ABSTRACT

The development of communication technology has brought the increasing of its aplications. For 3G technology which is integrates communication and information services, offering high speed data communication services, access, video traffic, and multimedia throughly, has been proved giving the advantages to users. Universal Mobile Telecommunication System (UMTS) is a third generation (3G) designed to accomodate wide range applicatin with quality of service (QoS) differences. One of the samples of UMTS 3G is Wideband Code Division Multiple Access (WCDMA). WCDMA is a multiple access technique used on third generation. The capacity of WCDMA is unlimited. The maximum capacity depends on the interference occurs in system. However, high interference can decrease the QoS, so that the mechanism to reduce the interference is strongly important.

To provide better quality service and increase wireless network performance, Radio Resource Management (RRM) is strongly needed. That is way, UMTS offers some RRM methods. This RRM has an important role in providing different services with better quality without ignoring user, and also in controlling the stability of network. The method that is choosen is Congestion Control.

This final project will talk of congestion control method which has a function to control the network stability so that the overload that leads to new call blocking and handoff dropping can be avoided, and maximize the performance of UMTS network.

Keyword : UMTS, QoS, RRM, Congestion Control