ABSTRACK

Along the development of the technology the greater the demand for communication, even indoor building area. In indoor building area that has a lot of room or in the skyscraper, the signal from the BTS decreased dramatically due to walls and concrete. So need femtocell technology to maintain signal quality. Femtocell is a micro BTS technology that uses low power, using a frequency that is used officially as a cellular network, but movement user of building both indoor area can make result ini termination of call abrupyly.

In this final analysis is done on the mechanisms of femtecell handover performance in this case UMTS femtocell. Parameters used in the analysis and simulation of femtocell handover are throughput and delay. So it will be seen the influence of distance and speed on the parameters of these femtocell handover.

The result of simulation analysis has been done throughput and delay values obtained with FAP power 10 dBm. From the analysis of simulation results obtained in scenario 1 with different distances but speed 3 km/jam that the greater the distance FAP then the value of throughput will be decrease with high delay. While in scenario 2 is the speed varies with the distance between FAP stabile, it was found the higher the speed the user then the value of the throughput will decrease with delay values obtained will be even greater.

Key word : Femtocell, Throughput , Handover, delay