

APPRAISAL OF VoIP CODECS WITH WiMAX OVER VEHICULAR AD HOC NETWORKS

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ABSTRACT

Vehicular ad hoc network (VANET) is a very wide area of research due to various types of services it provides. It is considering as essential part of Intelligent Transportation System (ITS). It is a wireless technology that helps to improve the road safety and driving assistance. WiMAX is a 4G technology, currently using by various industries & institutions. WiMAX is a wireless telecommunication protocol which provides many advantages due to its high speed and large coverage area. VoIP is a methodology for voice communication & transmission of multimedia session over Internet Protocol (IP) networks. These three networks provides a high variety of services when combine with each other. But there are also many challenges that need to be pointed to provide a better quality of voice communication in any network. In this article, we estimate the performance of various VoIP codecs with WiMAX in different network conditions of Highway over VANET. There are some parameters such as End-to-End delay, average MOS, average jitter, throughput, average delay and signal received with error has taken to evaluate the performance and quality of voice connections and also helps to find out that which factor affect most the telecommunication media quality over VANET.

KEYWORDS: VANET, Wi MAX, Codec, IP, Bellman-Ford