

**TSG RAN Working Group 1 Meeting #9  
Dresden, Germany, November 30 - December 3**

**TSGR1#9(99)L25????**

**Proposed Liaison Statement on the usage of measurements in RAN**

**From: Drafting group  
To: RAN WG4, RAN WG2  
Copy: RAN**

*RAN WG4 has started its study on the accuracy for the measurements related to RRM. In order to set the accuracy RAN WG4 needs to address two aspects.*

*The first is related to what is feasible from an implementation perspective, and good progress has been made in this area.*

*The second is to verify what is required from a system performance perspective. To do this, RAN WG4 needs to understand what the measurements are used for. This information could not be found in WG1 documentation and is requested by WG4 Ad Hoc for all measurements.*

*RAN WG4 Ad Hoc invites RAN WG1 to provide this information to RAN WG4, so that WG4 can finalise the specification for the measurement accuracy.*

WG1 very welcomes any progress made in WG4 in relation with the measurements accuracies in order to assess the system performances of UMTS. In relation with the usage of the above mentioned measurements, it is WG1 belief that the most correct answer can be provided by WG2 that is, according to WG1 understanding, the group in charge of defining the measurements, and, therefore, the group better suited to explain the rationale behind them.

It is however WG1 belief that a deeper understanding of the rationale behind the defined measurements would be beneficial to WG1 group too, and that such an explanation should be included in WG2 specs.

*One specific UTRAN measurement for FDD where WG4 has concerns is "Transmitted Carrier Power". It is believed that the purpose of this measurement is estimation of the downlink load. The problem is that absolute power levels are difficult to measure with high accuracy, +/-3 dB has been stated as reasonable. Another definition proposed in WG4 is the transmitted carrier power relative to maximum power, expressed as a percentage number (linear scale). Such a measurement can be made with much better accuracy and is also more representative of the load. It is also noted that the accuracy is better expressed in a linear scale.*

*RAN WG4 Ad Hoc asks RAN WG1 to consider this proposed new definition of the "Transmitted Carrier Power".*

A short discussion took part in WG1 in relation to the proposed definition. It is WG1 belief that such a definition could be well suited to express the transmitted carrier power in order to reach a better accuracy of the measurement, especially when downlink cell load evaluation is concerned.

During the discussions, it was also pointed out that the measurement could be expressed as a percentage of the maximum power available at the PA of the Node B in order to save signaling load and achieve a better accuracy.

Although WG1 is in favour of the proposal, it did not update yet the related specs awaiting WG2 final decision on the proposed definition.