

ABSTRACT

Nowadays the need of information especially internet is increasing. People in this Globalization era need to be able to get internet access anytime anywhere. To provide internet access to remote area is a problem. Teledesic system can overcome this problem. With direct internet connection from satellite to user terminal and worldwide coverage area, then anyone anywhere can get internet access anytime.

There are 288 satellites in teledesic constellation. Routing algorithm is needed to send information to its destination with minimum delay. This final project designs and evaluates a routing algorithm for teledesic satellite system in order to have an effective routing algorithm. The parameter used to evaluate the algorithm is delay and throughput.

From the simulation result, it can be concluded that in satellite network minimum number of hop means minimum path distance between source satellite to destination satellite. From the simulation result we can also conclude that the higher the number of hop, then the delay between source and destination become higher. The highest delay is 0,148426 s for 12 hop and the lowest delay is 0,006721 s for 1 hop. We can also conclude that the higher the number of hop, then the throughput obtained become lower. The highest throughput is 8923,6990 kbps for 1 hop and the lowest throughput is 6640,4410 kbps for 12 hop.