**ABSTRACT** 

Active Queue Management (AQM) is the process of signaling TCP sources

from core routers with the objective of managing queue utilization and delay. Active

Queue Management (AQM) routers will play a key role in meeting tomorrow's

increasing demand for performance in Internet applications. Such applications include

voice over IP (VoIP), class of service CoS) and streaming video where packet size

and session duration exhibit significant variations. It is essentially a feedback control

problem. Based on a recently developed dynamic model of TCP's congestion-

avoidance mode, there are important several things which need to get attention., it

relates key network parameters such as the number of TCP sessions, link capacity and

round-trip time to the underlying feedback control problem.

For the this Final task will be analysed an alternative scheme of AQM using

Fuzzv Marking(FEM) method supporting Explicit explicit congestion

notification(ECN) by using Fuzzy Logic Controler (FLC). To see how far

performance of this alternative AQM method, writer will compare performance from

this method with method preexist that is Random Early Detection(RED) by using

simulation from ns-2 and show real result from use of FEM in management of use and

delay at queue in an TCP best effort network.

Keywords: AQM, queue, FEM, ECN, Fuzy Logic, RED