3GPP TSG RAN WG1 ***TSGR1#14(00)0849***
Oulu, Finland, 4-7 July, 2000

Agenda item:

Source: **Philips**

Title: **Clarification on length of power control preambles**

Document for: **Decision**

Introduction

A request was made via the email reflector to clarify that the power control preambles for uplink and downlink are of the same length.

The attached CR for TS25.211 makes this clarification.

3GPP TSG RAN WG1 Meeting #14
Oulu. Finland, 4-7 July, 2000

Document R1-00-0849
e.g. for 3GPP use the format TP-99xxx
or for SMG, use the format P-99-xxx

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

25.214	CR	064	Current Version:	3.3.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to:	RAN #9	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)* (U)SIM [ ] ME [X] UTRAN / Radio [X] Core Network [ ]

Source: Philips **Date:** 2000-06-29

Subject: Clarification on length of power control preambles

Work item:

Category: *(only one category shall be marked with an X)*

F	Correction	X	**Release:**	Phase 2	
A	Corresponds to a correction in an earlier release			Release 96	
B	Addition of feature			Release 97	
C	Functional modification of feature			Release 98	
D	Editorial modification			Release 99	X
				Release 00	

Reason for change: Clarification that power control preambles are the same length in uplink and downlink

Clauses affected: 7.7

Other specs affected:

Other 3G core specifications	[ ]	→ List of CRs:
Other GSM core specifications	[ ]	→ List of CRs:
MS test specifications	[ ]	→ List of CRs:
BSS test specifications	[ ]	→ List of CRs:
O&M specifications	[ ]	→ List of CRs:

Other comments:

help.doc

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

7.7 Timing relations for initialisation of channels

Figure 33 shows the timing relationships between the physical channels involved in the initialisation of a DCH.

The maximum time permitted for the UE to decode the relevant FACH frame before the first frame of the DPCCH is received shall be $T_{B\text{-}min}$ = 38400 chips (i.e.15 slots).

The downlink DPCCH shall commence at a time T_B after the end of the relevant FACH frame, where $T_B \geq T_{B\text{-}min}$ according to the following equation:

$T_B = (T_n - T_k) \times 256 - N_{pcp} \times 2560 + N_{offset\_1} \times 38400$ chips , where:

N_{pcp} is a higher layer parameter set by the network, and represents the length (in slots) of the power control preamble (see [5], subclause 5.1.2.4). The uplink and downlink power control preambles are the same length.

N_{offset_1} is a parameter set by higher layers and derived from the activation time if one is specified. In order that $T_B \geq T_{B\text{-}min}$, N_{offset_1} shall be an integer number of frames such that:

$$N_{offset\_1} \geq \begin{cases} 1 \text{ when } T_n - T_k \geq \frac{T_{B-\min}}{256} + 10N_{pcp} - 150 \\ 2 \text{ when } \frac{T_{B-\min}}{256} + 10N_{pcp} - 300 \leq T_n - T_k < \frac{T_{B-\min}}{256} + 10N_{pcp} - 150 \\ 3 \text{ when } T_n - T_k < \frac{T_{B-\min}}{256} + 10N_{pcp} - 300 \end{cases}$$

T_n and T_k are parameters defining the timing of the frame boundaries on the DL DPCCH and S-CCPCH respectively (see subclause 7.1). These parameters are provided by higher layers.

The uplink DPCCH shall commence at a time T_C after the end of the relevant FACH frame, where

$T_C = T_B + T_0 + N_{offset\_2} \times 38400$ chips , where T_0 is as in subclause 7.6.3. If an activation time for the uplink DPCCH is specified, then N_{offset_2} shall be set to zero. Otherwise the stating time of the uplink DPCCH shall be determined by higher layers according to the procedure in TS 25.214 sub clause 4.3.2, subject to the constraint that N_{offset_2} shall be an integer number of frames greater than or equal to zero.

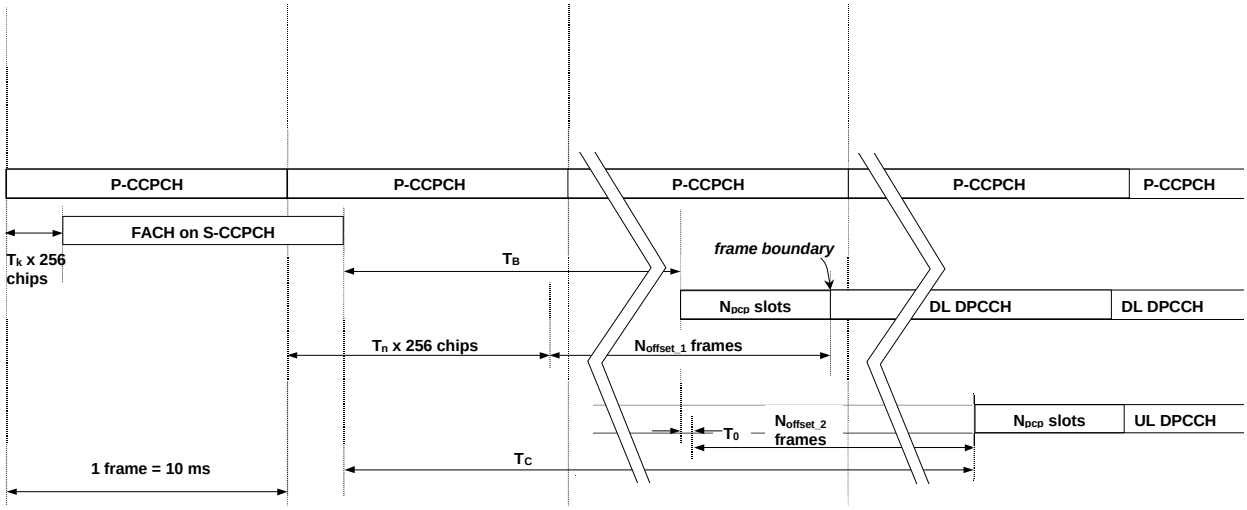

Figure 33: Timing for initialisation of DCH.

The data channels shall not commence before the end of the power control preamble.