

Review Form 1.6

Journal Name:	Journal of Engineering Research
Manuscript Number:	Ms_JERR_79755
Title of the Manuscript:	Evaluation Of Fade Margin in Telecommunication Network in Auchi, Nigeria
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments		
Minor REVISION comments	<p>This paper investigates the fade margin in a particular mobile network in Nigeria. In consideration of the parameters of latitude, height of tower, power, antenna gain and model, frequency, path length and distance, the fade margins of three different links were derived in detail. The mobile network fade margins across the three different links were within the acceptable range of 10db to 30db. It was discovered that the longer the path length, the higher the fade margin value, and was confirmed in the results.</p> <p>1) The value of Net Path Loss in Table 3.1-3.2 is very large, it should be explained.</p> <p>2) The derived conditions of equation (3.4) and (3.5) should be explained, and the D_{HOR}= distance in kilometers to the RF horizon did not appear in the equation.</p> <p>3) In Page No.10, for $d < d_c$ and for $d \geq d_c$, the Equation No. should be given.</p> <p>4) The first link, the distance between antennas is 3.06 kilometres, this distance is larger than d_c, so the L_{PATH} should use equation (3.7) to calculate. And the received signal level calculation in chapter 3.3.3, the L_{PATH} should be 40.15dB.</p> <p>5) The paper should be checked carefully and should be simplified.</p>	<p>1). It was a measured parameter; it was not calculated and the factors that affects the value of the net path loss are:</p> <p>a) The height of the tower</p> <p>b) Transmission power</p> <p>c) Distance between the communicating towers which is the path length</p> <p>d) Topography of the Land</p> <p>2). The parameters mentioned above are not actually part of the equation, but were used to verify if the value gotten for maximum line of sight LOSmax is in agreement with the path distance d_{PATH}</p> <p>3) Effectuated Equation 3.7 as shown in page No. 8. Line 224</p> <p>4) The length path is given in kilometers and not decibel dB, and the path loss using 2-Ray multipath propagation model was given in dB which is in decibel. The value of the path loss for the distance of 3.06km is correct 40.15dB as shown in the fourth stage in Page No. 9. Line 289</p> <p>5) Noted</p> <p>Thank you very much</p>
Optional/General comments		

PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	