

## **ABSTRACT**

The increasing number of subscribers of cellular network impacts not only on its revenue, but also on the derivation of the network quality. Increase of call failure is a mark of this derivation on network quality. Call failure can be caused by factor such as failure on the user's equipment of phone, the location of the user which is outside of the serving BTS's coverage area and loaded network traffic.

At this final project optimization process in Tasikmalaya area with the 3G network on the operator 3 by doing physical re-tuning as *azimuth* and antenna tilting, the software used during the test drive is TEMS Investigation 9.0.3 Data Collection for data collection and data processing drive test.

From the results of a test drive can do the optimization process. Standard KPIs to the operator 3 (tri) is RSCP > 80% and Ec / No > 70%. 3G network optimization results in the Tasikmalaya area amounted to 98.34% RSCP and the Ec / No amounted to 81.97%. By comparing the results of the test drive with the standard operator KPI 3 (tri) achieve optimal value.

**Keywords : Optimization 3G Network, coverage, quality, Tasikmalaya area**