Abstract

Fourth generation (4G) wireless based on worldwide interoperability for microwave access (WiMAX) systems are a new promising technology that support high data rate transfer. Channel Estimation of system is carried out by finding Channel impulse response (CIR) of pilot subcarrier using LS or LMMSE algorithms and then finding Channel Frequency Response (CFR) at data subcarrier is done by time and frequency Interpolation of Pilot CIR. This paper presents BER performance for 16QAM & 64QAM Coded OFDM System evaluated at different Doppler frequencies. Results show that Channel Estimation over Coded-OFDM system gives better performance than OFDM.

Index Terms

Computer Science  Wireless

Keywords

Coded OFDM System (C-OFDM)  Channel Estimation  LS  LMMSE  Channel Impulse Response (CIR)

Channel Frequency Response (CFR)

Downlink Partially Used Subchannelization (DL-PUSC).