

## **ABSTRACT**

*Telecommunication network is made with the aim to provide the tool to exchange information between the users whom wanted to use it when they need information. During the exchange of information process, there is an information exchange from the transmitter to the receiver. The information exchange from one place to another place inside the network is called telecommunication traffic (teletraffic). Teletraffic theory is used to determine the necessary components needed during the planning of one certain network and also purposed to evaluate the existing the network. So the network capacity used could be determined.*

*The rapid growth of science and technology nowadays, demanding one certain teaching assistant tool that bolster the learning process. Beside that, the availability of visual software is able assists the user in overcoming the traffic issue. In this project, the calculator of B Erlang and Engset formula has been made. For B Erlang formula, it was made in two kind of mode, which are circuit and blockage.*

*This calculator has been made by using Matlab software where the result of simulation perform an accurate result (100%) for B Erlang formula's calculator meanwhile for Engset formula's has not achieved the accuracy of 100% due to in one of the simulation with the input of  $A=2$ ,  $N=3$ ,  $S=6$  the output B achieved is 15.5% while the manual calculation perform 15.9% so there is an error margin about 0.4%.*