Abstract

In one of the underlying difficulties with the application of a predicting path loss model for any environment is that no two areas have the same building composition. It is therefore intractable to formulate the exact path loss model for all location. In order to overcome some of the problem stated above, parameters of certain propagation models must be fine-tuned with reference to target environment. In this study, the ITU-R 526 adopted Walfisch- Bertoni (W/B) path loss model is optimized base on the experimental campaign over some selected locations in Western part of Nigeria. Afterwards, the multiple diffraction loss component of the W/B model was modified to incorporate effects of building height variation $\Delta$.

References

measurements at 850 MHz, 1.7 GHz, and 4.0 GHz inside two dissimilar office buildings,” Electronics Letters, Vol. 26, No. 7, 445–447.


Index Terms

Computer Science

Information Sciences

Keywords

Pathloss, Walfisch-Bertoni model, Western Nigeria and optimized model.