

## **ABSTRACT**

The rapid development of mobile telecommunication has made a competition among mobile service providers to provide the best for their customers. It is also the consequence that TELKOMFlexi, as a service provider, faced. In this case, service providers are demanded to guarantee the QoS (Quality of Service). When QoS increases, the number of customers and the amount of revenue the service operators receive would increase. In this case, the service provider of TELKOMFlexi has the trafficability parameter to replace the QoS.

Due to the demand of customers, it is possible to have overload traffic in the network. Service providers need to measure the traffic periodically to cope with the overload. With the measurements, service providers could have as many calls possible to succeed in various situations, could be able to guarantee the network efficiency and effectiveness whenever an overload happens or an error found in the system. This final project gives the analysis of voice traffic on TELKOMFlexi, especially at the MSC and the solutions for the problems occurred at the moment of measurement or analysis. It is also gives an analysis of the distribution function that suit the existing theories of traffic. It also studies the data processing of voice traffic to achieve more valid results.

The analysis of TELKOMFlexi voice traffic data is done at the time of the measurement of the data itself with the emphasis on the connection of BTS to MSC. The traffic parameters that occurred in the measurement are: ASR, SCH, MHTS, OCC, SCR, distribution function, etc. With the existing traffic parameters, the realization of trafficability could be achieved.