ABSTRACT

A huge number of sensor would be needed in order to monitoring the city condition in Smart City. There will be a time when the internet network is crowded and make almost impossible to send a data package. Therefore we will need a solution to coupe this problem. One of the solution is using DTN network.

This Final Task will discuss how to simulate DTN network using drone as an alternatif relay. The simulation will run in ONE (*Opportunistic Network Environment*) and will analyze three component that is *Delivery Probability, Average Latency, Average Number of Hop*.

Based on observations there will be a performance comparison and analysis of the parameters tested between DTN networks that use drones and DTN networks without using drones.

Key Word : *Delay Toleran Network, Drone, Smartcity, Semi Random Circular Movement Model, Random Way Point.*