressed mode selection	DL & UL	DL & UL	2 configurations possible DL &UL / DL
UL compressed mode method	SF/2	SF/2	
DL compressed mode method	SF/2	Puncturing	
Downlink frame type and Slot format	11B	11A	
Scrambling code change	No	No	
RPP (Recovery period power control mode)	0	0	
ITP (Initial transmission power control mode)	0	0	

 Table A.21: Compressed mode reference pattern 1 parameters

Table A.22: Compressed mode reference	pattern 2 parameters
---------------------------------------	----------------------

Parameter	Set 1	Set 2	Set 3	Note
TGSN (Transmission Gap Starting Slot Number)	4	4	<u>10</u>	
TGL1 (Transmission Gap Length 1)	7	7	<u>10</u>	
TGL2 (Transmission Gap Length 2)	-	-	<u>-</u>	Only one gap in use.
TGD (Transmission Gap Distance)	0	0	<u>0</u>	
TGPL1 (Transmission Gap Pattern Length)	3	12	<u>11</u>	
TGPL2 (Transmission Gap Pattern Length)	-	-	<u>-</u>	Only one pattern in use.
TGPRC (Transmission Gap Pattern Repetition Count)	NA	NA	<u>NA</u>	Defined by higher layers
TGCFN (Transmission Gap Connection Frame Number):	NA	NA	<u>NA</u>	Defined by higher layers
UL/DL compressed mode selection	DL & UL	DL & UL	DL & UL	2 configurations possible. DL & UL / DL
UL compressed mode method	SF/2	SF/2	<u>SF/2</u>	
DL compressed mode method	SF/2	SF/2	Puncturing	
Downlink frame type and Slot format	11B	11B	<u>11A</u>	
Scrambling code change	No	No	<u>No</u>	
RPP (Recovery period power control mode)	0	0	<u>0</u>	
ITP (Initial transmission power control mode)	0	0	<u>0</u>	

R4-020960

3GPP TSG RAN WG4 Meeting #23 Gyeongju, Korea 13th -17th May, 2002

														CR-Form-v4
			(CHAN	IGE	RE	EQ	UE	ST	I				
ж	25.	101	CR	167		H .	ev	1	ж	Curre	ent vers	sion:	<mark>3.10.</mark>	<mark>0</mark> ^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: # (U)SIM ME/UE X Radio Access Network Core Network														
Title: ೫	UE	contro	ol and i	monitorin	<mark>ig func</mark>	tions	5							
Source: अ	RA	N WG	4											
Work item code: अ	TEI									Ľ	Date: ೫	17/	5/2002	
Category: ⊮	Detai	F (con A (cor B (add C (fun D (edi iled exp	rection) respon lition of ctional torial m planatic	owing cate ds to a con feature), modification ons of the TR 21.900	rrection on of fe ו) above (n in ar eature	e)		elease	Use 2 e) I	ase: # <u>one</u> of 2 R96 R97 R98 R99 REL-4 REL-5	the fo (GSN (Rele (Rele (Rele (Rele (Rele		6) 7) 8)
Reason for change	e: #			equireme cell can										g when no
Summary of chang	уе: Ж	Gen	eral red	quiremen	it on co	ontro	l and	d mo	nitori	ing fur	nctions	adde	d	
Consequences if not approved:	ж	Isola		demand pact state						uireme	ent that	was r	missing	in the
Clauses affected:	ж	43(new) 4	4.3.1(nev	v)									
Other specs Affected:	ж	О [.] Х Те	ther co	pre specification pecification	ication is	IS	ж	34	.121					
Other comments:	ж			CRs in o 5.101 v5.2		eleas	ses:	CR1	68r1	cat. A	to 25.	101 v	4.4.0, C	R169r1

How to create CRs using this form:

- 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.

4.3 Control and monitoring functions

This requirement verifies that the control and monitoring functions of the UE prevent it from transmitting if no acceptable cell can be found by the UE.

4.3.1 Minimum requirement

The power of the UE, as measured -with a thermal detector, shall not exceed -30dBm if no acceptable cell can be found by the UE.

