

Simulation, evaluation, and comparison of OFDM modulation used in WiMAX and WLAN

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Abstract: This topic focuses on simulating, evaluating, and comparing Orthogonal Frequency Division Multiplexing (OFDM) modulation methods applied in Wireless Metropolitan Area Network (Wimax) and Local Area Network (WLAN) systems. The context for selecting this topic is based on the need to optimize high-speed data transmission performance between Wimax and WLAN. The objective is to build an experimental model to evaluate the performance of OFDM in both network systems, in order to identify the benefits and limitations of each method. The research methodology includes setting up simulation scenarios, conducting experiments, and analyzing results. The significance of this topic lies in providing useful information for technology developers and scholars in the field of wireless data transmission.

Keywords: OFDM, WiMAX, WLAN, Simulation, Evaluation