ABSTRACT

Propagation Model is a standard design calculations coverage area for a wireless mobile

communication technology, Tuning Propagation models intended to resolve the error in the design

so that an area can be minimized design an overshoot area and a blank spot in a

telecommunications network design. propagation model using design calculations consisting of

high parameters such as base stations, mobile stations high, damping factor, and frekuensi of

operation of the technology works.

In this final project will be an improvement or modification in the calculation of "Standard

Propagation model", in measurement using a GSM (Global System for Mobile Communication)

technology as a reference and using tuning parameters as well as considering the geography,

weather and terrain type. So we get a calculation that can approach the appropriate result in the

implementation of the field, especially in the Urban area.

The simulation results of the review site looks an error signal, from a review of Global

Statistics. Standard deviation obtained value that exceeds the minimum standard is 10.11 dB and

the average error of -0.76 dB while in Class Clutter Statistic per standard deviation obtained 10.09

dB and the average error of -0.95 so that the necessary repairs on propagation models. In the first

simulation for global review the statistical standard deviation of 7.69 dB and an average error of 0

dB while the statistical standard deviation per cluster class 7:53 dB and the average error 0.09 dB.

In the second simulation for global review the statistical standard deviation of 11.15 dB and the

average error of 25.31 dB per cluster while the statistical standard deviation of 10.87 dB class and

the average error of 24.83. Of the two simulations are simulations 1 has a value corresponding to

the standard, but in the simulation 1 are parameters that exceed the limits specified value K1 and

K3 while in simulation 2 an increase in the standard deviation value and average error but there

are parameters that do simulated K3 using appropriate standard values prescribed limit propagation

model itself.

Keywords: Propagation Model, Model Tunning, Standart Propagation Model.

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