R4-020961

3GPP TSG RAN WG4 Meeting #23 Gyeongju, Korea 13th -17th May, 2002

			CR-Form-v4						
	CHANGI	E REQUEST							
ж	2 <mark>5.101</mark> CR 168	₩ ev <mark>1</mark> [₩] Cu	rrent version: 4.4.0 [#]						
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: # (U)SIM ME/UE X Radio Access Network Core Network									
Title: ೫	UE control and monitoring fu	nctions							
Source: ೫	RAN WG4								
Work item code: ℜ	TEI		Date: ೫ <mark>17/5/2002</mark>						
Category: Ж	 A Ise <u>one</u> of the following categorie F (correction) A (corresponds to a correcti B (addition of feature), C (functional modification of D (editorial modification) etailed explanations of the above e found in 3GPP <u>TR 21.900</u>. 	es: L on in an earlier release) feature)	Iease: #Rel-4Ise one of the following releases:2(GSM Phase 2)R96R97(Release 1996)R97R98(Release 1998)R99(Release 1999)REL-4(Release 4)REL-5(Release 5)						
Reason for change	# A general requirement is acceptable cell can be for		he UE from transmitting when no by 3GPP PCG.						
Summary of chang	# General requirement on	control and monitoring f	unctions added						
Consequences if not approved:	Solution: Specification. Solution: Specification		nent that was missing in the						
Clauses affected:	# 4.3 (new), 4.3.1(new)								
Other specs Affected:	 Conter core specification Test specifications O&M Specifications 	ons [#] 34.121							
Other comments:	# Equivalent CRs in other cat. A to 25.101 v5.2.0	Releases: CR167r1 cat.	. F to 25.101 v3.10.0, CR169r1						

How to create CRs using this form:

- 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.

4.3 Control and monitoring functions

This requirement verifies that the control and monitoring functions of the UE prevent it from transmitting if no acceptable cell can be found by the UE.

4.3.1 Minimum requirement

The power of the UE, as measured -with a thermal detector, shall not exceed -30dBm if no acceptable cell can be found by the UE.

R4-020962

3GPP TSG RAN WG4 Meeting #23 Gyeongju, Korea 13th -17th May, 2002

														CR-Form-v4
			(CHAN	IGE	RE	EQ	UE	ST					
¥	25.	<mark>101</mark>	CR	169		ж	ev	1	ж	Curre	ent vers	ion:	<mark>5.2.0</mark>	æ
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: # (U)SIM ME/UE X Radio Access Network Core Network														
Title: भ	UE	contro	ol and i	monitorin	ig func	tions	6							
Source: #	RAN	<mark>NWG</mark>	4											
Work item code: ℜ	TEI									Ľ	Date:	17/5	/2002	
Category:	Use <u>c</u> J L Detail be fou	F (con A (cor B (add C (fun D (edi led exp und in	rection) respond lition of ctional torial m blanatio 3GPP	ds to a co f feature), modificati odification ons of the TR 21.900	rrection on of fe n) above o	n in an eature categ	e) Jories	s can		Use 2 1 1 1 1	2 R96 R97 R98 R99 REL-4 REL-5	the foll (GSM (Relea (Relea (Relea (Relea (Relea	owing re Phase 2 se 1996 se 1997 se 1998 se 1999 se 4) se 5))))
				cell can										
Summary of chang	је: Ж	Gen	eral red	quiremer	n <mark>t on co</mark>	ontro	l and	d mo	<mark>nitori</mark>	ing fur	nctions	added		
Consequences if not approved:	¥	Isola		demand pact state						uireme	ent that	was m	issing i	n the
Clauses affected:	ж	4.3 (new), 4	4.3.1(nev	v)									
Other specs Affected:	ж	X Te	est spe	ore specif ecification ecificatio	IS	IS	ж	34	.121					
Other comments:	¥			CRs in o 5.101 v4.4		elea	ses:	CR1	67r1	cat. F	to 25.	101 v3.	.10.0, C	R168r1

How to create CRs using this form:

- 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.

4.3 Control and monitoring functions

This requirement verifies that the control and monitoring functions of the UE prevent it from transmitting if no acceptable cell can be found by the UE.

4.3.1 Minimum requirement

The power of the UE, as measured -with a thermal detector, shall not exceed -30dBm if no acceptable cell can be found by the UE.

