TSG-RAN Meeting #15
Jeju-do, Korea, 5 - 8 March 2002

RP-020084

Title: **Agreed CRs (Rel-5) for WI "Enhancement on the DSCH hard split mode"**

Source: **TSG-RAN WG2**

Agenda item: **9.2.6**

Doc-1st-	Status-	Spec	CR	Rev	Phase	Subject	Cat	Version	Versio	Workite
R2-020386	agreed	25.331	1129	2	Rel-5	Support of flexible hard split mode	B	4.3.0	5.0.0	RInImp-DSCHhsp

3GPP TSG-RAN WG2 Meeting #27
Orlando, U.S.A., 18~22 Feb. 2001

R2-020386

CR-Form-v5

CHANGE REQUEST

⌘ **25.331** **CR** **1129** ⌘ **rev** **r2** ⌘ Current version: **4.3.0** ⌘

*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:	⌘	Support of flexible hard split mode
Source:	⌘	TSG-RAN WG2
Work item code:	⌘	RInImp-DSCHhsp
Date:	⌘	2002-02-15
Category:	⌘	**B**
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)

Reason for change:	⌘	Flexible hard split mode was proposed to enhance the current hard split mode. An expected impact on RAN WG2 was already clarified and approved during the last several meetings. This document reflects such inpact on TS 25.331.
Summary of change:	⌘	Remove the resctriction that TFCI (field1) and TFCI (field2) have a static length of five bits
Consequences if not approved:	⌘	could not support flexible hard split mode which was already approved new feature of release 5 in RAN WG1.

Clauses affected:	⌘	10.3.5.20
Other specs affected:	⌘	☐ Other core specifications ⌘ ☐ Test specifications ☐ 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/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.

10.3.5.20 Transport Format Combination Set

Indicates the allowed combinations of already defined Transport formats and the mapping between these allowed TFCs and the corresponding TFCI values.

For TDD, different coded composite transport channels have independent transport format combination sets and thus independent TFCI values.

For FDD, Where the UE is assigned access to one or more DSCH transport channels, a TFCI(field2) is used to signal the transport format combination for the DSCH. The following two cases exist:

- Case 1:
  Using one TFCI-word on the physical layer. A logical split determines the available number of transport format combinations for DCH and DSCH.

- Case 2:
  Using split TFCI on the physical layer. Two TFCI-words, TFCI (field1) and TFCI (field2), ~~each having a static length of five bits,~~ are used and they are block coded seperately.

Information Element/Group name	Need	Multi	IE type and reference	Semantics description
CHOICE *TFCI signalling*	MP			'Normal' : meaning no split in the TFCI field (either 'Logical' or 'Hard') 'Split' : meaning there is a split in the TFCI field (either 'Logical' or 'Hard'). This value is only valid for FDD downlink when using DSCH.
>Normal				
>>TFCI Field 1 Information	MP		TFCS explicit Configuration 10.3.5.13	
>Split				
>>Split type	OP		Enumerated ('Hard', 'Logical')	'Hard' : meaning that TFCI (field 1) and TFCI (field 2) are ~~each 5 bits long and each field is~~ block coded separately. 'Logical' : meaning that on the physical layer TFCI (field 1) and TFCI (field 2) are concatenated, field 1 taking the most significant bits and field 2 taking the least significant bits). The whole is then encoded with a single block code.
>>Length of TFCI(field2)	OP		Integer (1..10)	This IE indicates the length measured in number of bits of TFCI(field2)
>>TFCI Field 1 Information	OP		TFCS explicit Configuration 10.3.5.13	
>>TFCI Field 2 Information	OP		TFCI field 2 information 10.3.5.12	

CHOICE *TFCI signalling*	Condition under which *TFCI signalling type* is chosen
Normal	It is chosen when no split in the TFCI field.
Split	It is chosen when split in the TFCI field. This value is only valid for FDD downlink when using DSCH.

10.3.5.21 Transport Format Combination Set Identity

NOTE: Only for TDD.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
TFCS ID	MD		Integer (1...8)	Indicates the identity of every TFCS within a UE. Default value is 1.
Shared Channel Indicator	MP		Boolean	TRUE indicates the use of shared channels. Default is false.

10.3.5.22 Transport Format Combination Subset

Indicates which Transport format combinations in the already defined Transport format combination set are allowed.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
CHOICE *Subset representation*	MP			
>Minimum allowed Transport format combination index			Transport format combination 10.3.5.19	
>Allowed transport format combination list		1 to <maxTFC>		
>>Allowed transport format combination	MP		Transport format combination 10.3.5.19	
>Non-allowed transport format combination list		1 to <maxTFC>		
>>Non-allowed transport format combination	MP		Transport format combination 10.3.5.19	
>Restricted TrCH information		1 to <maxTrCH>		
>>Uplink transport channel type	MP		Enumerated(DCH, USCH)	USCH is TDD only
>>Restricted UL TrCH identity	MP		Transport channel identity 10.3.5.18	
>>Allowed TFIs	OP	1 to <maxTF>		
>>>Allowed TFI	MP		Integer(0..31)	
>Full transport format combination set				(No data)