

ABSTRACT

Wireless Sensor Network (WSN) or Wireless Sensor Networks is a wireless network that consists of many sensor sources (nodes) are deployed in a particular area in order to monitor and control the sensor area. Each sensor collects data from the monitored area can be data temperature, noise, vibration, pressure, and movement.

At the end of this task, will analyze the performance of hierarchical clustering algorithms one based routing protocol, TEEN (Threshold sensitive Energy Efficient sensor Network protocol) which has the working mechanism-based clustering and cluster-head uses to minimize energy usage. These simulations use software NS-2 (Network Simulator 2) and analysis of network performance using the parameters of energy consumption and node life time.

The results of research shows that the TEEN performance with adding the node number will be better because the energy consumption that needed is less, also for the adding the number of cluster.

Keywords: Wireless Sensor Network, Hierarchical routing - protocols, algorithms TEEN