R4-020892

3GPP TSG RAN WG4 Meeting #23 Gyeongju, Korea 13th -17th May, 2002

	CHANGE REQUEST											
æ	25	<mark>.101</mark> CR	<mark>170</mark> [#]	ev #	Current vers	ion: 4.4.0 [#]						
For <u>HELP</u> on	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	e affec	ts:	M ME/UE	X Radio A	ccess Network	Core Network						
Title:		dition of a set of t cases in 25.13		ode reference	e pattern 2 para	ameters for FDD-TDD						
Source:	₩ <mark>RA</mark>	N WG4										
Work item code:	₩ TE	I			<i>Date:</i>	17/5/2002						
Category:	Deta	B (addition of feC (functional modD (editorial mod	to a correction in a ature), idification of featur ification) of the above cate	re)	Use <u>one</u> of 2 2 se) R96 R97 R98 R99 REL-4	Rel-4 the following releases: (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 5)						
Reason for chang	ye: ж	The existing of	compressed mod	le reference r	oattern sets cur	rently provided A.5 for						
	-	test cases in a transmission TDD cell mea	25.133 do not in gap length for TI surement capab	clude a patter DD cell meas ility a compat	n set compatib urements. In o ible reference	le with the required rder to properly test pattern set must be est cases in 25.133.						
Summary of char	nge: ೫	•	d mode referenc requirements is		compatible with	n TDD cell						
Consequences if not approved:	¥	reference patres Isolated impa		and will there	efore not be val							
		cases in 25.1 25.133. The a	33, allowing for	the correction eference patte	and completio	n of these test cases in t affect previous						
Clauses affected	: ¥	A.5										
Other specs affected:	¥	Other core Test specif O&M Spec		¥								
Other comments:	: ¥	25.133.	Rs in other Relea			TDD test cases in 1 v3.10.0, CR171 cat. A						

How to create CRs using this form:

- 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 DL reference compressed mode parameters

Parameters described in Table A.21 are used in some test specified in TS 25.101 while parameters described in Table A.22 are used in some tests specified in TS 25.133.

Set 1 parameters in Table A.21 are applicable when compressed mode by spreading factor reduction is used in downlink. Set 2 parameters in Table A.21 are applicable when compressed mode by puncturing is used in downlink.

Parameter	Set 1	Set 2	Note
TGSN (Transmission Gap Starting Slot Number)	11	11	
TGL1 (Transmission Gap Length 1)	7	7	
TGL2 (Transmission Gap Length 2)	-	-	Only one gap in use.
TGD (Transmission Gap Distance)	0	0	Only one gap in use.
TGPL1 (Transmission Gap Pattern Length)	4	4	
TGPL2 (Transmission Gap Pattern Length)	-	-	Only one pattern in use.
TGPRC (Transmission Gap Pattern Repetition Count)	NA	NA	Defined by higher layers
TGCFN (Transmission Gap Connection Frame Number):	NA	NA	Defined by higher layers
UL/DL compressed mode selection	DL & UL	DL & UL	2 configurations possible DL &UL / DL
UL compressed mode method	SF/2	SF/2	
DL compressed mode method	SF/2	Puncturing	
Downlink frame type and Slot format	11B	11A	
Scrambling code change	No	No	
RPP (Recovery period power control mode)	0	0	
ITP (Initial transmission power control mode)	0	0	

 Table A.21: Compressed mode reference pattern 1 parameters

Table A.22: Compressed mode reference pattern 2 parameters

Parameter	Set 1	Set 2	Set 3	Note
TGSN (Transmission Gap Starting Slot Number)	4	4	<u>10</u>	
TGL1 (Transmission Gap Length 1)	7	7	<u>10</u>	
TGL2 (Transmission Gap Length 2)	-	-	=	Only one gap in use.
TGD (Transmission Gap Distance)	0	0	<u>0</u>	
TGPL1 (Transmission Gap Pattern Length)	3	12	<u>11</u>	
TGPL2 (Transmission Gap Pattern Length)	-	-	-	Only one pattern in use.
TGPRC (Transmission Gap Pattern Repetition Count)	NA	NA	<u>NA</u>	Defined by higher layers
TGCFN (Transmission Gap Connection Frame Number):	NA	NA	<u>NA</u>	Defined by higher layers
UL/DL compressed mode selection	DL & UL	DL & UL	<u>DL & UL</u>	2 configurations possible. DL & UL / DL
UL compressed mode method	SF/2	SF/2	<u>SF/2</u>	
DL compressed mode method	SF/2	SF/2	Puncturing	
Downlink frame type and Slot format	11B	11B	<u>11A</u>	
Scrambling code change	No	No	<u>No</u>	
RPP (Recovery period power control mode)	0	0	<u>0</u>	
ITP (Initial transmission power control mode)	0	0	<u>0</u>	

