

Comparison between DSRC and other Short Range Wireless Communication Technologies

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Abstract—DSRC (also known as IEEE 802.11p or WAVE) is a medium/short-range RF communication technology designed specifically for in-vehicle environments that provide high-speed, real-time, accurate, and reliable connectivity between vehicles and vehicles, vehicles, and roadside infrastructure. The single/two-way voice, image and data communication services support vehicle public safety, traffic management, in-transit information release, commercial freight management and non-stop charging services, which can significantly improve the safe operation efficiency of road traffic. It consists of a series of protocols and standards that work very similar to RFID technology. This study presents a compares DSRC with several other commonly used short-range wireless access technologies in terms of transmission rate, spectrum characteristics, and communication modes.

Keyword— VANET, V2V, IEEE 802.11p, WAVE, DSRC.



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