ABSTRACT

Along growth of transmission technology which have support the high transfer rate, the growth of telecommunication content also increasing to give multimedia service to the customer. Universal Mobile Telecommunication System (UMTS) as one of 3rd generation technology support connection up to 2 Mega bit per seconds (Mbps). That high rate connection is used to support multimedia services with different Quality of Service (QoS). This network can support effective bandwidth equal to 144 kbps for vehicular user, 384 kbps for mobile user and up to 2 Mbps for static user.

The technology based on video which represent audiovisual technology rapidly grow in this time. Television as the most actual media for entertainment, news, information and also business, have important role in our society. Mobile streaming services give a solution about limitation in wireless network. The research focussed at the process of live encoding H263 video codec and Adaptive Multi-Rate (AMR) speech codec for streaming server application with television content which implemented in mobile network. Streaming technology selected because it can transmit data of video and audio for real-time communication.

The implementation of this final project is in packet switched UMTS network. The first aim is to transmit data stream video-audio with maximum bitrate 64 kbps according to streaming class in UMTS. The measurement that have been done is consist of the quality of data stream, analyze network performance and performance of server. As a whole, result of analysis which have been done, give a result that streaming service is compatible implemented in packet switched UMTS network that appropriate with *quality of service* (QoS) that explain in 3GPP TS 23.107 and 3GPP TS 22.105.

Keywords : *H263, AMR, UMTS*