R4-020893

3GPP TSG RAN WG4 Meeting #23 Gyeongju, Korea 13th -17th May, 2002

		CHAN	GE REC	QUEST			CR-Form-v4				
ж	25	.101 CR 171	ж ev	ж	Current versi	ion: 5.2.0	ж				
For <u>HELP</u> on t	For HELP on using this form, see bottom of this page or look at the pop-up text over the # symbols.										
Proposed change	affec	ts: 晞 (U)SIM	ME/UE X	Radio Ac	cess Network	Core Ne	twork				
Title: भ		dition of a set of Comp cases in 25.133	pressed mode	e reference	pattern 2 para	ameters for FD	D-TDD				
Source: #	RA	N WG4									
Work item code: भ					<i>Date:</i>	17/5/2002					
Category: ₩	Deta	one of the following cate F (correction) A (corresponds to a col B (addition of feature), C (functional modification D (editorial modification iled explanations of the a und in 3GPP <u>TR 21.900</u>	rection in an e on of feature)) above categori		2 R96 R97 R98 R99 REL-4	Rel-5 the following rele (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 5)	ases:				
Reason for chang	e: Ж	The existing compre	ssed mode r	eference pa	attern sets cur	rently provided	A.5 for				
		test cases in 25.133 transmission gap ler TDD cell measurem defined, since only c	do not inclue ogth for TDD ent capability	le a pattern cell measur a compatik	set compatib rements. In o ple reference	le with the required to properly attern set must	uired / test st be				
Summary of chan	ge: ೫	A compressed mode measurement requir			ompatible with	TDD cell					
Consequences if not approved:	ж	FDD-TDD test cases reference pattern se Isolated impact and This CR provides a cases in 25.133, allo 25.133. The addition	t defined, and vsis: compressed owing for the of this refer	d will thereform mode referonce correction a	ore not be val ence pattern s and completio	id. set for FDD-TD n of these test	cases in				
		implementations or	functionality.								
Clauses affected:	Ħ	A.5									
Other specs affected:	æ	Other core specif Test specification O&M Specificatio	S	¥							
Other comments:	ж	This CR is required 25.133. Equivalent CRs in or to 25.101 v4.4.0									

How to create CRs using this form:

- 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 DL reference compressed mode parameters

Parameters described in Table A.21 are used in some test specified in TS 25.101 while parameters described in Table A.22 are used in some tests specified in TS 25.133.

Set 1 parameters in Table A.21 are applicable when compressed mode by spreading factor reduction is used in downlink. Set 2 parameters in Table A.21 are applicable when compressed mode by puncturing is used in downlink.

Parameter	Set 1	Set 2	Note
TGSN (Transmission Gap Starting Slot Number)	11	11	
TGL1 (Transmission Gap Length 1)	7	7	
TGL2 (Transmission Gap Length 2)	-	-	Only one gap in use.
TGD (Transmission Gap Distance)	0	0	Only one gap in use.
TGPL1 (Transmission Gap Pattern Length)	4	4	
TGPL2 (Transmission Gap Pattern Length)	-	-	Only one pattern in use.
TGPRC (Transmission Gap Pattern Repetition Count)	NA	NA	Defined by higher layers
TGCFN (Transmission Gap Connection Frame Number):	NA	NA	Defined by higher layers
UL/DL compressed mode selection	DL & UL	DL & UL	2 configurations possible DL &UL / DL
UL compressed mode method	SF/2	SF/2	
DL compressed mode method	SF/2	Puncturing	
Downlink frame type and Slot format	11B	11A	
Scrambling code change	No	No	
RPP (Recovery period power control mode)	0	0	
ITP (Initial transmission power control mode)	0	0	

 Table A.21: Compressed mode reference pattern 1 parameters

Table A.22: Compressed mode reference pattern 2 parameters

Parameter	Set 1	Set 2	Set 3	Note
TGSN (Transmission Gap Starting Slot Number)	4	4	<u>10</u>	
TGL1 (Transmission Gap Length 1)	7	7	<u>10</u>	
TGL2 (Transmission Gap Length 2)	-	-	-	Only one gap in use.
TGD (Transmission Gap Distance)	0	0	<u>0</u>	
TGPL1 (Transmission Gap Pattern Length)	3	12	<u>11</u>	
TGPL2 (Transmission Gap Pattern Length)	-	-	Ξ	Only one pattern in use.
TGPRC (Transmission Gap Pattern Repetition Count)	NA	NA	<u>NA</u>	Defined by higher layers
TGCFN (Transmission Gap Connection Frame Number):	NA	NA	<u>NA</u>	Defined by higher layers
UL/DL compressed mode selection	DL & UL	DL & UL	<u>DL & UL</u>	2 configurations possible. DL & UL / DL
UL compressed mode method	SF/2	SF/2	<u>SF/2</u>	
DL compressed mode method	SF/2	SF/2	Puncturing	
Downlink frame type and Slot format	11B	11B	<u>11A</u>	
Scrambling code change	No	No	No	
RPP (Recovery period power control mode)	0	0	<u>0</u>	
ITP (Initial transmission power control mode)	0	0	<u>0</u>	

