Abstract

The advances and many new works have been made in sensor technologies and communication in Wireless Sensor Networks (WSN). Almost hierarchical routing protocols are based in the separated area zone and clustering. In this work, we propose an improvement of energy aware of nodes in wireless sensor networks for a hierarchical routing protocol. The proposed improvement is based on taking into account the number of nodes that are dead which can create an empty space with any functional nodes. Here we proposed the simulation results with some different parameters. We have simulated and analyzed LEACH, and then we have compared a performance concerning a network lifetime. We noticed a gain of around 16%.

References


**Index Terms**

Computer Science  Wireless

**Keywords**

WSN; LEACH; Simulation; network lifetime.