TSG RAN Meeting #28 **RP-050346**
Quebec, Canada, 1 - 3 June 2005

Title **Revised CRs: 25.331CR2606r2&CR2607r2**
Source **Ericsson**
Agenda Item **7.3.5**

RAN1 Tdoc	Spec	CR	Rev	Rel	Cat	Current Version	Subject	Work item	Remarks
-	25.331	2606	2	Rel-5	F	5.12.0	UE behaviour for DCH SIR target setting for Downlink power control	TEI-5	Revisions to RAN2 agreed CRs in RP-050302 aiming to avoid that the text suggests the opposite of the intended UE behaviour
-	25.331	2607	2	Rel-6	A	6.5.0	UE behaviour for DCH SIR target setting for Downlink power control	TEI-5	

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Tdoc ⌘RP-050346

CR-Form-v7.1

CHANGE REQUEST

⌘ **25.331** **CR** **2607** ⌘ **rev** **2** ⌘ Current version: **6.5.0** ⌘

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

Title:	⌘	UE behaviour for DCH SIR target setting for Downlink power control
Source:	⌘	Ericsson
Work item code:	⌘	TEI-5
Date:	⌘	31/05/2005
Category:	⌘	**A**
Release:	⌘	Rel-6

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

Use one of the following releases:
Ph2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)
Rel-7 (Release 7)

Reason for change:	⌘	The required Ec/No to achieve a target BLER for a particular transport format is different from the required Ec/No to achieve the target BLER for another transport format. As highlighted by LS:s from RAN4 [R4-050267] and RAN1 [R1-050563], current text in 25.331 regarding DCH quality target is not sufficiently clear with respect to that the SIR target should be set on a Transport Channel level, and not for each Transport Format.
Summary of change:	⌘	It is clarified that the SIR target shall be set on a Transport Channel level, and not for each Transport Format. This means that the UE is not to compensate for the fact that the required Ec/No to achieve a target BLER for a particular transport format is different from the required Ec/No to achieve the target BLER for another transport format.
Consequences if not approved:	⌘	If the CR is not approved, different UE implementations will exist, where UEs will or will not try to compensate for the difference in required Ec/No in for the network unpredictable ways. This unpredictable UE behaviour will make it either impossible or highly inefficient for the network to ensure sufficient quality of the DCH, which is especially important for the case of DCCH. **Isolated impact analysis:** The CR has isolated impact to DL power control. If this is not implemented in the UE would result in that either too high power need to be used on a Transport channel or that non sufficient quality would be achieved in cases when there are changes in the used transport format if these

transport formats have a difference in requirements.

Impact on test specifications:
No impact is foreseen.

Clauses affected:	⌘	8.6.5.4			
		Y	**N**		
Other specs affected:	⌘		**X**	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

8.6.5.4 DCH quality target

If the IE "DCH quality target" is included, the UE shall:

1> set, at physical channel establishment, ~~an~~ the initial downlink target SIR value based on the received IE "DCH quality target" for the transport channel with respect to all transport formats;

1> adjust the target SIR for the downlink power control to meet the quality target received in the IE "DCH quality target" for the transport channel. The UE shall not compensate for the fact that the required SIR to achieve a target BLER for a particular transport format may be different from the required SIR to achieve the target BLER for another transport format.

NOTE 1: Adjusting the target SIR is possible to do continuously by the UE if a CRC exists in all transport formats in the downlink TFS for a DCH. If a CRC does not exist in all transport formats, the UE can only adjust the target SIR when receiving transport formats containing a CRC and the UE has knowledge about the transport format according to [27].

NOTE 2: If the UTRAN configures a UE to use blind transport format detection and configures a transport channel such that single transport format detection [27] must be used to detect the TF, then it is not possible for the UE to maintain a quality target for that transport channel.

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CHANGE REQUEST

⌘ **25.331** **CR** **2606** ⌘ **rev** **2** ⌘ Current version: **5.12.0** ⌘

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Source:	⌘	Ericsson
Work item code:	⌘	TEI-5
Date:	⌘	31/05/2005
Category:	⌘	**F**
Release:	⌘	Rel-5

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Other comments:	⌘				

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