

ABSTRACT

Cellular network performance Universal Mobile Telecommunication System (UMTS) in an area, voice and data services becomes important to note. Because of the voice and data services is the mobile network performance can be seen from the area of coverage can be served well. In the case of UMTS frequent cases of drop calls and block calls caused by poor network quality. Therefore we need a process of optimization techniques course with regard values of voice and data services must comply with the established standards.

In this final project case studies in areas Cileunyi Toll-Pasteur Bandung by focusing on the issue of voice and data services for 3G networks XL. Then do the optimization activities and drive test on XL 3G network voice and data services. Optimization activity is an action to analyze the problem and also make an analysis of the decision to fix the problem of voice and data services that occur from the values of the parameters of the data drive test results. Then activities Test Drive is an action collect data from network quality measurement results with the help of software TEMS Investigation 11.0.1 Data Collection.

The values of the parameters that must be met in KPI voice services namely, Received Signal Code Power (RSCP), Chip Energy Over Noise (E_c / N_o), Call Setup Success Ratio (CSSR), Call Dropped Ratio (CDR), Successful Call Ratio (SCR). Then the values of the parameters that must be met in KPI Download namely PS Throughput. Of the values of the parameters above, it can be done in the area of UMTS network optimization Cileunyi Toll-Pasteur.

Keywords: *Drive Test, Optimization, UMTS, TEMS, KPI parameters.*