Agenda Item:	**8.4**
Source:	**Lucent Technologies**
Title:	**Values for ACLR and ACS for the BS as a result of Harmonisation**
Document for:	**Approval**

1   Introduction

At TSG RAN #4, it was agreed that some parameters in the WG4 specifications would be changed as a result of the decision on Harmonisation (in particular, the change of chip rate). It was agreed that the changes could be made directly by the editors of TS 25.101 (UE) and TS 25.104 (BS). However, from the discussions on the WG4 reflector, it is clear that there are two different interpretations of the decision as it relates to the FDD BS. Unfortunately, neither the input documents to TSG RAN nor the TSG RAN meeting report explicitly state what changes should be made. The two views can be summarised as follows:

1)   The recommendation of WG4 does not distinguish between UE and MS; therefore the same changes should be made. The technical arguments made in respect of the UE in the input papers to WG4 are also applicable to the BS.

2)   The input documents to WG4 #5 only analysed the effect of the change in chip rate on the UE; therefore WG4 only intended its recommendation to TSG RAN to apply to the UE.

Lucent Technologies believes that the values of ACLR and ACS should be increased by 1dB, as has already been done for the MS, for the following reasons:

1)   The input documents to TSG RAN did not distinguish between BS and UE, so the decision of TSG RAN did not (as nothing was recorded in the meeting report qualifying the decision).

2)   The increase does not represent any increase in the difficulty of implementation, compared with the values before the change of chip rate.

3)   The values for the UE have been set on the basis if the performance which is currently achievable, rather than the QoS scenario. The UE specification may be tightened as the state-of-the-art improves, to meet the scenario. The life of BS in the network is much longer than for terminals. It is therefore important that the performance of terminals. It is important that, as the performance of terminals improves, the BS do not become a limitation on network performance.

4)   The typical performance of equipment will be significantly better that the specification limits. It may therefore not be wise to set the BS ACLR on the assumption that the UE will only just meet the specified performance.

5)   The BS performance also influences coexistence with systems in neighbouring frequency bands; the UE performance is not a limiting factor in this case.

2   Text proposal to TS 25.104

Section 6.6.2.2.1, Table 4:

-       Change ACLR for 5MHz offset to 46dB

-       Change ACLR for 10MHz offset to [56] dB.

Section 7.5.1, Table n:

-       Change level of interfering signal to –51dBm.