

## **ABSTRACT**

*Performance of a mobile network in the region is the important thing to note. The need for quality mobile communications services either voice or data is needed. The increasing number of users 3G network have an impact on the low performance of the network. After conducting a survey in Kopo Permai Bandung area, the problem caused by low coverage area and low throughput resulting in the low performance of 3G network in Kopo Permai Bandung area.*

*In this Final Project, will be measured by the quality of the 3G network on Telkomsel operator in Kopo Permai Bandung area. Make measurements performance of 3G network with drive test method use software tems investigation 11.0.1 covering measurements on parameter RSCP , Ec / No and Throughput. From In the process optimize , analysis was conducted based on the drive test use software Actix Analyzer . After conducted analysis based on the results of drive test obtained problems Bad Coverage and low throughput on 3G network in Kopo Permai Bandung area. Next, for handle the problem on 3G network with recommended optimize to increase 3G performance in Kopo Permai Bandung area.*

*From drive test, can be conducted optimization performansi 3G network. Standard value KPI in operator Telkomsel that must to be met on voice service namely Received Signal Code Power (RSCP) is 95% and Energy Chip Over Noice (Ec/No) is 90% and for data service is PS Throughput. The results of optimize 3G performance in Kopo Permai Bandung area on parameter RSCP is 98,50% and Ec/No 99,86%. Based on a comparison between standard value KPI in operator Telkomsel with the results of optimasi 3G network performance for handling Bad Coverage and low throughput reached the optimal performansi value.*

*Keywords: 3G/UMTS, Optimasi 3G, Drivetest, Kopo Permai, TEMS Investigation 11.0.1*