ABSTRACT

The use of the sensors is not always goes smoothly. Power efficiency is becoming the crucial problem when using sensors with a limited power especially in Wireless Sensor Network (WSN). The use of the sensor with the concept of client-server, where each sensor node is sending data sensing to sink node will have an impact on resource use of sensors that use batteries due to cause high network traffic [3].

The concept of mobile agent is implemented to do data aggregation in sensor nodes that have the ability to migrate between one node to the other nodes to perform a given computational processes [2]. Mobile agent that is implemented using the platform Agent Factory Micro Edition (AFME) which allows to create an agent running on a mobile device with the rule sets are defined.

The average power consumption usage by using mobile agent is 39.6 mWh whereas without the mobile agent is 209 mWh. Latency or time interval required for the entire process of mobile sensor nodes of the registered agent of mobile agent to depart back to the sink node is a linear rise within 5 seconds of each node increases.

Keyword: *Mobile Agent*, *Wireless Sensor Network*, Daya, *Latency*.