TSG-RAN Meeting #14 Kyoto, Japan, 11 – 14, December, 2001

RP-010743

Title: Agreed CRs (R99 and Rel-4 Category A) to TS 25.225

Source: TSG-RAN WG1

Agenda item: 8.1.3

No.	Spec	CR	Rev	R1 T-doc	Subject	Release	Cat	W/I Code	V_old	V_new
1	25.225	035	1	R1-01-1273	Removal of references to Block STTD	R99	F	TEI	3.8.0	3.9.0
2	25.225	036	1	R1-01-1273	Removal of references to Block STTD	Rel-4	Α	TEI	4.2.0	4.3.0
3	25.225	039	-		Correction of measurement definition for UTRA Carrier RSSI and CPICH_Ec/No	R99	F	TEI	3.8.0	3.9.0
4	25.225	040	-		Correction of measurement definition for UTRA Carrier RSSI and CPICH_Ec/No	Rel-4	А	TEI	4.2.0	4.3.0

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*	25.	225	CR	035	₩ rev	1 *	Current vers	3.8.0 [#]
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Proposed	change a	affects	∷ ¥ (U)SIN	1 ME	/UE X	Radio A	ccess Networ	k X Core Network
Title:	ж	Rem	oval of referer	ces to Bloc	k STTD			
Source:	¥	TSG	RAN WG1					
Work iten	n code: Ж	TEI					Date: ∺	November 15, 2001
Category:	* #	F					Release: %	R99
		F A B C D Detaile	ne of the following (essential corresponds in (Addition of few (Functional mode) (Editorial mode) ed explanations and in 3GPP TR	ection) o a correction ature), odification of fication) of the above	n in an ear feature)		2	the following releases: (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 5)
Reason fo	or change		Block STTD is Trasmit Divers			P-CCP(CH it is replace	ed by Space Code
Summary	of chang	уе: Ж	References to	Block STT	D are rem	oved.		
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Clauses a	effected:	¥	3, 5.1					
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Other spe	cs	 #)	Other core	specificatio	ns ¥	25.221 25.433		02, 25.331, 25.423,
affected:			Test specifi O&M Speci			_		
Other con	nments:	¥						

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3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

BCH Broadcast Channel

BCCH Broadcast Control Channel (GSM)

BER Bit Error Rate
BLER Block Error Rate

CFN Connection Frame Number
CPICH Common Pilot Channel (FDD)
CRC Cyclic Redundancy Check
DCA Dynamic Channel Allocation

DCH Dedicated Channel

DPCH Dedicated Physical Channel

Ec/No Received energy per chip divided by the power density in the band

FACH Forward Access Channel

FCCH Frequency Correction Channel (GSM)

FDD Frequency Division Duplex

GSM Global System for Mobile Communication

GPS Global Positioning System
ISCP Interference Signal Code Power

P-CCPCH Primary Common Control Physical Channel

PCH Paging Channel

PLMN Public Land Mobile Network
PRACH Physical Random Access Channel
PDSCH Physical Downlink Shared Channel
PUSCH Physical Uplink Shared Channel
RACH Random Access Channel

RSCP Received Signal Code Power
RSSI Received Signal Strength Indicator

S-CCPCH Secondary Common Control Physical Channel

SCH Synchronisation Channel
SCTD Space Code Transmit Diversity

SF Spreading Factor
SFN System Frame Number
SIR Signal-to-Interference Ratio
STTD Space Time Transmit Diversity

TDD Time Division Duplex

TDMA Time Division Multiple Access

TrCH Transport Channel

TTI Transmission Time Interval

UE User Equipment

UMTS Universal Mobile Telecommunications System

USCH Uplink Shared Channel

UTRA UMTS Terrestrial Radio Access

UTRAN UMTS Terrestrial Radio Access Network

- NOTE 1: Measurements for TDD which are specified on the Primary CCPCH (P-CCPCH) are carried out on the P-CCPCH or on any other beacon channel, see [6].
- NOTE 2: For the beacon channels [6], the received power measurements shall be based on the received power for midamble m⁽¹⁾ if no <u>Space Code Transmit Diversity (SCTD) Block-STTD</u>-is applied to the P-CCPCH and on the sum of the received powers for midambles m⁽¹⁾ and m⁽²⁾ if <u>SCTD Block-STTD</u>-is applied to the P-CCPCH.
- NOTE 3: The UTRAN has to take into account the UE capabilities when specifying the timeslots to be measured in the measurement control message.
- NOTE 4: The line 'applicable for' indicates whether the measurement is applicable for inter-frequency and/or intra-frequency and furthermore for idle and/or connected mode.
- NOTE 5: The Interference part of the SIR measurement will be dependent on the receiver implementation, and will normally be different from the Timeslot ISCP measurement.
- NOTE 6: The measurement 'Timeslot ISCP' is only a measure of the intercell interference.
- NOTE 7: The term "antenna connector of the UE" used in this sub-clause to define the reference point for the UE measurements is defined in [17].

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Other specs	ж	Test	core specif	าร	Ж	25.221 25.433	, 25.224, 25. 3	102, 25.331,	25.423,
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- NOTE 5: The Interference part of the SIR measurement will be dependent on the receiver implementation, and will normally be different from the Timeslot ISCP measurement.
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- NOTE 7: The term "antenna connector of the UE" used in this sub-clause to define the reference point for the UE measurements is defined in [17].

