Abstract

In this paper, BER performance of WRAN based on IEEE 802.22 standard is introduced, the performance of physical layer of IEEE 802.22 network is analyzed and simulated over different communication channels. AWGN and multipath fading channels are assumed. BER performance is applied to different types of users and areas. Stationary and mobile users performance is proposed for typical rural and hilly terrain rural area. Different mapping schemes and code rate is presented.

References

1. Hyoil Kim, Student Member, and Kang G. Shin " In-Band Spectrum Sensing in IEEE 802.22 WRANs for Incumbent Protection" IEEE TRANSACTIONS ON MOBILE COMPUTING, VOL. 9, NO. 12, DECEMBER 2010.
2. Carlos Cordeiro, Kiran Challapali, and Dagnachew Birru "IEEE 802.22: An Introduction to the First Wireless Standard based on Cognitive Radios" JOURNAL OF COMMUNICATIONS,
VOL. 1, NO. 1, APRIL 2006.


**Index Terms**

Computer Science    Wireless

**Keywords**

WRAN, IEEE 802.22, Network Performance