

ABSTRACT

At this moment, internet is the one of the most important parts of our lives. By internet, we can get various information easily, throughout data communications, such as sending a message, file sharing, and many others. Technology of data communication has encounter many developments, followed by rapid growth of vehicle in the worldwide, create a new technology, which called VANET. VANET is a technology, which uses vehicle as nodes in *ad-hoc* network. VANET itself has many benefits, such as collision warning, file-sharing, and many others.

On this final project, there is a simulation work of audio file transmission, in form of lossy and loseless compression, with format .mp3 and .alac by using VADDs *protokol*. Simulation done with NS-2 version 2.35 to get the value of average packet delivery delay and average throughput. The simulation also using OneSim to determine the setting of variety speed and count of nodess. And then, the result of simulation will be assessed by reference of ITU-T Rec. G.1010.

The result of simulation showed the value of average packet delivery delay has variety values, from the lowest value, are 91.382-170.982 ms for all *audio* file size, and has the value of variant throughput from 13.465 Mbps - 627.595 Mbps.