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

TSGRP#15(02) 0176

Title: **Agreed CRs to TS 25.435**

Source: **TSG-RAN WG3**

Agenda item: **7.3.3/7.3.4**

RP_Num	Tdoc_Num	Specification	CR_Num	Revision_Num	3G_Release	CR_Subject	CR_Category	Cur_Ver_Num	Workitem
RP-020176	R3-020834	25.435	076	1	R99	Transport Bearer replacement for the USCH	F	3.9.0	TEI
RP-020176	R3-020835	25.435	077	1	Rel-4	Transport Bearer replacement for the USCH	A	4.2.0	TEI

3GPP TSG-RAN3 #27 Meeting
Orlando, USA, 18 – 22 Feb 2001

Tdoc R3-020834

CR-Form-v3

CHANGE REQUEST

⌘ **25.435 CR 076** ⌘ rev **1** ⌘ Current version: **3.9.0** ⌘

*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 ☐ Radio Access Network **X** Core Network ☐

Title:	⌘	Transport Bearer replacement for the USCH
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	February 2002
Category:	⌘	**F**
Release:	⌘	R99

Use one of the following categories:
F *(essential 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:	⌘	The NBAP specification offers the possibility in the Synchronised Radio Link Reconfiguration to replace the transport bearer used for the DSCH and [TDD – USCH]. However, the exact behaviour for such a transport bearer replacement for USCH is not specified.
Summary of change:	⌘	The subclause for DSCH transport bearer replacement is extended to include the USCH. Rev.1: Subheaders added; 1 sentence removed. Impact analysis: This CR has isolated impact with the previous version of the specification (same release), because it only affects the Transport Bearer Replacement for the USCH. The CR may have impact under functional point of view. The impact is considered small since the CR is in line with the implicit procedure description which could be derived from the previously existing text in the Specifications.
Consequences if not approved:	⌘	If this CR is not approved, the specification will remain incomplete.

Clauses affected:	⌘	5.8.2			
Other specs affected:	⌘	**X**	Other core specifications	⌘	TS 25.425 v3.6.0 CR 45 TS 25.425 v4.2.0 CR 46 TS 25.435 v4.3.0 CR 77
		☐	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://www.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 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.

5.8 General

5.8.1 Association between transport bearer and data/control frames

Table 1 shows how the data and control frames are associated to the transport bearers. 'yes' indicates that the control frame is applicable to the transport bearer, 'no' indicates that the control frame is not applicable to the transport bearer.

Table 1

Transport bearer used for	Associated data frame	Associated control frames					
		Timing Adjust-ment	DL Transport Channels Synchronisat-ion	Node Synchroni-sation	Dynamic PUSCH Assignment	Timing Advance	DSCH TFCI Signalling
RACH	RACH DATA FRAME	no	no	no	no	no	no
FACH	FACH DATA FRAME	yes	yes	yes	no	no	no
CPCH	CPCH DATA FRAME	no	no	no	no	no	no
PCH	PCH DATA FRAME	yes	yes	yes	no	no	no
DSCH	DSCH DATA FRAME	yes	yes	yes	no	no	no
USCH	USCH DATA FRAME	no	no	no	yes	yes	no
TFCI2	-	yes	yes	yes	no	no	yes

5.8.2 DSCH / [TDD – USCH] transport bearer replacement

As described in NBAP [6], transport bearer replacement can be achieved for a DSCH [TDD – or USCH] by using the Synchronised Radio Link Reconfiguration Preparation procedure in combination with the Synchronised Radio Link Reconfiguration Commit procedure. The following steps can be discerned:

1) The new transport bearer is established after which 2 transport bearers exist in parallel.

2) The transport channel(s) is/are switched to the new transport bearer.

3) The old transport bearer is released.

DSCH transport bearer replacement, step 1:

~~In step 1), communication~~ Communication on the old transport bearer continues as normal. In addition, the Node B shall support DSCH DATA FRAMEs, the DL Transport Channel Synchronisation procedure (see sub-clause 5.3) and the DL Timing Adjustment procedure (see sub-clause 5.4) on the new bearer. This enables the CRNC to determine the timing on the new transport bearer. DSCH DATA FRAMEs transported on the new transport bearer shall not be transmitted on the Uu Interface before the CFN indicated in the RADIO LINK RECONFIGURATION COMMIT message.

[TDD - USCH transport bearer replacement, step 1:]

[TDD - Communication on the old transport bearer continues as normal.]

DSCH [/TDD – USCH] Transport Bearer Replacement step 2:

Regarding step 2), the moment of switching is determined as follows:

- The DSCH DATA FRAMEs [TDD – or USCH DATA FRAMEs] shall be transported on the new transport bearer from the CFN indicated in the RADIO LINK RECONFIGURATION COMMIT message.

Starting from this CFN the Node B shall support all applicable Common Transport Channels frame protocol procedures on the new transport bearer and no requirements exist regarding support of Common Transport Channels frame protocol procedures on the old transport bearer.

DSCH [/TDD – USCH] Transport Bearer Replacement step 3:

Finally in step 3), the old transport bearer is released.

6 Frame Structure and Coding

3GPP TSG-RAN3 #27 Meeting
Orlando, USA, 18 – 22 Feb 2001

Tdoc R3-020835

CR-Form-v3

CHANGE REQUEST

⌘ **25.435 CR 077** ⌘ rev **1** ⌘ Current version: **4.2.0** ⌘

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Title:	⌘	Transport Bearer replacement for the USCH
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	February 2002
Category:	⌘	**A**
Release:	⌘	Rel-4

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Other comments: ⌘

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FACH	FACH DATA FRAME	yes	yes	yes	no	no	no	no
CPCH	CPCH DATA FRAME	no	no	no	no	no	no	no
PCH	PCH DATA FRAME	yes	yes	yes	no	no	no	no
DSCH	DSCH DATA FRAME	yes	yes	yes	no	no	no	no
USCH	USCH DATA FRAME	no	no	no	yes	yes	no	yes
TFCI2	-	yes	yes	yes	no	no	yes	no

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[TDD - USCH transport bearer replacement, step 1:]

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DSCH [/TDD – USCH] Transport Bearer Replacement step 3:

Finally in step 3), the old transport bearer is released.

6 Frame Structure and Coding