

PERFORMANCE ENHANCEMENT WITH THE NEW IEEE802.11p (DSRC) IN VEHICULAR COMMUNICATIONS

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ABSTRACT

Active wireless communication between high speed vehicles, nowadays, is actually a very challenging problem and using advanced mathematics & signal processing methods, we can significantly increase the reliability of those systems. The technology has been developed now globally and is termed as Dedicated Short Range Communication (DSRC). For DSRC, IEEE has made a new protocol IEEE802.11p with some amendments in the previous IEEE802.11a. In this paper we are using 802.11p for vehicular communications and the results of the paper show that this 802.11p is much better than 802.11 with better packet delivery ratio, less delay and some other improved parameters.

KEYWORDS: DSRC, 802.11p, 802.11, Packet Delivery Ratio, Delay, AODV, DSR, VANET, NS2