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

RP-010744

Title: **Agreed CR (Rel-4) to TS 25.214**

Source: **TSG-RAN WG1**

Agenda item: **8.1.4**

No.	Spec	CR	Rev	R1 T-doc	Subject	Release	Cat	W/I Code	V_old	V_new
1	25.214	217	2	R1-01-1304	DSCH power control clarification	Rel-4	F	RInImp-DSCHsho	4.2.0	4.3.0

CR-Form-v4

CHANGE REQUEST

⌘	**25.214** CR **217**	⌘ rev **2** ⌘	Current version:	**4.2.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: ⌘   (U)SIM ☐   ME/UE **X**   Radio Access Network **X**   Core Network ☐

Title: ⌘	DSCH power control clarification

Source: ⌘	TSG RAN WG1

Work item code: ⌘	RInImp-DSCHsho	***Date:*** ⌘	22.11.2001

Category: ⌘	**F**	***Release:*** ⌘	REL-4

<table>
<tr><td colspan="2"><i>Use <u>one</u> of the following categories:</i></td><td colspan="2"><i>Use <u>one</u> of the following releases:</i></td></tr>
<tr><td>F</td><td><i>(correction)</i></td><td>2</td><td><i>(GSM Phase 2)</i></td></tr>
<tr><td>A</td><td><i>(corresponds to a correction in an earlier release)</i></td><td>R96</td><td><i>(Release 1996)</i></td></tr>
<tr><td>B</td><td><i>(addition of feature),</i></td><td>R97</td><td><i>(Release 1997)</i></td></tr>
<tr><td>C</td><td><i>(functional modification of feature)</i></td><td>R98</td><td><i>(Release 1998)</i></td></tr>
<tr><td>D</td><td><i>(editorial modification)</i></td><td>R99</td><td><i>(Release 1999)</i></td></tr>
<tr><td colspan="2">Detailed explanations of the above categories can</td><td>REL-4</td><td><i>(Release 4)</i></td></tr>
<tr><td colspan="2">be found in 3GPP TR 21.900.</td><td>REL-5</td><td><i>(Release 5)</i></td></tr>
</table>

Reason for change: ⌘	The current specification not explicitly stating the related UE capability aspect with DSCH power control operation and potentially the cell primary state principel can be mixed between SSDT and DSCH power control.
Summary of change: ⌘	This CR clarifies that the support for the DSCH related power control procedures is required from those UEs that support DSCH. Also it is clarified that the cell primary status for DSCH power control purposes may be different that the cell status for SSDT
Consequences if not approved: ⌘	Possibility for misunderstanding of the specifications

Clauses affected: ⌘	

Other specs affected: ⌘	☐ Other core specifications ⌘ ☐ Test specifications ☐ O&M Specifications

Other comments: ⌘	Isolated impact: This CR will not impact the use of any other Rel'4 features besides DSCH power control operation

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.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.

5.2.2 PDSCH

The PDSCH power control can be based on the following solutions, which are selectable, by the network:

- Inner-loop power control based on the power control commands sent by the UE on the uplink DPCCH.

- Slow power control.

UTRAN may use the SSDT signalling to determine what power offset to use for PDSCH with respect to the associated downlink DCH when more than one cell may be in the active set. The support for a combination where SSDT signaling is used in the uplink, but SSDT is not necessarily used in the downlink, is required only from the UEs that support the use of DSCH.

If the downlink direction uses SSDT for the DCH transmission, then the TPC procedure in the UE to generate TPC commands to control the network transmit power is as specified in 5.2.1.4.2.

If the downlink transmission does not use SSDT operation, then the TPC procedure in the UE to generate TPC commands to control the network transmit power is as specified in 5.2.1.2.1.

The PDSCH power offset to be used with respect to the associated DCH depends on whether the cell transmitting PDSCH is determined to be a primary one or not.

The SSDT commands sent by the UE are averaged in UTRAN side over one or more frames. The averaging window length parameter as the number of frames to average over, *SSDT_aveg_window*, and the parameter for the required number of received primary SSDT commands, *SSDT_primary_commands*, during the averaging window for declaring primary status for a cell are given by UTRAN.

If the number of primary ID codes in the uplink received during the averaging window is less than the parameter *SSDT_primary_commands*, then a cell shall consider itself as non-primary and uses the power offset given from UTRAN to the cell with the data for the PDSCH.

If the number of primary ID codes in the uplink received during the averaging window is equal or more than the parameter *SSDT_primary_commands* defines, the cell shall use the power control parameterisation for the primary case. When the cell considers itself as primary it uses both the power offset for the PDSCH frame for the given UE and the *Enhanced DSCH Power Offset* parameter given by the UTRAN for the primary case.

The cell status (primary/non-primary) obtained from the rules above may differ from the cell status for SSDT transmission in the downlink depending on the values given by UTRAN for the parameters for averaging window length and the required number of received primary SSDT commands for cell status determination.