

ABSTRACT

Currently, Telecommunication Operators are in competition to increase their quality of service they have, therefore the operators keep upgrading feature and/or software. This research focus on the usage of “UMTS State Transformation” feature. Noteworthy, there is always trade-off in optimizing in operator such as increasing throughput will decrease other KPI performance. So, it needs later treatment to return KPI value back to network standard normally.

This research was held to analyze the decreasing of KPI value caused by “UMTS State Transformation” activation feature for RNMKS02 region in South Sulawesi. Optimization for increasing KPI value using script provided by Software Operation and Maintenance M2000 PT. Huawei Tech Investment. Research's parameter concern are Power *Congestion*, IuB *congestion* dan CE *Congestion*.

The result of this research shows the value is increasing for Accessibility RRC SR is 99,44%, CSSR CS is 98,18%, CSSR PS is 98.8%, and CSSR HSDPA is 98,8%. All of these value affected by those three parameters. For retainability CDR CS is 0,42% CDR PS is 0,32% and CDR HSDPA is 0,87%. This decreasing caused by KPI mobility parameter. For KPI mobility SHO SR is 99,9%, ISHO CS SR is 99,31%, and ISHO PS SR is 91,74% which their increasing caused by KPI retainability parameter.

Key Words: KPI, Accessibility, Retainability, Mobility, *congestion*