

Overlap Frequency Domain Equalization for Wavelet OFDM

Wavelet-OFDM is a promising alternative to the well established Fourier Transform based OFDM (DFT-OFDM). The Wavelet OFDM does not utilize Cyclic Prefix, due to which its symbols are no longer circularly convolved, thereby producing Inter Block Interference, after transmission through the channel. In this paper Overlap Frequency Domain Equalizer has been used to minimize BER, due to residual Inter Block Interference for Wavelet-OFDM. Moreover, BER performance has been compared between Wavelet OFDM with Overlap-FDE, DFT-OFDM without Guard Interval and Overlap FDE, Conventional OFDM with Guard Interval and simple FDE.