

## CHANGE REQUEST

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

**25.211 CR 081**

Current Version: **3.4.0**

GSM (AA.BB) or 3G (AA.BBB) specification number ?

? CR number as allocated by MCC support team

For submission to: **RAN #10**  
list expected approval meeting # here ?

for approval   
for information

strategic   
non-strategic  (for SMG use only)

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: <http://tp.3gpp.org/Information/CR-Formv2.doc>

**Proposed change affects:**  
(at least one should be marked with an X)

(U)SIM  ME  UTRAN / Radio  Core Network

**Source:** Philips **Date:** 2000-10-03

**Subject:** Clarification of uplink timing reference

**Work item:**

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

F Correction   
A Corresponds to a correction in an earlier release   
B Addition of feature   
C Functional modification of feature   
D Editorial modification

**Release:** Phase 2   
Release 96   
Release 97   
Release 98   
Release 99   
Release 00

**Reason for change:** UL transmit timing could be continually slewing in soft handover.

**Clauses affected:** 7.6.3

**Other specs affected:**

Other 3G core specifications	<input type="checkbox"/>	? List of CRs:	
Other GSM core specifications	<input type="checkbox"/>	? List of CRs:	
MS test specifications	<input type="checkbox"/>	? List of CRs:	
BSS test specifications	<input type="checkbox"/>	? List of CRs:	
O&M specifications	<input type="checkbox"/>	? List of CRs:	

**Other comments:**



help.doc

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

## 7.6 DPCCH/DPDCH timing relations

### 7.6.1 Uplink

In uplink the DPCCH and all the DPDCHs transmitted from one UE have the same frame timing.

### 7.6.2 Downlink

In downlink, the DPCCH and all the DPDCHs carrying CCTrCHs of dedicated type to one UE have the same frame timing.

### 7.6.3 Uplink/downlink timing at UE

When the UE has no more than one Node B in the active set, ~~At the UE,~~ the uplink DPCCH/DPDCH frame transmission at the UE shall take place approximately  $T_0$  chips after the reception of the first detected path (in time) of the corresponding downlink DPCCH/DPDCH frame.  $T_0$  is a constant defined to be 1024 chips. The first detected path (in time) is defined implicitly by the relevant tests in [14]. More information about the uplink/downlink timing relation and meaning of  $T_0$  can be found in [5].

When the UE has more than one Node B in the active set, the uplink DPCCH/DPDCH frame transmission at the UE shall take place approximately  $T_0 + \tau_0$  chips after the reception of the first detected path (in time) of the corresponding downlink DPCCH/DPDCH frame from the first cell, where  $\tau_0$  shall be within the following range:

$\tau_0 \in [T_0 - \tau_{diff}, T_0 + \tau_{diff}]$  chips.

where  $\tau_{diff}$  is equal to the number of chips between the arrival time of the first detected path (in time) of the first-received DL DPCH and the arrival time of the first detected path (in time) of the last-received DL DPCH.

The rate of timing adjustment which shall be used by the UE is detailed in [14].