TSG RAN WG 2#6 TSGR2#6(99)800

Sophia-Antipolis, France

August 16-20, 1999

Agenda item: 7

Source: Golden Bridge Technology

Title: CR for TS25.301: Delete CPCH Annex(informative)

Document for: Discussion and approval

INTRODUCTION

GBT originally introduced this Annex into the specification. Now it appears that this information is not suitable for inclusion and should be deleted.

3GPP TSG-RAN meeting #5 Korea, 6-8 October 1999

Document RP-99???

3G CHANGE REQUEST Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.				
	TS 25.301 3G specification number↑		Current Version	
For submission to TSG RAN#5 for approval list TSG meeting no. here ↑ for information (only one box should be marked with an X)				
Form: 3G CR cover sheet, version 1.0 The latest version of this form is available from: ttp://ftp.3gpp.org/Information/3GCRF-xx.rtf Proposed change affects: (at least one should be marked with an X) The latest version of this form is available from: ttp://ftp.3gpp.org/Information/3GCRF-xx.rtf USIM ME X UTRAN Core Network				
Source:	TSG-RAN WG2		Date:	09/07/99
Subject:	Clarification on the usage of CCCH vs DCCH logical channels			
3G Work item:				
Category: A (only one category B shall be marked with an X) Reason for change:	Correction Corresponds to a correction in a 2G specification Addition of feature Functional modification of feature Editorial modification Annex B (informative) includes an incomplete description of CPCH procedures. This information is not needed in this document and can be deleted.			
<u>Jimilyoi</u>		usodinom unu C	22.20 40.004.	
Clauses affected: Annex B (informative)				
affected:	Other 3G core specifications Other 2G core specifications MS test specifications BSS test specifications O&M specifications	$\begin{array}{c} \longrightarrow \text{ List of C} \\ \end{array}$	Rs: Rs: Rs:	
Other comments:				

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Annex B (informative):

Overview of CPCH Channel Access Procedure

[Note: This description needs to be reviewed and completed in future meetings.]

B.1 Overview of PHY and MAC

- The CPCH Random Access procedure is based on a DSMA CD multiple access method.
- Access Preamble (AP) signatures are used to identify the particular CPCH resource which the UE is attempting to
 access.
- The access preamble ramp up is similar to the RACH mechanism. However, there is a collision detection/resolution mechanism that follows the access preamble ramp up. The UEs receive AICH indicating their success in ramp up and granting accessing to the CPCH. The UEs will refrain requesting a busy CPCH channel. All UEs log and timestamp all received AICHs in a recency table. This table allows the UE to estimate the probability that a given CPCH is unused at any particular time. This models the DSMA CD protocol.
- Layer 1 in Node B is responsible for Call Admission Control and resource management for the CPCH set assigned by the RNC to Node B.

B.2 Temporal Sequence of CPCH Events for Normal Access

The following describes the normal CPCH access procedure and entails both the UE and UTRAN side:

- 1.The UE will initiate RRC connection procedure and transition to the RRC connection mode. Transport Format Sets will be assigned to the UE by UTRAN, by RAB set up.
- 2.The UE enters the idle mode where it performs the following tasks:
- monitoring the CPCH cell resources and parameters in BCCH,
- execution of the RLC ARQ procedure,
- monitoring of the AICH/ASSIGN to update CPCH availability table,
- -reporting of traffic measurement Data as required by UTRAN.
- 3.UTRAN will be performing the following tasks in the idle mode:
- collection of traffic measurements from the UEs and the cells,
- -reassignment of priorities to all UE RABs to maintain QoS,
- allocation of CPCHs to cells based on traffic measurements (cell demand),
- -calculation of persistency values from all CPCHs to balance loads and relieve congestion.
- UTRAN broadcasts the CPCH parameters and resources on BCCH. The UTRAN transmits the system messages which contain the following information:

For each CPCH physical channel allocated to a cell the following parameters are included in the System Information message:

- CPCH Set ID to which this CPCH belongs.
- UL Access Preamble (AP) code (256 chip)
- DL AICH preamble code (256 chip)
- UL CD preamble code (256 chip)
- DL ASSIGN preamble code (256 chip)

- -CPCH UL scrambling code (40,960 chip)
- CPCH UL channelisation code (variable, data rate dependant)
- CPCCH DL channelisation code (512 chip) [FFS]
- Data rate (spreading factor) (64, 128Kbps, 256Kbps, 384Kbps, or 2 Mbps)
- N_frames_max: Maximum packet length in frames [2-64] [FFS]
- Persistency value: assigned by RNC to control congestion and for load balancing
- Signature set: set of preamble signatures (up to 16, 16 bits long) for AP to access this CPCH