## TSG-RAN Working Group 2 (Radio layer 2 and Radio layer 3) Sophia Antipolis, August 16<sup>th</sup> to 20<sup>th</sup> 1999

TSGR2#6(99)870

Agenda Item:	4.3
Source:	Nokia
Title:	CR to 25.303 on incorporation of DSCH transmission with one TFCI
Document for:	Approval

Proposal to incorporate DSCH transmission with one TFCI-word on the physical layer. Liaisoned to RAN WG3 from previous meeting as Tdoc 703.

3GPP TSG-RAN meeting #5		Document <b>RP 99???</b>	
Korea, 6-8 October 1999			
	3G CHANGE REQUEST	lease see embedded help file at the bottom of this age for instructions on how to fill in this form correctly.	
	25.303 CR 00?	Current Version: 3.0.0	
	3G specification number ↑ ↑ CR numb	er as allocated by 3G support team	
For submision to TSG       RAN#5       for approval       X       (only one box should be marked with an X)         list TSG meeting no. here ↑       for information       be marked with an X)			
Form: 3G CR cover sheet, version 1.0 The latest version of this form is available from: <u>ftp://ftp.3gpp.org/Information/3GCRF-xx.rtf</u>			
Proposed changes (at least one should be n	ge affects: USIM ME X	UTRAN X Core Network	
Source:	TSG-RAN WG2	Date: 16/08/99	
Subject:	Incorporation of DSCH transmission with one TFC		
3G Work item:			
Category:       F         A         (only one category       B         shall be marked       C         with an X)       D	<ul> <li>Correction</li> <li>Corresponds to a correction in a 2G specification</li> <li>Addition of feature</li> <li>Functional modification of feature</li> <li>Editorial modification</li> </ul>		
Reason for change:	Addition of a way to use DSCH after receiving confirmation from RAN WG3 that this method will be possible.		
Clauses affected:         Added as new 7.3.2, previous 7.3.2 will shift to 7.3.3			
Other specs affected:	Other 3G core specifications $\rightarrow$ List of CROther 2G core specifications $\rightarrow$ List of CRMS test specifications $\rightarrow$ List of CRBSS test specifications $\rightarrow$ List of CRO&M specifications $\rightarrow$ List of CRO&M specifications $\rightarrow$ List of CR	s: s: s: s:	
<u>Other</u> comments:			

help.doc

<----- double-click here for help and instructions on how to create a CR.

## 7.3.2 Acknowledged-mode data transmission in DCH / DCH + DSCH with one TFCI

[Note: For release-99 this example is only valid in the case where SRNC = CRNC.]



Figure 1: Example of acknowledged-mode data transmission on DSCH

Figure 1 shows an example of acknowledged-mode data transmission on DSCH in the DCH / DCH + DSCH substate. First RLC in SRNC requests data transmission from MAC-d. MAC-d passes the data on to MAC-sh, which schedules the DSCH transmission and determines the TFI for the data. The TFI and CFN (connection frame number) for transmission are given back to MAC-d.

MAC-sh selects the TFI and transmits the data for DSCH while MAC-d transmits the TFI synchronised with the transmission of any DCH data and TFI:s intended for transmission in the same frame. TFI for the DSCH and TFI2 for the DCH are combined into the same TFCI on the physical layer and transmitted on the DPCCH (dedicated physical control channel) of the associated DPCH (dedicated physical channel). The DSCH data is transmitted separately on the PDSCH (physical downlink shared channel). TFI is used to decode DSCH data, which is then forwarded through MAC-sh and MAC-d to the receiving RLC. An acknowledgement is eventually sent by the UE-RLC mapped to a DCH, unless the DCH is released before the acknowledgement.