TSG RAN Meeting #28 **RP-050251**
Quebec, Canada, 1 - 3 March 2005

Title **CRs (Rel-6 category F) for corrections of MBMS in RAN1 specifications**
Source **TSG RAN WG1**
Agenda Item **8.4**

RAN1 Tdoc	Spec	CR	Rev	Rel	Cat	Current Version	Subject	Work item	Remarks
R1-050530	25.212	217	1	Rel-6	F	6.4.0	MBMS related corrections	MBMS-RAN	
R1-050531	25.214	392	1	Rel-6	F	6.5.0	Removal of MBMS Rake Combining	MBMS-RAN	Linked CR (CR 2548 to 25.331) is packed in separate package.

3GPP TSG-RAN1 Meeting #41
Athens, Greece, May 9-13, 2005

Tdoc ⌘R1-050530

CR-Form-v7.1

CHANGE REQUEST

⌘ **25.212** **CR** **217** ⌘ **rev** **1** ⌘ Current version: **6.4.0** ⌘

*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 [X] Core Network [ ]

Title:	⌘	MBMS related corrections
Source:	⌘	RAN WG1
Work item code:	⌘	MBMS-RAN
Date:	⌘	9/05/2005
Category:	⌘	**F**
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:

Ph2	*(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)*
Rel-7	*(Release 7)*

Reason for change:	⌘	The current assumption that if S-CCPCHs can be soft combined, then they will be conbinable during a period of consecutive TTIs, is not correctly reflected.
Summary of change:	⌘	In section 4.3.2, the change clarifies that soft combining will be performed over number of TTIs, not frames.
Consequences if not approved:	⌘	The current assumption that if S-CCPCHs can be soft combined, then they will be conbinable during a period of consecutive TTIs, is not correctly reflected.

Clauses affected:	⌘	Section 4.3.2

		Y	N		
Other specs Affected:	⌘		X	Other core specifications	⌘
			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.

4.3.2 Transport format detection based on TFCI

If a TFCI is available, then TFCI based detection shall be applicable to all TrCHs within the CCTrCH. The TFCI informs the receiver about the transport format combination of the CCTrCHs. As soon as the TFCI is detected, the transport format combination, and hence the transport formats of the individual transport channels are known.

If higher layers indicate that S-CCPCHs can be soft combined during a period of consecutive TTIs, then the same TFC is used on those S-CCPCHs ~~during~~ for ~~the radio frames when soft combining is possible~~each combinable TTI. The UE may therefore detect TFCI on one S-CCPCH to determine the TFC on all S-CCPCHs that can be soft combined. (S-CCPCH soft combining is further specified in [4]).

----------[END OF MODIFIED SECTION]----------

3GPP TSG-RAN1 Meeting #41
Athens, Greece, May 9-13, 2005

Tdoc ⌘ R1-050531

CR-Form-v7.1

CHANGE REQUEST

⌘ **25.214** **CR** **392** ⌘ **rev** **1** ⌘ Current version: **6.5.0** ⌘

*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 [X] Core Network [ ]

Title:	⌘	Removal of MBMS Rake Combining
Source:	⌘	RAN WG1
Work item code:	⌘	MBMS-RAN
Date:	⌘	11/05/2005
Category:	⌘	**F**
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)*
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Use one of the following releases:

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R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*
Rel-7	*(Release 7)*

Reason for change:	⌘	At RAN#27, following discussion of RP-050130, it was agreed to remove the RAKE combining option for MBMS PTM transmission and the working groups were tasked to correct the specifications accordingly. This CR implements the decision made by RAN#27
Summary of change:	⌘	References to "S-CCPCH clusters" are changed to "S-CCPCH". Note that this is consistent with MBMS UE capability definitions in RAN2.
Consequences if not approved:	⌘	If the CR is not approved the signalling for rake combining will remain in the specifications, and the decision of RAN#27 will not be implemented.

Clauses affected:	⌘	Sections 3.1 and 4.2.2

	Y	N			
Other specs Affected:	X		Other core specifications	⌘	25.331(CR 2548)
		X	Test specifications		
		X	O&M Specifications		

Other comments:	⌘	

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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.

----------[START OF MODIFIED SECTION]----------

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply:

L1 combining period: An interval of contiguous ~~radio frame~~TTIs when S-CCPCHs, each on different RLs~~s~~, ~~clusters~~ may be soft combined~~-~~.

~~**S-CCPCH cluster**: One or more S-CCPCHs on different RLs, all containing identical physical channel bits. S-CCPCHs in an S-CCPCH cluster are synchronized such that the delay between the earliest and latest arriving S-CCPCH at the UE is no more than 296 chips.~~

----------[END OF MODIFIED SECTION]----------

----------[START OF MODIFIED SECTION]----------

4.2.2 S-CCPCH soft combining timing

Higher layers will provide ~~additional~~ timing information when S-CCPCHs, each on different RLs, ~~clusters~~ can be soft combined. The timing information allows the UE to determine the L1 combining period that applies to each S-CCPCH ~~cluster~~. The information also identifies the S-CCPCHs and the RLs ~~in each cluster as well as which S-CCPCH clusters~~ that can be soft combined. The set of S-CCPCHs ~~clusters~~ that can be combined does not change during an L1 combining period. When S-CCPCHs ~~clusters~~ can be soft combined, all S-CCPCHs ~~in the clusters~~ shall contain identical bits in their data fields, although the TFCI fields of the S-CCPCHs ~~in different clusters~~ may be different. (TFC detection when S-CCPCHs ~~clusters~~ may be soft combined is discussed in [2].) ~~An L1 combining period shall contain only complete TTIs~~. The maximum delay between S-CCPCHs ~~clusters~~ that the UE may combine is set by UE performance requirements. The maximum number of S-CCPCHs that UE may simultaneously combine is defined by the UE capability in [10].

----------[END OF MODIFIED SECTION]----------