**ABSTRACT** 

Mobile ad hoc network (MANET) is an ad hoc network from nodes who each nodes

in this network could work as routers which are responsible to search and handle routes

needed in the network. MANET can be developed quickly in least infrastructure area such

as disaster or war area. Media application such as video streaming is widely used and

really functional. But, video streaming needs enough bandwidth and minimum delay to

work properly, while MANET network has limited bandwidthand delay. To overcome this

problem, video compression and routing protocol are needed.

In this Final Assignment, trials have been done to see how user addition and network

load influence video streaming application performance on MANET. For user addition,

trials have done with 2, 3 and 4 user. And for network load, trials used 500 kbps, 1000

kbps and without background traffick.

Based on user addition, we got worst performance in 4 users scenario, with 1.109 ms

delay, 0.936% packet loss and 7.3549 ms jitter. Whereas based on network load, worst

performance was found in 1000 kbps background traffic scenario, with 1.045 s delay, 1.9%

packet loss and 11 ms jitter.

Keywords: MANET, OLSR, Video Streaming, H264

ii