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ANALYSIS OF DATA EXCHANGE OF VEHICLE-TO-VEHICLE COMMUNICATION IN VANET

This paper is to analysis of data exchange of vehicle-to-vehicle communication in VANET. The relevance of traffic management mechanisms and technological solutions in V2V communications was presented. It was explained that VANET communication interoperability enables exchange of information, to improve the mobility and reliability in routing protocol.

The use of vehicle-to-vehicle (V2V) communications in VANET is necessary and has advantages in monitoring and management during congestion on the road traffic to reduce average delay and travel time. Measuring of traffic and traffic information would be organized in smart cities. Researchers have been performed on designing of traffic simulation models for vehicles, including protocols for exchanging information to reduce and improve congestion and average delay.

Many benefits are related to traffic management where drivers, are supported in precision, position location and safety in the road. Studies showed the intersection environment between user's road and operators. VANET communication interoperability enables exchange of information, to improve the mobility and reliability in routing protocol. The vehicle-to-vehicle communication use wireless communication to exchange data. Studies on performance data in 801.11p using DSRC technology connectivity and investigation of performance must respect air density changes in that environment map. The usage of personal mobile devices in VANET without vehicles device-to-device (D2D) still benefits in traffic networks. This interoperability provides data required of connected vehicles to vehicular networks, where localization system availability and precision are using in all vehicles having GPS. The notification system to drivers about road conditions helps to reduce the number of collisions on the road. That system is used to prevent accidents, collision and provide assistance to drivers. Data are charring between vehicles, one another to improve safety, comfort and efficiency of transportation networks, but with serious problem in urban areas in the case of changing lanes. These technologies are not the perfect solution in communication network delivery. Researcher's challenges associated with V2V applications and their communications system are classified according the Quality of Service.

The development of technology in VANET is relevant nowadays. In addition, the analysis of data transmission in these networks is a prominent solution to solve issues of smart cities. Vehicles are connected to each other through some networking technology. Studies show that many challenges and advantages are related to this network to monitor and manage the traffic network.

References

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