

## ABSTRACT

Multimedia services quality of telecommunication network that is not maximal is the weak point for its selling power. It pushes further research to improve services quality. While the new technology of copper local access network has been a demand that cannot be avoid anymore.

Technology can applied at copper local access network are *Asymmetric Digital Subscribe Line (ADSL)*, digital modem technology that can used at conventional telephone network. This technology can solve weakness of copper local access network. It has high speed access, wide bandwidth downstream, existing infrastructure, and can give various multimedia services.

At this Final Task build tripleplay services (voice, data, and video) based on web pass through Wireless ADSL. That application can be access by user with PC and notebook. The kinds of application are: data download, streaming video, voice call, video call. Then will be doing analysis performance of tripleplay. The programs implementation and analysis will be examined in Accessnet Laboratory. With smartDSLAM IPAM-1600s.

As for result of this analysis can give information concerning optimalization of WADSL technology to support tripleplay service based on web. Frame rate streaming video is 25 fps. Average throughput of data download is 1,008 Mbps. Average delay of voice call 50,717 ms, in video call 115,4 ms. Average jitter 6,394 ms, video call 5,565 ms. Throughput in voice call 17,8 Kbps, video call 25 Kbps. Packet loss in voice call 0,0096 % and video call 0,039 %. This case include in standard ITU\_T that is means good quality for tripleplay.

Keyword : *tripleplay, WADSL, streaming*