3GPP TSG RAN WG4 Meeting #23

R4-021025

Gyeongju, Korea 13th -17th May, 2002

Ħ	25.101 CR 178 [#] ev - [#] Current version: 3.10.0 [#]
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: 第 (U)SIM ME/UE X Radio Access Network Core Network
Title: ដ	Correction of Compressed Mode Performance Requirement
Source: अ	RAN WG4
Work item code: ℜ	TEI Date: ೫ 17/5/2002
Category: ₩	FRelease: %R99Use one of the following categories: F (correction)Use one of the following releases: 2(GSM Phase 2)A (corresponds to a correction in an earlier release)R96(Release 1996)B (addition of feature), C (functional modification of feature)R97(Release 1997)C (functional modification of feature) D (editorial modification)R98(Release 1998)D (editorial modification)R99(Release 1999)Detailed explanations of the above categories can be found in 3GPP TR 21.900.REL-4(Release 4) REL-5
Baasan far abango	
Reason for change	The imprementation margin of the compressed mode SF/2 method requirement is smaller than pucturing method. The imprementation margin should be considered as absolute value i.e. 2.5dB as same as the margin for other Case 2 tests.
Summary of chang	A new result is combined with previous one. Furthermore, the imprementation margin is changed to 2.5 dB from 1.8 dB for the SF/2 mothod of compressed mode. As a result the figure of the requirement is changed to -14.6dB from – 15.4dB for SF/2 method and to –15.2dB from –15.4dB for puncturing method.
	Isolated Impact Analysis:
	Correction to the requirement would not affect imprementations behaving according to current specification.
	This correction would affect to the performence requrement of Downlink compressed mode test described in table 7.9.2 of TS34.121. But it would not affect any test procedures in the test specification.
Consequences if not approved:	[#] It is hard for UE to achieve the regruirement of compressed mode.
Clauses affected:	೫ <mark>8.9.1.1</mark>
Other specs affected:	Image: Second system Image: Second system <td< th=""></td<>
Other comments:	# Equivalent CRs in other Releases: CR179 cat. A to 25.101 v4.4.0, CR180 cat. A to 25.101 v5.2.0

How to create CRs using this form:

- 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.

Denemator	Unit	Test 1		
Parameter	Unit	Stage 1	Stage 2	Stage 3
Time in each stage	S	>15 5 0.5		
\hat{I}_{or}/I_{oc}	dB	5		
I _{oc}	dBm/3.84 MHz	-60		
Information Data Rate	kbps	12.2		
Quality target on DTCH	BLER	0.01		
Propagation condition			Case 4	
Maximum_DL_Power	dB	7 -6.2 7		
Minimum_DL_Power	dB		-18	
DL Power Control step size, Δ_{TPC}	dB	1		
Limited Power Increase	-	"Not used"		

Table 8.33: Test parameter for downlink power control, wind-up effects

Table 8.34: Requirements	s in downlink power	control, wind-up effects
--------------------------	---------------------	--------------------------

Parameter	Unit	Test 1, stage 3
$\frac{DPCH_E_c}{I_{or}}$	dB	-13.3

8.9 Downlink compressed mode

Downlink compressed mode is used to create gaps in the downlink transmission, to allow the UE to make measurements on other frequencies.

8.9.1 Single link performance

The receiver single link performance of the Dedicated Traffic Channel (DCH) in compressed mode is determined by the Block Error Ratio (BLER) and transmitted DPCH_Ec/Ior power ratio in the downlink.

The compressed mode parameters are given in clause A.5. Tests 1 and 2 are using Set 1 compressed mode pattern parameters from Table A.21 in clause A.5 while tests 3 and 4 are using Set 2 compressed mode patterns from the same table.

8.9.1.1 Minimum requirements

For the parameters specified in Table 8.35 the downlink $DPCH_{-E_{c}}$ power ratio

measured values, which are averaged over one slot, shall be below the specified value in Table 8.36 more than 90% of the time. The measured quality on DTCH shall be as required in Table 8.36.

Downlink power control is ON during the test. Uplink TPC commands shall be error free. System simulator shall increase the transmitted power during compressed frames by the same amount that UE is expected to increase its SIR target during those frames.

