

TSG-RAN Working Group 1 meeting #9
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Agenda item: AH 16
Source: Ericsson
Title: CR 25.215-013: Definition of Transmitted code power
Document for: Decision

Currently the Transmitted code power is defined as being possible to perform on any channelisation code, which implies that the measurement shall be possible on downlink common and dedicated channels. The RNC controls the power of the common channels and the common channels are not separately power controlled (using the inner loop pwc). Therefore there is no reason to measure the Transmitted code power on common channels. It is proposed that the Transmitted code power measurement shall be possible on dedicated channels only, e.g. downlink DPCH.

On the downlink DPCH the different fields (Data, TFCI, TPC, Pilot) can be transmitted with different power levels. In the definition of the UTRAN measurement Transmitted code power is not clear which fields of the DPCH that shall be reflected by the measurement.

As the power offsets between the different fields of the DPCH are known by the RNC and as the DPCCH part is transmitted even during DTX it is more convenient to define the Transmitted code power on the pilot bits for the DPCH. Also the received power (RSCP) measurement in the UE is defined on the pilot bits. This CR will clarify the definition of the Transmitted code power in 25.215.

5.2.1 RSSI

Definition	Received Signal Strength Indicator, the wide-band received power within the UTRAN uplink carrier channel bandwidth in an UTRAN access point. The reference point for the RSSI measurements shall be the antenna connector.
Range/mapping	

5.2.2 SIR

Definition	Signal to Interference Ratio, is defined as the RSCP divided by the ISCP. Measurement shall be performed on the DPCH after RL combination in Node B. The reference point for the SIR measurements shall be the antenna connector.
Range/mapping	

5.2.3 Transmitted carrier power

Definition	Transmitted carrier power, is the total transmitted power on one carrier from one UTRAN access point. Measurement shall be possible on any carrier transmitted from the UTRAN access point. The reference point for the total transmitted power measurement shall be the antenna connector. In case of Tx diversity the total transmitted power for each branch shall be measured.
Range/mapping	

5.2.4 Transmitted code power

Definition	Transmitted code power, is the transmitted power on one carrier, one scrambling code and one channelisation code <u>on one given scrambling code on one given carrier</u> . Measurement shall be possible on any DPCH channelisation code transmitted from the UTRAN access point <u>and shall reflect the power on the pilot bits of the DPCH</u> . The reference point for the transmitted code power measurement shall be the antenna connector. In case of Tx diversity the transmitted code power for each branch shall be measured.
Range/mapping	

5.2.5 Transport channel BLER

Definition	Estimation of the transport channel block error rate (BLER). The BLER estimation shall be based on evaluating the CRC on each transport block. Measurement shall be possible to perform on any transport channel after RL combination in Node B. BLER estimation is only required for transport channels containing CRC.
Range/mapping	

5.2.6 Physical channel BER

Definition	The physical channel BER is an estimation of the average bit error rate (BER) before channel decoding of the DPDCH data after RL combination in Node B. It shall be possible to report a physical channel BER estimate at the end of each TTI for the transferred TrCh's, e.g. for TrCh's with a TTI of x ms a x ms averaged physical channel BER shall be possible to report every x ms.
Range/mapping	