

ABSTRACT

GSM (Global System for Mobile Communication) is cellular communication technology for 2G that has been applied by the countries of the world include Indonesia. The application of cellular concept (with look mobility of subscriber) on GSM system efficiently is one of the useful factor for establishment network quality. The other side, the subscriber want the best service from cellular operators which give communication service. Based on cellular concept and user mobility that are high enough, so need *Handover* and *SDCCH* (*Standalone Dedicate Control Channel*) mechanism that may the user can move from one cell to the other cell without break of the connection. Performance of *Handover* and *SDCCH* that are not good can cause quality of service and communication which are resulted.

From traffic data, there are the failure of indicator like low of *Handover* and *SDCCH* successful. This can be saw through the parameters that compose *Handover Success Rate* and *SDCCH Success Rate*.

This final project, performance of *Handover* and *SDCCH* will be analyzed with look the parameters that compose *Handover Success Rate* and *SDCCH Success Rate*. From this final project can be know the failure factor of *Handover Success Rate* and *SDCCH Success Rate* that influenced of network performance. Then, from result of observation can be know network performance, if successful level of *Handover* and *SDCCH* fullfil the KPI standart or no, so can be reached quality of network performance to guarantee satisfaction of subscriber.