PAGE

Parameter	Unit	Test 1	Test 2	Test 3	Test 4	
Delta SIR1	dB	0	3	0	3	
Delta SIR after1	dB	0	3	0	3	
Delta SIR2	dB	0	0	0	0	
Delta SIR after2	dB	0	0	0	0	
\hat{I}_{or}/I_{oc}	dB	9				
I _{oc}	dBm/3.84 MHz	-60				
Information Data Rate	kbps		12	2.2		
Propagation condition			Cas	se 2		
Target quality value on DTCH	BLER	0.01				
Maximum_DL_Power	dB			7		
Minimum_DL_Power	dB	-18				
DL Power Control	dB	1				
step size, Δ_{TPC}	uD	I				
Limited Power Increase	-	"Not used"				

Table 8.35: Test parameter for downlink compressed mode

Parameter	Unit	Test 1	Test 2	Test 3	Test 4	
$\frac{DPCH_E_c}{I_{or}}$	dB	-15.4<u>—</u>14.6	No requirements	-15.4<u>-15.2</u>	No requirements	
Measured quality of compressed and recovery frames	BLER	No requirements	<0.001	No requirements	<0.001	
Measured quality on DTCH	BLER	0.01 ± 30 %				

8.10 Blind transport format detection

Performance of Blind transport format detection is determined by the Block Error Ratio (BLER) values and by the measured average transmitted DPCH_Ec/Ior value.

8.10.1 Minimum requirement

For the parameters specified in Table 8.37 the average downlink \underline{DPCH}_{E_c} power

ratio shall be below the specified value for the BLER shown in Table 8.38. Table 8.37: Test parameters for Blind transport format detection

Parameter	Unit	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6
\hat{I}_{or}/I_{oc}	dB		-1			-3	
I _{oc}	dBm/3.84 MHz	-60					
Information Data Rate	kbps	12.2 (rate 1)	7.95 (rate 2)	1.95 (rate 3)	12.2 (rate 1)	7.95 (rate 2)	1.95 (rate 3)
propagation condition	-	static multi-path fading case 3					
TFCI	-	off					

3GPP TSG RAN WG4 Meeting #23

R4-021026

Gyeongju, Korea 13th -17th May, 2002

	CHANGE REQUEST
ж	25.101 CR 179 * ev _ * Current version: 4.4.0 *
For <u>HELP</u> on us	ing this form, see bottom of this page or look at the pop-up text over the X symbols.
Proposed change a	ffects: ¥ (U)SIM ME/UE X Radio Access Network Core Network
Title: ೫	Correction of Compressed Mode Performance Requirement
Source: #	RAN WG4
Work item code: ℜ	TEI Date: ೫ 17/5/2002
	A Release: % Rel-4 Use one of the following categories: Use one of the following releases: 2 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 be found in 3GPP TR 21.900. REL-4 (Release 5)
Reason for change.	The imprementation margin of the compressed mode SF/2 method requirement is smaller than pucturing method. The imprementation margin should be considered as absolute value i.e. 2.5dB as same as the margin for other Case 2 tests.
Summary of change	A new result is combined with previous one. Furthermore, the imprementation margin is changed to 2.5 dB from 1.8 dB for the SF/2 mothod of compressed mode. As a result the figure of the requirement is changed to -14.6dB from – 15.4dB for SF/2 method and to –15.2dB from –15.4dB for puncturing method Isolated Impact Analysis: Correction to the requirement would not affect imprementations behaving according to current specification. This correction would affect to the performence requirement of Downlink
	compressed mode test described in table 7.9.2 of TS34.121. But it would not affect any test procedures in the test specification.
Consequences if not approved:	It is hard for UE to achieve the regruirement of compressed mode.
Clauses affected:	策 <mark>8.9.1.1</mark>
Other specs affected:	Image: State of the state
Other comments:	# Equivalent CRs in other Releases: CR178 cat. F to 25.101 v3.10.0, CR180 cat. to 25.101 v5.2.0

How to create CRs using this form:

- 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.

Denemator	Unit	Test 1		
Parameter	Unit	Stage 1	Stage 2	Stage 3
Time in each stage	S	>15 5 0.5		
\hat{I}_{or}/I_{oc}	dB	5		
I _{oc}	dBm/3.84 MHz	-60		
Information Data Rate	kbps	12.2		
Quality target on DTCH	BLER	0.01		
Propagation condition			Case 4	
Maximum_DL_Power	dB	7 -6.2 7		
Minimum_DL_Power	dB		-18	
DL Power Control step size, Δ_{TPC}	dB	1		
Limited Power Increase	-	"Not used"		

Table 8.33: Test parameter for downlink power control, wind-up effects

Table 8.34: Requirements	s in downlink power	control, wind-up effects
--------------------------	---------------------	--------------------------

Parameter	Unit	Test 1, stage 3
$\frac{DPCH_E_c}{I_{or}}$	dB	-13.3

8.9 Downlink compressed mode

Downlink compressed mode is used to create gaps in the downlink transmission, to allow the UE to make measurements on other frequencies.

