3GPP TSG RAN Meeting #28   **RP-050214**
Quebec, Canada, 1 - 3 June 2005

Title   **CRs (Rel-5 & Rel-6) to 25.101 for the removal of Tx diversity closed loop mode2**
Source   **3GPP TSG RAN WG4 (Radio)**
Agenda Item   **7.7.5**

WG Tdoc	Spec	CR	R	Cat	Rel	Curr Ver	Title	Work Item
R4-050405	25.101	416		C	Rel-5	5.14.0	Feature Clean Up: Removal of Tx diversity closed loop mode2	TEI5
R4-050406	25.101	417		C	Rel-6	6.7.0	Feature Clean Up: Removal of Tx diversity closed loop mode2	TEI6

CR-Form-v7

CHANGE REQUEST

⌘ **25.101** CR **416** ⌘ **rev** ⌘ Current version: **5.14.0** ⌘

*For **HELP** 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: ⌘	Feature Clean Up: Removal of Tx diversity closed loop mode2
Source: ⌘	3GPP TSG RAN WG4 (Radio)

Work item code:⌘	TEI5	*Date:* ⌘	16/05/2005

Category: ⌘	**C**	*Release:* ⌘	Rel-5

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:
2 *(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)*

Reason for change: ⌘	RAN#27 decision on Feature Clean-up

Summary of change:⌘	Sub section 8.6.2.1 test 2 Demodulation of DCH in Closed Loop Transmit Diversity Mode 2 removed **Isolated Impact Analysis** Functionality removed: Closed Loop Transmit Diversity Mode 2 Isolated impact statement: Since functionality is removed, UE implementations are not affected. Would affect UTRAN implementations supporting the removed functionality.

Consequences if not approved: ⌘	Introduction of new features and evolution of the existing feature remain slow also in the future.

Clauses affected: ⌘	8.6.2.1

	Y	N		
Other specs affected: ⌘	X		Other core specifications ⌘	25.211, 25.214, 25.331, 25.423, 25.433 34.121
	X		Test specifications	
		X	O&M Specifications	

Other comments: ⌘	

How to create CRs using this form:
Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm.
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 ftp://ftp.3gpp.org/specs/ 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.

8.6.2 Demodulation of DCH in closed loop transmit diversity mode

The receive characteristic of the dedicated channel (DCH) in closed loop transmit diversity mode is determined by the Block Error Ratio (BLER). DCH is mapped into in Dedicated Physical Channel (DPCH).

8.6.2.1 Minimum requirement

For the parameters specified in Table 8.21 the average downlink $\frac{DPCH\_E_c}{I_{or}}$ power ratio shall be below the specified value for the BLER shown in Table 8.22.

Table 8.21: Test Parameters for DCH Reception in closed loop transmit diversity mode (Propagation condition: Case 1)

Parameter	Unit	Test 1 (Mode 1)	Test 2 (Mode 2)
$\hat{I}_{or}/I_{oc}$	dB	9	9
I_{oc}	dBm/3.84 MHz	-60	-60
Information data rate	kbps	12.2	12.2
Feedback error rate	%	4	4
Closed loop timing adjustment mode	-	1	1

Table 8.22: Test requirements for DCH reception in closed loop transmit diversity mode

Test Number	$\frac{DPCH\_E_c}{I_{or}}$ (see note)	BLER
1	-18.0 dB	10^{-2}
2	-18.3 dB	10^{-2}
NOTE:	This is the total power from both antennas. Power sharing between antennas are feedback mode dependent as specified in TS25.214.	

8.6.3 Demodulation of DCH in Site Selection Diversity Transmission Power Control mode

CR-Form-v7

CHANGE REQUEST

⌘   **25.101** CR **417**   ⌘**rev**   ⌘ Current version: **6.7.0** ⌘

*For **HELP** 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: ⌘	Feature Clean Up: Removal of Tx diversity closed loop mode2	
Source: ⌘	3GPP TSG RAN WG4 (Radio)	
Work item code:⌘	TEI6	***Date:*** ⌘ 16/05/2005

Category: ⌘ **C**	***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:
2   *(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)*

Reason for change: ⌘	RAN#27 decision on Feature Clean-up

Summary of change:⌘	Sub section 8.6.2.1 test 2 Demodulation of DCH in Closed Loop Transmit Diversity Mode 2 removed **Isolated Impact Analysis** Functionality removed: Closed Loop Transmit Diversity Mode 2 Isolated impact statement: Since functionality is removed, UE implementations are not affected. Would affect UTRAN implementations supporting the removed functionality.

Consequences if not approved: ⌘	Introduction of new features and evolution of the existing feature remain slow also in the future.

Clauses affected: ⌘	8.6.2.1

		Y	N		
Other specs affected:	⌘	X		Other core specifications ⌘	25.211, 25.214, 25.331, 25.423, 25.433 34.121
		X		Test specifications	
			X	O&M Specifications	

Other comments: ⌘	

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 ftp://ftp.3gpp.org/specs/ 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.

8.6.2 Demodulation of DCH in closed loop transmit diversity mode

The receive characteristic of the dedicated channel (DCH) in closed loop transmit diversity mode is determined by the Block Error Ratio (BLER). DCH is mapped into in Dedicated Physical Channel (DPCH).

8.6.2.1 Minimum requirement

For the parameters specified in Table 8.21 the average downlink $\frac{DPCH\_E_c}{I_{or}}$ power ratio shall be below the specified

value for the BLER shown in Table 8.22.

**Table 8.21: Test Parameters for DCH Reception in closed loop transmit diversity mode
(Propagation condition: Case 1)**

Parameter	Unit	Test 1 (Mode 1)	~~Test 2 (Mode 2)~~
$\hat{I}_{or}/I_{oc}$	dB	9	~~9~~
I_{oc}	dBm/3.84 MHz	-60	~~-60~~
Information data rate	kbps	12.2	~~12.2~~
Feedback error rate	%	4	~~4~~
Closed loop timing adjustment mode	-	1	~~1~~

Table 8.22: Test requirements for DCH reception in closed loop transmit diversity mode

Test Number	$\frac{DPCH\_E_c}{I_{or}}$ **(see note)**	BLER
1	-18.0 dB	10^{-2}
~~2~~	~~-18.3 dB~~	~~10^{-2}~~
NOTE: This is the total power from both antennas. Power sharing between antennas are feedback mode dependent as specified in TS25.214.		

8.6.3 Demodulation of DCH in Site Selection Diversity Transmission Power Control mode