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5.1.1 P-CCPCH RSCP

	Received Signal Code Power, the received power on P-CCPCH of own or neighbour cell. The
	reference point for the RSCP shall be the antenna connector of the UE.
Applicable for	idle mode, connected mode (intra-frequency & inter-frequency)

5.1.2 CPICH RSCP

Definition	Received Signal Code Power, the received power on one code measured on the Primary
	CPICH. The reference point for the RSCP shall be the antenna connector of the UE. (This
	measurement is used in TDD for monitoring FDD cells while camping on a TDD cell).
	If Tx diversity is applied on the Primary CPICH the received code power from each antenna shall
	be separately measured and summed together in [W] to a total received code power on the
	Primary CPICH.
Applicable for	idle mode, connected mode (inter-frequency)

5.1.3 Timeslot ISCP

Definition	Interference Signal Code Power, the interference on the received signal in a specified timeslot measured on the midamble. The reference point for the ISCP shall be the antenna connector of
	the UE.
Applicable for	connected mode (intra-frequency).

5.1.4 UTRA carrier RSSI

Definition	The received wide band power, including thermal noise and noise generated in the receiver,
	within the bandwidth defined by the receiver pulse shaping filter, for TDD within a specified
	timeslot.Received Signal Strength Indicator, the wide-band received power within the relevant
	channel bandwidth in a specified timeslot. Measurement shall be performed on a UTRAN DL
	carrier The reference point for the RSSI-measurement shall be the antenna connector of the UE.
Applicable for	idle mode, connected mode (intra- & inter-frequency)

5.1.5 GSM carrier RSSI

Definition	Received Signal Strength Indicator, the wide-band received power within the relevant channel
	bandwidth Measurement shall be performed on a GSM BCCH carrier. The reference point for the
	RSSI shall be the antenna connector of the UE.
Applicable for	idle mode, connected mode (inter-frequency)

5.1.6 SIR

Definition Signal to Interference Ratio, defined as: (RSCP/Interference)xSF. Where:							
	RSCP = Received Signal Code Power, the received power on the code of a specified DPCH or PDSCH.						
	Interference = The interference on the received signal in the same timeslot which can't be eliminated by the receiver.						
	SF = The used spreading factor.						
	The reference point for the SIR shall be the antenna connector of the UE.						
Applicable for	connected mode (intra-frequency)						

5.1.7 CPICH Ec/No

Definition	The received energy per chip divided by the power density in the band. The <u>CPICH</u> Ec/No is identical to <u>CPICH</u> RSCP/ <u>UTRA Carrier</u> RSSI. <u>The mMeasurement</u> shall be performed on the Primary CPICH. The reference point for the CPICH Ec/No shall be the antenna connector of the UE. (This measurement is used in TDD for monitoring FDD cells while camping on a TDD cell) If Tx diversity is applied on the Primary CPICH the received energy per chip (Ec) from each antenna shall be separately measured and summed together in [Ws] to a total received chip energy per chip on the Primary CPICH, before calculating the Ec/No.
Applicable for	idle mode, connected mode (inter-frequency)

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5.1.1 P-CCPCH RSCP

	Received Signal Code Power, the received power on P-CCPCH of own or neighbour cell. The reference point for the RSCP shall be the antenna connector of the UE.
Applicable for	idle mode, connected mode (intra-frequency & inter-frequency)

5.1.2 CPICH RSCP

Definition	Received Signal Code Power, the received power on one code measured on the Primary
	CPICH. The reference point for the RSCP shall be the antenna connector of the UE. (This
	measurement is used in TDD for monitoring FDD cells while camping on a TDD cell).
	If Tx diversity is applied on the Primary CPICH the received code power from each antenna shall
	be separately measured and summed together in [W] to a total received code power on the
	Primary CPICH.
Applicable for	idle mode, connected mode (inter-frequency)

5.1.3 Timeslot ISCP

Definition	Interference Signal Code Power, the interference on the received signal in a specified timeslot measured on the midamble. The reference point for the ISCP shall be the antenna connector of
	the UE.
Applicable for	connected mode (intra-frequency).

5.1.4 UTRA carrier RSSI

Definition	The received wide band power, including thermal noise and noise generated in the receiver,
	within the bandwidth defined by the receiver pulse shaping filter, for TDD within a specified
	timeslot.Received Signal Strength Indicator, the wide-band received power within the relevant
	channel bandwidth in a specified timeslot. Measurement shall be performed on a UTRAN DL
	carrier. The reference point for the RSSI-measurement shall be the antenna connector of the UE.
Applicable for	idle mode, connected mode (intra- & inter-frequency)

5.1.5 GSM carrier RSSI

Definition	Received Signal Strength Indicator, the wide-band received power within the relevant channel
	bandwidth Measurement shall be performed on a GSM BCCH carrier. The reference point for the
	RSSI shall be the antenna connector of the UE.
Applicable for	idle mode, connected mode (inter-frequency)

5.1.6 SIR

Definition	Signal to Interference Ratio, defined as: (RSCP/Interference)xSF. Where:				
	RSCP = Received Signal Code Power, the received power on the code of a specified DPCH or PDSCH.				
	Interference = The interference on the received signal in the same timeslot which can't be eliminated by the receiver.				
	SF = The used spreading factor.				
	The reference point for the SIR shall be the antenna connector of the UE.				
Applicable for	connected mode (intra-frequency)				

5.1.7 CPICH Ec/No

Definition	The received energy per chip divided by the power density in the band. The <u>CPICH</u> Ec/No is identical to <u>CPICH</u> RSCP/ <u>UTRA Carrier</u> RSSI. <u>The mMeasurement</u> shall be performed on the Primary CPICH. The reference point for the CPICH Ec/No shall be the antenna connector of the UE. (This measurement is used in TDD for monitoring FDD cells while camping on a TDD cell) If Tx diversity is applied on the Primary CPICH the received energy per chip (Ec) from each antenna shall be separately measured and summed together in [Ws] to a total received chip energy per chip on the Primary CPICH, before calculating the Ec/No.
Applicable for	idle mode, connected mode (inter-frequency)