8.9.1 Single link performance

The receiver single link performance of the Dedicated Traffic Channel (DCH) in compressed mode is determined by the Block Error Ratio (BLER) and transmitted DPCH_Ec/Ior power ratio in the downlink.

The compressed mode parameters are given in clause A.5. Tests 1 and 2 are using Set 1 compressed mode pattern parameters from Table A.21 in clause A.5 while tests 3 and 4 are using Set 2 compressed mode patterns from the same table.

8.9.1.1 Minimum requirements

For the parameters specified in Table 8.35 the downlink $DPCH_{-E_{c}}$ power ratio

measured values, which are averaged over one slot, shall be below the specified value in Table 8.36 more than 90% of the time. The measured quality on DTCH shall be as required in Table 8.36.

Downlink power control is ON during the test. Uplink TPC commands shall be error free. System simulator shall increase the transmitted power during compressed frames by the same amount that UE is expected to increase its SIR target during those frames.

PAGE

Parameter	Unit	Test 1	Test 2	Test 3	Test 4
Delta SIR1	dB	0	3	0	3
Delta SIR after1	dB	0	3	0	3
Delta SIR2	dB	0	0	0	0
Delta SIR after2	dB	0	0	0	0
\hat{I}_{or}/I_{oc}	dB			9	
I _{oc}	dBm/3.84 MHz	-60			
Information Data Rate	kbps	12.2			
Propagation condition		Case 2			
Target quality value on DTCH	BLER	0.01			
Maximum_DL_Power	dB	7			
Minimum_DL_Power	dB	-18			
DL Power Control	dB	1			
step size, Δ_{TPC}	uD			I	
Limited Power Increase	-		"Not	used"	

Table 8.35: Test parameter for downlink compressed mode

Parameter	Unit	Test 1	Test 2	Test 3	Test 4
$\frac{DPCH_E_c}{I_{or}}$	dB	-15.4 —14.6	No requirements	-15.4<u>-15.2</u>	No requirements
Measured quality of compressed and recovery frames	BLER	No requirements	<0.001	No requirements	<0.001
Measured quality on DTCH	BLER	0.01 ± 30 %			

8.10 Blind transport format detection

Performance of Blind transport format detection is determined by the Block Error Ratio (BLER) values and by the measured average transmitted DPCH_Ec/Ior value.

8.10.1 Minimum requirement

For the parameters specified in Table 8.37 the average downlink \underline{DPCH}_{E_c} power

ratio shall be below the specified value for the BLER shown in Table 8.38. Table 8.37: Test parameters for Blind transport format detection

Parameter	Unit	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6
\hat{I}_{or}/I_{oc}	dB		-1			-3	
I _{oc}	dBm/3.84 MHz			-6	0		
Information Data Rate	kbps	12.2 (rate 1)	7.95 (rate 2)	1.95 (rate 3)	12.2 (rate 1)	7.95 (rate 2)	1.95 (rate 3)
propagation condition	-		static		multi	-path fading	case 3
TFCI	-	off					

3GPP TSG RAN WG4 Meeting #23

R4-021027

Gyeongju, Korea 13th -17th May, 2002

		Form-v4
¥	25.101 CR 180 # ev - # Current version: 5.2.0 #	
For <u>HELP</u> on usi	ng this form, see bottom of this page or look at the pop-up text over the st symbol	ls.
Proposed change af	fects: ೫ (U)SIM ME/UE X Radio Access Network Core Netwo	rk
Title: ೫	Correction of Compressed Mode Performance Requirement	
Source: ೫	RAN WG4	
Work item code: 🕷 📒	TEI Date: ೫ 17/5/2002	
	A Release: % Rel-5 Ise one of the following categories: Use one of the following release. 2 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) e found in 3GPP TR 21.900. REL-5 (Release 5)	s:
Reason for change:	* The imprementation margin of the compressed mode SF/2 method requirements smaller than pucturing method. The imprementation margin should be consider as absolute value i.e. 2.5dB as same as the margin for other Case 2 tests.	
Summary of change.	A new result is combined with previous one. Furthermore, the imprementation margin is changed to 2.5 dB from 1.8 dB for the SF/2 mothod of compressed mode. As a result the figure of the requirement is changed to -14.6dB from – 15.4dB for SF/2 method and to –15.2dB from –15.4dB for puncturing method.	
	Isolated Impact Analysis: Correction to the requirement would not affect imprementations behaving according to current specification.	
	This correction would affect to the performence requrement of Downlink compressed mode test described in table 7.9.2 of TS34.121. But it would not affect any test procedures in the test specification.	
Consequences if not approved:	% It is hard for UE to achieve the regruirement of compressed mode.	
Clauses affected:	₩ 8.9.1.1	
Other specs affected:	% Other core specifications % X Test specifications 34.121 section 7.9 O&M Specifications O&M Specifications	
Other comments:	# Equivalent CRs in other Releases: CR178 cat. F to 25.101 v3.10.0, CR179 c to 25.101 v4.4.0	cat. A

How to create CRs using this form:

- 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.

