3GPP TSG-RAN1 Meeting #18
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Tdoc R1-01-0012

CR-Form-v3

CHANGE REQUEST

✍ **25.214** **CR** **CR-Num** ✍ rev **-** ✍ Current version: **3.5.0** ✍

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ✍ symbols.*

Proposed change affects: ✍ (U)SIM ☐ ME/UE **X** Radio Access Network ☐ Core Network ☐

Title: ✍	Physical channel establishment criteria		
Source: ✍	Nokia		
Work item code: ✍		***Date:*** ✍	04, January, 2001
Category: ✍	**F**	***Release:*** ✍	R99

Use one of the following categories:	*Use one of the following releases:*	
F *(essential correction)*	*2*	*(GSM Phase 2)*
A *(corresponds to a correction in an earlier release)*	*R96*	*(Release 1996)*
B *(Addition of feature),*	*R97*	*(Release 1997)*
C *(Functional modification of feature)*	*R98*	*(Release 1998)*
D *(Editorial modification)*	*R99*	*(Release 1999)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.	*REL-4*	*(Release 4)*
	REL-5	*(Release 5)*

Reason for change: ✍	According to 25.331 the physical dedicated channel establishment is based on the calculation of consecutive insyncs in UE. Now in 25.214 it is described that first phase of sync status reporting starts after the downlink dedicated channel is considered established by higher layers. Thus, resulting the fact that insyncs which should calculated by higher layers are not reported.
Summary of change: ✍	CR proposes a change to downlink synchronization primitives in 25.214.
Consequences if not approved: ✍	According to 25.214 layer 1 waits until the physical channel is established by the higher layers to initiate sending of insyncs. On the other hand, higher layers are waiting insyncs from layer 1. This results physical channel establishment failure.

Clauses affected: ✍	4.3.1.2		
Other specs affected: ✍	☐ Other core specifications ☐ 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

P-CCPCH	Primary Common Control Physical Channel
PCA	Power Control Algorithm
PCPCH	Physical Common Packet Channel
PDSCH	Physical Downlink Shared Channel
PICH	Paging Indicator Channel
PRACH	Physical Random Access Channel
RACH	Random Access Channel
RL	Radio Link
RPL	Recovery Period Length
RSCP	Received Signal Code Power
S-CCPCH	Secondary Common Control Physical Channel
SCH	Synchronisation Channel
SFN	System Frame Number
SIR	Signal-to-Interference Ratio
SNIR	Signal to Noise Interference Ratio
SSDT	Site Selection Diversity TPC
TFC	Transport Format Combination
TPC	Transmit Power Control
TrCH	Transport Channel
TTI	Transmission Time Interval
UE	User Equipment
UL	Uplink
UTRAN	UMTS Terrestrial Radio Access Network

4 Synchronisation procedures

4.1 Cell search

During the cell search, the UE searches for a cell and determines the downlink scrambling code and common channel frame synchronisation of that cell. How cell search is typically done is described in Annex C.

4.2 Common physical channel synchronisation

The radio frame timing of all common physical channels can be determined after cell search. The P-CCPCH radio frame timing is found during cell search and the radio frame timing of all common physical channel are related to that timing as described in [1].

4.3 DPCCH/DPDCH synchronisation

4.3.1 Synchronisation primitives

4.3.1.1 General

For the dedicated channels, synchronisation primitives are used to indicate the synchronisation status of radio links, both in uplink and downlink. The definition of the primitives is given in the following subclauses.

4.3.1.2 Downlink synchronisation primitives

Layer 1 in the UE shall every radio frame check synchronisation status of the downlink dedicated channels. Synchronisation status is indicated to higher layers using the CPHY-Sync-IND and CPHY-Out-of-Sync-IND primitives.

The criteria for reporting synchronisation status are defined in two different phases.

The first phase lasts until 160 ms after the downlink physical dedicated channel establishment is initiated ~~is considered established by higher layers~~ (physical channel establishment is defined in [5]). During this time out-of-sync shall not be reported and in-sync shall be reported using the CPHY-Sync-IND primitive if the following criterion is fulfilled: