

TSG-RAN Working Group1 meeting #7
Hannover, Germany, Aug.30-Sept.3, 1999

TSGR1#7(99)c50

Agenda Item : **ad-hoc 15**
Source : **Nortel Networks**
Title : **Optimized 2nd Interleaver for High Speed Fading – 200kmph simulation results**
Document for : **Decision**

1. Introduction

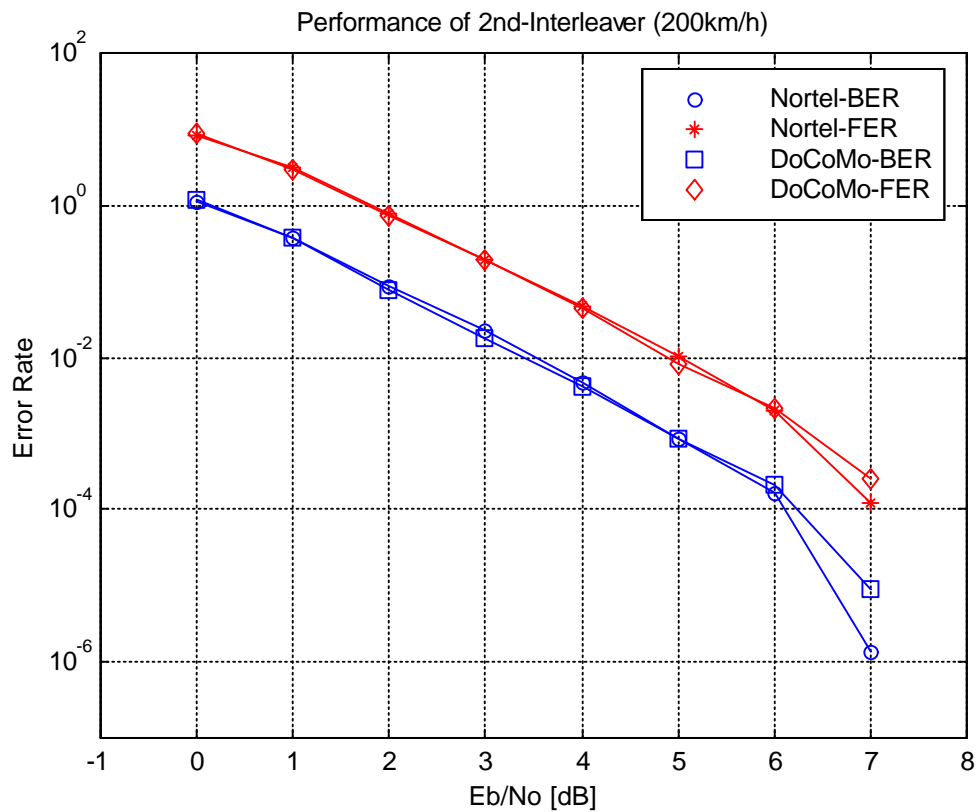
This document provides additional results for the second channel interleaver 30-columns table proposed by Nortel in R1-99c29. Results obtained with simulation at 200kmph presented here, confirm the improvement due to the new table.

3. Simulation Results at 200kmph

3.1 Simulation conditions:

Channel : Rayleigh Fading
Coding : Convolutional coding (R=1/3, K=9)
Decoder: Viterbi
Simulation termination : 100 frames errors or 800 000 frames
Demodulation : Rake

3.4 Results 200kmph:



5. Conclusions

An improved 2nd interleaver is proposed to enhance the performance of high speed fading channel. Such an enhancement is critical especially for the DL performance for high speed UE, where the entire system depends solely on the 2nd interleaver to combat the Rayleigh fading. It is recommended that this second interleaver is adopted for UTRA.