ABSTRACT

The most popular communication used in recent time is cellular. The familiar service used by people known as *Video Call*. *Video Call* can be defined as call service which allows people to see each other while communicating via *hand phone*. To assure users feel comfortable while using *Video Call*, quality must be kept at the first place. There is undeniable fact that many obstructions may appear and keep users away from being comfortable. One sort of that obstruction generally faced in real condition is *Video Drop Call* which is usually making current *Video Call* communication suddenly dropped.

In this final assignment, an analysis towards *Video Call* communication drop will be conducted according to study case of XL operator as one of provider in *Video Call* service. The analysis has been done at Cikutra Node B which has the highest drop call rate and doesn't meet the KPI parameter requirement. Analysis result based on drive test just before *Video Drop Call* served by third sector of Cikutra Node B where UE is located between third sector of Cikutra Node B and Cibeunying Node B, in that position UE is closer to Cibeunying Node B, RSCP value in that time is -87 dBm and Ec/No is -23,50 dB. When UE is located between third sector of Cikutra Node B and first sector where UE position is closer to first sector, the RSCP value is -90 dBm and Ec/No is -22 dB.

Prior to the observation field and analysis by drive test, comes a conclusion stated that *Video Call Drop* is occurred due to handover failure between third sector of Cikutra Node B with it's *neighbor site*. It's happened because of missing neighbor which means *Create* for overall *neighbor site* isn't done yet from third sector of Cikutra Node B.