Denemator	Unit	Test 1		
Parameter	Unit	Stage 1	Stage 2	Stage 3
Time in each stage	S	>15	5	0.5
\hat{I}_{or}/I_{oc}	dB	5		
I _{oc}	dBm/3.84 MHz		-60	
Information Data Rate	kbps	12.2		
Quality target on DTCH	BLER	0.01		
Propagation condition			Case 4	
Maximum_DL_Power	dB	7	-6.2	7
Minimum_DL_Power	dB		-18	
DL Power Control step size, Δ_{TPC}	dB		1	
Limited Power Increase	-		"Not used"	

Table 8.33: Test parameter for downlink power control, wind-up effects

Table 8.34: Requirements	s in downlink power	control, wind-up effects
--------------------------	---------------------	--------------------------

Parameter	Unit	Test 1, stage 3
$\frac{DPCH_E_c}{I_{or}}$	dB	-13.3

8.9 Downlink compressed mode

Downlink compressed mode is used to create gaps in the downlink transmission, to allow the UE to make measurements on other frequencies.

8.9.1 Single link performance

The receiver single link performance of the Dedicated Traffic Channel (DCH) in compressed mode is determined by the Block Error Ratio (BLER) and transmitted DPCH_Ec/Ior power ratio in the downlink.

The compressed mode parameters are given in clause A.5. Tests 1 and 2 are using Set 1 compressed mode pattern parameters from Table A.21 in clause A.5 while tests 3 and 4 are using Set 2 compressed mode patterns from the same table.

8.9.1.1 Minimum requirements

For the parameters specified in Table 8.35 the downlink $DPCH_{-E_{c}}$ power ratio

measured values, which are averaged over one slot, shall be below the specified value in Table 8.36 more than 90% of the time. The measured quality on DTCH shall be as required in Table 8.36.

Downlink power control is ON during the test. Uplink TPC commands shall be error free. System simulator shall increase the transmitted power during compressed frames by the same amount that UE is expected to increase its SIR target during those frames.

PAGE

Parameter	Unit	Test 1	Test 2	Test 3	Test 4
Delta SIR1	dB	0	3	0	3
Delta SIR after1	dB	0	3	0	3
Delta SIR2	dB	0	0	0	0
Delta SIR after2	dB	0	0	0	0
\hat{I}_{or}/I_{oc}	dB			9	
I _{oc}	dBm/3.84 MHz	-60			
Information Data Rate	kbps	12.2			
Propagation condition		Case 2			
Target quality value on DTCH	BLER	0.01			
Maximum_DL_Power	dB	7			
Minimum_DL_Power	dB	-18			
DL Power Control	dB	1			
step size, Δ_{TPC}	uD			I	
Limited Power Increase	-		"Not	used"	

Table 8.35: Test parameter for downlink compressed mode

Parameter	Unit	Test 1	Test 2	Test 3	Test 4		
$\frac{DPCH_E_c}{I_{or}}$	dB	-15.4<u>—</u>14.6	No requirements	-15.4<u>-15.2</u>	No requirements		
Measured quality of compressed and recovery frames	BLER	No requirements	<0.001	No requirements	<0.001		
Measured quality on DTCH	BLER	0.01 ± 30 %					

8.10 Blind transport format detection

Performance of Blind transport format detection is determined by the Block Error Ratio (BLER) values and by the measured average transmitted DPCH_Ec/Ior value.

8.10.1 Minimum requirement

For the parameters specified in Table 8.37 the average downlink \underline{DPCH}_{E_c} power

ratio shall be below the specified value for the BLER shown in Table 8.38. Table 8.37: Test parameters for Blind transport format detection

Parameter	Unit	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	
\hat{I}_{or}/I_{oc}	dB	-1			-3			
I _{oc}	dBm/3.84 MHz	-60						
Information Data Rate	kbps	12.2 (rate 1)	7.95 (rate 2)	1.95 (rate 3)	12.2 (rate 1)	7.95 (rate 2)	1.95 (rate 3)	
propagation condition	-	static			multi-path fading case 3			
TFCI	-	off						