SIMULATION AND ANALYSIS PERFORMANCE OF BPSK AND 8-PSK BY USING CONVOLUTIONAL CODING FOR WCDMA ENVIRONMENT

This thesis is presented in partial fulfillment for the award of the Bachelor of the Electrical Engineering (Hons.)

UNIVERSITI TEKNOLOGI MARA



NURUL SYUHADA RAMLI FACULTY OF ELECTRICAL ENGINEERING UNIVERSITI TEKNOLOGI MARA 40450 SHAH ALAM, SELANGOR

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ABSTRACT

This thesis illustrated the simulation and performance of BPSK and 8-PSK in WCDMA. The model consists of the transmitter, transmission channel and also the receiver. The simulation used two channels where first channel used BPSK and 8-PSK is for the second channel. The channel coding that been used in this project is the convolutional codes to encode and decode the signals from the two channels before the modulation and after demodulation process occur in the system. As for the noise, Rayleigh fading was being injected to the WCDMA spread spectrum environment. In this project, the performance of BPSK is better compare to 8-PSK since it produce greater BER. The difference is about 3dB at the 10⁻³ of BER. This project used the Matlab Version R2008a in the simulation process.

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