TSG-RAN Working Group 1 meeting #19

Las Vegas, USA, February 27th - March 2nd, 2001

Agenda Item : 1.28 Mcps TDD

Source: Samsung Electronics Co., Ltd.

Title : Propagation Delay Measurement in 1.28 Mcps TDD: correction

Document for : Approval

Discussion

In TSG RAN1 #17 meeting held in Stockholm, a measurement which can be used for the calculation of propagation delay or round trip time is proposed and approved. This contribution tries to correct some errors in the text proposal to the working CR 25.225 approved at R1 #17 meeting.

----- Beginning of the proposed correction of the Text Proposal for working CR to 25.225 ------

5.2.8.1 Received SYNC_UL Timing Deviation for 1.28 Mcps TDD

Definition	'Received SYNC_UL Timing Deviation' is the time difference
	UpPCH _{POS} = <u>UpPTS_{Rxpath} -</u> UpPTS _{TS} - UpPTS_{Rxpath}
	in multiple of 1/8 chips, where UpPTS _{Rxpath} : time of the reception in the Node B of the SYNC_UL to be used in the uplink synchronization process UpPTS _{TS} : time instance two symbols prior to the end of the DwPCH according to the Node B internal timing
	UE can calculate Round Trip Time (RTT) towards the UTRAN after the reception of the FPACH containing UpPCH _{POS} transmitted from the UTRAN.
	Round Trip Time RTT is defined by
	$RTT = \frac{UpPCH_{AVD} + UpPCH_{POS} - 8*16 T_{C}UpPCH_{AVD} - UpPCH_{POS} + 8*16 T_{C}}{16 T_{C}}$
	Where
	UpPCH _{ADV} : the amount of time by which the transmission of UpPCH is advanced in time relative to the end of the guard period according to the UE Rx timing.

----- End of the proposed correction of the Text Proposal -----