ABSTRACT

Nowadays wireless telecommunications technology is growing rapidly. Allowing many standard is used, One is technology *Wireless Sensor Network* (WSN). WSN is a wireless network that consists of a set of nodes which is equipped with sensors to monitor and collect information from the environment where the sensors are spread over an area and interconnected.

Research carried out recently is about how to overcome the limited power in WSN network. One mechanism used is a greedy routing protocol on the condition of the mobile node. This Final Task will discuss the influence of greedy routing protocol for mobile nodes on the network performance WSN node based on the influence of speed and increasing the number of nodes. In addition, this study will also take a look at the effect of adding background traffic, as well as comparison with WSN network without greedy routing protocol.

From the simulation result obtained that greedy routing protocol has a bad enough performance for WSN. It is because the obtained performance parameter is quite bad the node moves with velocity up to 4 m/s, like average packet loss 76.423% supported by power consumed 6.446mW and average throughput is 49.983Kbps. In adding rate background traffic is up to 100Kbps, the obtained average packet loss is 72.6737% with average power consumed 6.4841mW and average throughput 32.8202Kbps.

Kata Kunci : WSN, Greedy Routing, Mobile Node