

ABSTRACT

Technology 3G is the newest technology today before GSM and then CDMA become the king in market of cellular in Indonesia. Many operators give us cheap price with the purpose to get many consumers in their product. Usually cheap price is not guarantee the quality of service. Sometimes the service of voice is not clear even when we talk is drop. Consequently, Indosat one of the big operators in Indonesia tries to give subscriber the best quality and perform for all services.

In this final assignment observation will discuss about analyze cause of drop call in 3G Indosat Network with study case at BTS 3G Kembangan Utara. Writer will analyze cause of drop call from RAN Network side for see the data trafik and use methode of propagation analyze with Cost-231 for pathloss and use drive test with software Terms 8.0.3 to know KPI in the reality.

In the reality, power of BTS and RSCP of UE are still good. For Power BTS is still in good quality with the average 41.12 dB bigger than $P_{\text{threshold}}$ is 32.25 dB and for RSCP with the average -79.6 dBm is still in range -15 dBm s.d -85 dBm. It is mean that there is no problem with the Power. But in Reality if see from the data traffic, BTS 3G Kembangan Utara has big drop ratio for service voice. It is bigger than $\geq 1\%$. From analyze result; drop call has been caused less of capacity.

Key: 3G, Drop call, Drive test, RAN Network, less capacity.