ABSTRACT

Universal Mobile Telecommunication System (UMTS) offer mobile service, like voice, data communications and multimedia services. The internet which first can only be enjoyed by consumer of fixed network, now can be used on UMTS.

Data service in UMTS use TCP as its protocol transport. Initially TCP was designed for the media of cable, but at UMTS there are air interface which have unstable character. Variation of TCP made to yield the better performance from its predecessor. In this final project compared TCP Reno and TCP Vegas at UMTS network with window variation (5,10,15,20,25,30,35,40) and channel bit rate (32, 64, 128, 384 and 1024 kbps). TCP's performance seen from throughput, delay and packet retransmition.

Result shows that TCP Vegas have better performance than TCP Reno, TCP Vegas have better throughput, smaller delay and packet retransmition almost not happen on TCP Vegas.

 Keyword: UMTS, TCP Reno, TCP Vegas