A Study for QoS support in the WAVE MAC

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Abstract— WAVE(Wireless Access in Vehicle Environments) communication technology has been designed for short initial link, low latency and high mobility in the communication between vehicles or between a vehicle and a infrastructure. In order to provide high quality and reliable services using WAVE technology, it is required to guarantee QoS(Quality of Service) in the WAVE. However, there are limitations in guaranteeing QoS in current WAVE technology. In this paper, we present the features of the WAVE technology, the limitations in supporting QoS in the WAVE MAC(Media Access Control) and the enhanced technologies to overcome these limitations with considerations for the development of next-generation WAVE technology based on them.

Keyword—WAVE, MAC, QoS, EDCA, TDMA

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