3GPP TSG GERAN #19 **GP-040931**
Cancun, Mexico; April 19th – 23rd, 2004 **Agenda Item: 7.1.5.1**
Title: RF power control requirements for DTM: discussion
Source: Motorola
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Discussion: RF power control for DTM

The requirements for measurement reporting and RF power control are set forth in the following specifications:

[1] 3GPP TS 45.008, Release 6:

- clause 8.4.1 “Measurement reporting for the MS”,
- clause 10.1.1.2 “Packet transfer mode or MAC-Shared state”,
- clause 10.2 “RF Power Control”,
- clause 10.2.3.1.2 “Packet transfer mode or MAC-Shared state”

Consider these requirements in terms of of a Mobile Station (MS) operating in Dual Transfer Mode (DTM):

1. Compliant against Circuit-Switched (CS) requirement as far as measurement reporting is concerned, i.e. the MS shall be able to perform in the SACCH frame at least 3 samples per carrier contained in the BA list [especially in the case of 32 BCCH carriers].

   Number of BCCH carriers Number of samples per in BCCH Allocation carrier in SACCH multiframe

   32 3 4

   16 6 7

   10 10 11

   812 13

   : :

   : :

2. Compliant against Packet Switched (PS) requirement as far as PS power control is concerned in the case PC_MEAS_CHAN indicates BCCH, i.e. the MS shall be able to perform at least 6 measurement samples per 52-multiframe.

Issue: The two different requirements noted above appear to be in conflict, and therefore the MS is unable to be compliant with both.

Summary

Question: what shall be the MS behaviour in DTM in terms of CS measurement reporting and RF PS uplink power control? Is a clarification to specification necessary?

References

[1], 3GPP 45.008, “Technical Specification; 3rd Generation Partnership Project; Technical Specification Group GSM/EDGE Radio Access Network; Radio subsystem link control”, (3rd Generation Partnership Project (3GPP) Technical Specification (TS)).