

## ABSTRACT

Nowadays, many telecommunication operators which provide CDMA cellular communication service, one of them is PT.Telkom, Tbk with their product called *TelkomFlexi*. The SMS (Short Message Service) is a feature that people interest, because of its advantages, effective communication service and not expensive cost.

SMSC (Short Message Service Center) is one of important part ini SMS network. All of messages traffic will be detected in SMSC. This final assignment try to analyze the performance of SMSC in *TelkomFlexi* , and try to give solution to optimalize SMSC. Data according to SMSC *TelkomFlexi* in PT.Telkom,Tbk Kebayoran Baru, Jakarta Selatan.

The result shows that average outgoing rate from *TelkomFlexi* is 4.99 SMS/second, and average incoming to *TelkomFlexi* is 4.87 SMS/second. Busy hour in 19.00 – 20.00 WIB. Average delay time system is 3.27 seconds and standard deviation 1.17 seconds. Average utility factor is 0.85 and message failure is 2.025%, shows that system condition stability is good.

The result of this analysis shows that the performance of SMSC *TelkomFlexi* is good enough. Evaluation of capacity and system utility are needed to optimalize SMSC performance and to give satisfaction for costumers.