IMPLEMENTATION OF MEMAC PROTOCOL IN WIRELESS SENSOR NETWORK : A SURVEY

TRIVENI D. DHAMALE[a], D. S. MANTRI[b] and S. S. WAGH[b]

[a] B.E.(Electronics and Telecommunication), M.E. (VLSI & embedded System)- Pursuing
Sinhgad Institute of Tech. Kusgaon(BK.),Lonavala, Pune. Maharashtra, India.
[b] Asst. Professor in STE'SSinhgad Institute of Tech., Kusgaon (BK.), Lonavala, Pune. Maharashtra, India.

Abstract

In Wireless Sensor Networks, no. of significant challenges are imposed on MAC Protocol Design for energy efficiency with node mobility. Various MAC Protocols with different objectives were designed to provide reliable communication with good data rates & low energy consumption. Some MAC protocols proposed for static sensor nodes degrades network performance in mobile networks. In this project we propose to introduce an adaptive mobility aware & energy efficient medium access protocol (MEMAC) for mobile wireless sensors network. MEMAC protocol is hybrid based MAC protocol which has the advantages of energy efficiency in mobile environment. MEMAC differentiates between message as data & control. MEMAC uses dynamic frame size to allow protocol to adapt itself to changes in mobility conditions. Also it includes only those nodes in schedule which have data to send. It handles the channel access through the following phases synchronization, request /leave/join, schedule calculation and distribution and data transfer. By simulation experiments of MEMAC protocol performance analysis will be done in terms of energy consumption, throughput and average packet delay.