

## **Abstract**

*In recent times, sophisticated wireless systems in the emerging market world, one WiMAX. In the era of the all these moves, all are required to follow what was the trend at that time. If there is a client that accesses the internet using a mobile WiMAX network will inevitably happen displacement of the BS (Base Station) in accessing to avoid termination.*

*Handover is the process for handling data transfer for a moving MS. Handover method commonly used is the Soft Handover (SHO) where MS simultaneously connected to two or more cells of the BS during a data connection lasts. In the process of handover, there is a parameter that can affect the process of handover, ie the speed of movement of MS, changes in the movement of MS, BS transmission power settings, setting the frequency of modulation and coding pathloss BS and MS settings.*

*There is a significant influence on the setting BS transmission power settings, setting the frequency of modulation and coding BS and MS due to pathloss setting is an important parameter in the configuration of WiMAX. The results of experimental evaluation carried out SHOWed that the transmission power parameters affect the coverage and signal strength of BS. For modulation and coding parameters affect the range and how to send signals as well as to an effect on how the pathloss parameters for coverage and handling of signal interference from the BS.*

*Keywords: WiMAX, Soft Handover, BS transmission power, Frequency Modulation and Coding of BS, Pathloss of MS*