

Agenda Item:

Source: 3GPP RAN WG4

Title: Liaison statement to WG1 on clarification of Open loop power control in the uplink

To: 3GPP RAN WG1

Copy: 3GPP RAN WG2

1. Introduction

3GPP RAN WG4 is continuing the specification work for RF specifications of UE.
3GPP RAN WG4 would like to confirm the clarification of open loop power control in the uplink.

2. Backgrounds

- (1) 3GPP RAN WG4 would like to define the minimum requirement for the tolerance of open loop power control. We would also like to describe briefly for which case open loop power control is applied and how expected power is determined, because it is helpful for testing.
- (2) Referring to S1.14, we are drafting the document.
In this current version of WG4 specifications, it is stated that :
 - Open loop power control is applied for RACH and initial power of DPCCH/DPDCH.
 - The same equation is used to determine both RACH power and the initial power of DPCCH/DPDCH.
 - The tolerance includes both the received power estimation error and the transmitter setting error, implicitly.

3. Questions and requests

- (1) WG4 would like to confirm that the open loop power control is applied only for RACH and the initial power of DPDCH/DPCCH.
- (2) For RACH, WG4 would like to know our understanding (= the ramping process works before sending a message part) is right or not. Could you please clarify its procedure in detail?
- (3) Given the work done in WG1 and WG2 on power ramping scheme for the RACH, WG4 would like to know if the initial TX power of DPDCH/DPCCH has to be based
 - on an open loop PC estimation carried by UE,
 - or on the power of first RACH preamble,
 - or on the power of RACH message part,
 - or has to refer to higher level signalling indicating to the UE the initial TX power on a dedicated channel,
 - or something else.
- (4) High data rate connections, e.g. 64kbps,128kbps, need more power for successful reception in BTS than low data rate connection of RACH. Is this taken into account when defining the initial TX power of DPDCH/DPCCH ?