## ABSTRACT

Nowadays, the development of wireless communication technology increases quickly. The variety of wireless technology is able to communicate not only for voice, but also for video and data with high mobility.

Broadband Wireless Access (BWA) technology existed such as WiMAX and WLAN offer their special characteristic. The change of characteristic between WiMAX network to WLAN or vice versa can cause the change of value toward bandwidth and delay propagation. Therefore, it causes Quality of Service (QoS) decline and network performance disorder.

Media Independent Handover (MIH) occurred to the user experiencing the movement between WiMAX network and WLAN network called vertical handover. Media Independent Handover enables the transfer of user with high mobility among high rate data network and narrow coverage area and also low rate network data and wide coverage area.

In this paper WiMAX and WLAN network was simulated by Network Simulator 2 (NS2) program, and then the performance and effect of Media Independent Handover between WiMAX network and WLAN network was analyzed.

Keyword : wireless, WiMAX , WLAN, Media Independent Handover.