Ieee control protocol in ieee 802.11p uses

IEEE 802. 11p is one of the recently approved amendments to the IEEE 802. 11 standard to add wireless access in vehicular environments (WAVE). It appended some enhancements to the latest version of 802. 11 that requires applications support of Intelligent Transportation Systems (ITS) (Abdeldime M. S. Abdelgader, 2014). 802.

11p allows nodes to communicate in OCB mode i. e. outside the context of a basic service set (BSS), thus avoiding the latency problem.

Another benefit of 802. 11p over its predecessor is channel scan free since the OCB communication occurs in a frequency (Ikbal Chammakhi Msadaa, 2010). 3. 9. 1 Medium Access Control protocol in IEEE 802. 11p
The Medium Access Control protocol in IEEE 802. 11p uses the Enhanced Distributed Channel Access (EDCA) mechanism originally provided by IEEE 802.

11e standard. Different Arbitration Inter Frame Space (AIFS) and Contention Window (CW) values are chosen for different application categories (ACs). There are four available data traffic categories with different priorities; these are Background Traffic (BK), Best Effort traffic (BE), Voice traffic (VO) and video traffic (VI) (Yi Wang, 2008). MAC is the sub layer between Data link layer and Physical layer of Open System Interconnection (OSI) model. It provides the ease of control and enables nodes to communicate with each other from different location. The implementation of MAC in IEEE 802. 11p enables faster and efficient of communication.

(Pathak, 2015). 3. 9. 2 Physical Layer of IEEE 802.

11PPhysical layer is the heart of communication in vehicular network. In Open System Interconnection (OSI) model physical layer is the seventh layer. The Physical Layer is the link between the MAC layer and the medium that allows transmissions of data.

It generally deals with hardware specification, coding and formatting the data according to certain requirement. Physical layer comprises two sub layers.