Agenda Item: Ad Hoc 29
Source: Siemens AG
Title: CR 25.224-049, Clarification of IP_Frame(x) definition
Document for: Decision

This CR specifies the parameter IP_Frame(x) more clearly.

CHANGE REQUEST

⌘ **25.224** CR **049** ⌘ rev **-** ⌘ Current version: **4.0.0** ⌘

*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 **X** Core Network ☐

Title: ⌘	Clarification of IP_Frame(x) definition	
Source: ⌘	Siemens AG	
Work item code: ⌘	LCS1-UEpos-enh	*Date:* ⌘ 14. May 2001
Category: ⌘	D	*Release:* ⌘ REL-4

Use *one* of the following categories:
F (essential 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:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
REL-4 (Release 4)
REL-5 (Release 5)

Reason for change: ⌘	The definition of IP_Frame is not clearly specified.
Summary of change: ⌘	One sentence added regarding IP_Frame(x) definition.
Consequences if not approved: ⌘	Missing additional comment could lead to confusion.

Clauses affected: ⌘	4.10.3
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.

4.10.3   Calculation of idle period position

In burst mode, the first burst starts in the radio frame with SFN = Burst_Start. The nth burst starts in the radio frame with SFN = Burst_Start + $n \times$Burst_Freq. The sequence of bursts according to this formula continues up to and including the radio frame with SFN = 4095. At the start of the radio frame with SFN = 0, the burst sequence is terminated (no idle periods are generated) and at SFN = Burst_Start the burst sequence is restarted with the first burst followed by the second burst etc., as described above.

Continuous mode is equivalent to burst mode, with only one burst spanning the whole SFN cycle of 4096 radio frames, this burst starts in the radio frame with SFN = 0. In case of continuous mode the parameter IP_Start defines the first frame with idle periods.

The position of an idle period~~time slot that has to be idle~~ is defined by two values: IP_Frame(x) and IP_Slot. IP_Frame(x) defines the xth frame within a burst that contains the idle period. IP_Slot defines the slot in that frame during which no transmission takes place except for the SCH.~~in which the slot with the number IP_Slot has to be switched off.~~

The actual frame with idle periods within a burst is calculated as follows:

IP_Frame(x) = IP_Start + (x-1) $\times$ IP_Spacing with x = 1, 2, 3, ...

If the parameter IP_PCCPCH is set to 1, then the P-CCPCH will not be transmitted in the frame IP_Frame(x) +1 within a burst.

Figure 7 below illustrates the idle periods for the burst mode case, if the IP_P-CCPCH parameter is set to 0.
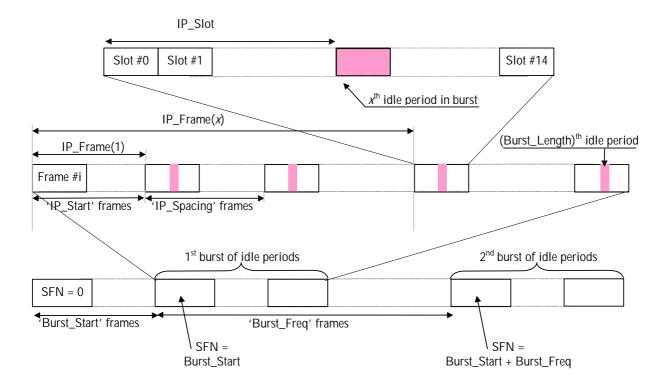

Figure 7: Idle Period placement in the case of burst mode operation with IP_P-CCPCH parameter set to 0