

ABSTRACT

Development of Cellular Technology GSM (Global System for Mobile) is currently growing rapidly. For that each operator is required to perform network optimization so customers still get the quality better service. The process of performance improvement of service quality in a GSM network that is by considering the factors that cause decline in network performance and make recommendations for improvement or to guarantee customer satisfaction

Final task was to discuss more specific about the traffic in the Balancing analysis microcells, and overlay on the GSM underlay EXCELCOMINDO area study cluster Bandung Center. Underlay known as GSM 900 who work at 900MHz frequency and mikrocell overlay while working at 1800MHz frequency. Optimization steps to overcome customer traffic is very dense with the overlay service license in the underlay network management capabilities (traffic handling) and also the addition of microcells cells in roadside areas so that all calls can be achieved optimally

Subject matter in this final task of the network conditions Bandung Center for Cluster is a condition of unbalance of traffic networks, statistical records visible to BSC traffic conditions tend to take the traffic overlay compared with underlay and microcells. BSS parameters imbalances especially in the capital Layer ACCmin threshold parameter value is not in accordance with rangenya coveragenya respectively so that the totality of traffic that can be served more but when viewed in terms performansinya poorly. The amount dropcall values, congestion, and performance parameters Key Parameter Indicator (KPI) others are not as expected.

As a result of the end of this final task is increase optimization performance network in cluster Bandung Center. Visible from the result of drive test for level Speech Quality Indeks is better. In addition, can get the performance network which is the standar of Key Parameter Indicator in GSM network of Excelcomindo.

Keywords: Underlay, overlay, microcell, balancing traffic, ACCMin, Layer Threshold