3GPP TSG-RAN WG2 meeting #6

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Sophia Antipolis, France, 16-20 Aug 1999

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			25.303	CR	009		Curren	t Versio	on: 3.0.0		
3G specification number ↑									ort team		
For submision to TSG RAN #5 for approval X (only one box should be marked with an X) list TSG meeting no. here 1 for information be marked with an X)											
Form: 3G CR cover sheet, version 1.0 The latest version of this form is available from: ftp://ftp.3gpp.org/Information/3GCRF-xx.rtf											
Proposed change affects: (at least one should be marked with an X)					ME X	U'	TRAN	X	Core Network		
Source:	Norte	el Networks						Date:	1999-08-18		
Subject:	Clarification of model for RACH procedures										
3G Work item:											
Category: (only one category shall be marked with an X) Reason for change:	 Correction Corresponds to a correction in a 2G specification Addition of feature Functional modification of feature Editorial modification The interaction between WG1 and WG2 concerning PRACH procedures has been clarified : The broadcast parameters will be defined in this group. Subchannels done in this group. The power ramp-up is processed in WG1 until the preamble is detected in the BTS. After that the control should be in WG2 for the backoff etc. It was confirmed that the access class selection is done in the MAC for uplink access on the random access channel. Indicated to L1 with the data request primitive. For this a parameter in the data request primitive is needed. 										
Clauses affecte	ed:										
Other specs affected:	Other 3G core specifications \rightarrow List of CRs:Other 2G core specifications \rightarrow List of CRs:MS test specifications \rightarrow List of CRs:BSS test specifications \rightarrow List of CRs:O&M specifications \rightarrow List of CRs:										
<u>Other</u> comments:											
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7.7.2 Random access transmission sequence

The RACH and AICH are configured once via a CPHY-TrCH-Config-REQ primitive. This primitive is issued only for initial configuration or when a parameter shall be changed, not for every RACH transmission.

The CMAC-Config-REQ primitive is used to configure MAC parameters required for the random access procedure (e.g. persistence value, maximum number of preamble ramping cycles, initial and subsequent backoff times).

When there is data to be transmitted on the RACH, i.e. reception of a MAC-Data-REQ primitive, the RACH transmission control procedure is started.

After some initial backoff, a primitive PHY-Data-REQ containing the selected Access Service Class (ASC) is sent to L1. This triggers the PRACH preamble transmission procedure, i.e. the physical layer selects a PRACH access slot and signature without further backoff delay imposed on L1, but within the ASC constraints.

If the maximum permitted transmission power was reached without receiving an acknowledgement, or a negative acknowledgement (Nack) has been received on AICH, the preamble ramping cycle is repeated. The number of preamble ramping cycles is counted in MAC.

Upon successful transmission of a preamble, MAC receives an acknowledgement via PHY-Status-IND primitive that the acquisition indicator was received and the message sent.