ABSTRACT

This research will implement *traffic control* on *the IP Multimedia Subsystem (IMS)* which provides a new paradigm in multimedia networks. To performed to determine the *minimum level of bandwidth* and services *performancy* generally only performed for IP networks.

One solution to implement *traffic control* on the *IP Multimedia Subsystem (IMS)* is to use *DiffServ QoS* method on *individual flow controls*. Is *IP-based DiffServ QoS* using *DiffServ value Code Point (DSC*P) to separate the traffic into several levels. *DiffServ* using the modeling system and WLAN *interworking* access network, *IMS* servers, and server applications. This is related to service classes consisting of *conversational, interactive,* and *background*. Modeling is combined with changes in the number of users, the application of *DiffServ*, for *balancing system.* Implementation built using network properties and the best methods.

After the construction of the system, the result is the number of *users* and *DiffServ* technology affect changes in the value of *end-to-end flow-level control*, *delay*, *jitter*, *throughput and packet loss*.

Keywords : Traffic control, IMS, DiffServ