3GPP TSG-WG1 Meeting #19
Las Vegas, USA, 27 Feb – 2 Mar 2001

Tdoc R1-01-0277

CR-Form-v3

CHANGE REQUEST

25.221	CR	047	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 [X] Core Network ☐

Title: ✍	Clarification of Midamble Usage in TS25.221	
Source: ✍	Siemens	
Work item code: ✍		***Date:*** ✍ 20/02/01
Category: ✍	F	***Release:*** ✍ R99

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: ✍	In case of a default midamble allocation, according to the current specifications the UE shall use an individual midamble for each channelisation code. However, if less than 16 midambles are available in that slot, there is only one midamble available for a channelisation code group, containing one primary and one or more secondary codes. Also, it is clarified that each of the code group specific midambles of the default midamble allocation may result in different channel estimates. The default midamble allocation currently well supports open loop TxDiversity techniques that transmit different codes on different antennas to one user in multicode operation. These techniques are transparent to the UE. From the closed loop TxDiversity techniques, supported by the standard, one might conclude that all codes for one user are always transmitted with the same antenna weightings. The assumption of user specific antenna weightings only could lead to faulty UE receiver implementations.
Summary of change: ✍	Clarifies that the UE shall use one midamble per channelisation code group and that the channel estimates may be different for each of the midamble.
Consequences if not approved: ✍	Ambiguous specifications

Clauses affected: ✍			
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.

5.6.1.2.1 Default midamble

If a midamble is not explicitly assigned and the use of the common midamble allocation scheme is not signalled by higher layers, the UE shall derive the midambles from the allocated~~ssociated~~ channelisation codes and shall use an individual midamble for each channelisation code group containing one primary and a set of secondary channelisation codes. The ~~For each~~ association between midambles and channelisation code groups is given in annex A.3. ~~, there is one primary channelisation code associated to each midamble. A set of secondary channelisation codes is associated to each primary channelisation code.~~ All the secondary channelisation codes within a set use the same midamble as the primary channelisation code to which they are associated. The UE shall assume different channel estimates for each of the individual midambles.

Higher layers shall allocate the channelisation codes in a particular order. Primary channelisation codes shall be allocated prior to associated secondary channelisation codes. If midambles are reserved for the beacon channels, all primary and secondary channelisation codes that are associated with the reserved midambles shall not be used.

C~~Primary and its associated secondary c~~hannelisation codes of one channelisation code group shall not be allocated to different UE's.

In the case that secondary channelisation codes are used, secondary channelisation codes of one set shall be allocated in ascending order, with respect to their numbering.