ABSTRACT

Wimax is a new technology that can give broadband wireless services like the exist technology, Wi-Fi. Wimax can give high data rate until 120 MBps in maximum radius cell 40-50 kilometres. Wimax has two standar, IEEE 802.16ed for fixed wireless and IEEE 802.16e for mobile wireless. The transmission of information signal has many problem that can performance the quality of signal information such as *reflections*, *scattering*, dan *diffractions.* These problems can decrease level power receive and increase noise that can decrease the quality of link radio. Wimax has many solutions to guard signal information quality. One of the solutions is adaptive modulation.

In this final document, adaptive modulation performance data got by measurement trial on field. The measurements take in four places in Bandung such as Risti Park, Pasteur Street, Cileunyi, and Rancaekek. Radio Link Parameters that measured are SNR, RSSI, and Throughput. This measurement use BreezeMax hardware.

This final document will analyze the performance of adaptive modulation based on SNR, RSSI, Throughput, and Environment condition of measured places. That environment condition such as buildings, trees dan others obstacle that influence the performance of adaptive modulation. From this final document, we will get information about adaptive modulation performance for each four measured places.