A Medium Access Control for the Infraless Peer Aware Communication Networks

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***Abstract*— In this paper, the peer aware communication (PAC) network is introduced as an infraless area network which supports peer group communication for the low power wireless devices. For providing efficient synchronized group communication, the PAC MAC superframe is suggested. To avoid interference among neighboring peer groups implicitly and to support the variety of required quality of peer group services, the cyclic-superframe structure is proposed. The PAC devices can communicate with less power consumption by configuring a cyclic-superframe structure aligned with the service traffic, and can avoid interference to neighbor peer groups by selecting the start time of peer group communication.**

***Keyword*—— peer aware communication; IEEE 802.15.8; superframe; cyclic-superframe**

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