

ABSTRACT

802.11p protocol or better known as Wireless Access in vehicular Environment (WAVE) This goal was originally developed and used as a solution for the Intelligent Transportation Systems (ITS), this is done by providing a range of services vehicular Ad-hoc Networks (VANETs), such as navigation service service, Traffic Information System (TIS) and service Car to Car Communication (C2C). This protocol provides communication services Vehicle to Vehicle (V2V) and Vehicle to Infrastructure (V2I).

With the characteristics of high mobility and packet loss during handover occurs, giving its own difficulties for building application services on the network's vehicular network. In addition to the effect of vehicle speed while driving also have an influence on the quality of network reception. In this thesis, will be constructed simulation of a possible development potential applications in Wireless Access in vehicular Environments (WAVE) using CBR traffic with Mobile IP solution to test the performance of the network.

From the analysis of the parameters - input parameters are calculated and observed from the images and graphics have been created, the hypothesis the authors concluded that the speed of the mobile host on the move on the highway on a simulated scenario affects the packet loss, throughput and delay produced during the process of reconfiguration of the network during handover occurs and the network quality.

Keyword : *Vehicular Ad-hoc Networks (VANETs) , Intelligent Transportation Systems (ITS), packet loss, throughput , delay, handover, Wireless Acces in Vehicular Environments (WAVE).*