ABSTRACT

The emerging number of motorized vehicle, especially motorcycle, has grown so big nowadays that it demands our concern in term of a better security and faster data collecting. Because this number also attracts another number, the number of crime against it and ways of doing it.

To achieve the better security and faster data collecting problem, the author uses Radio-Frequency Identification (RFID), which consists of an RFID tag planted in the vehicle, and an RFID Reader which will be installed in certain coordinates to read the identification of the vehicle. And all of them will be connected into one Wireless Sensor Network (WSN) based on Zigbee 802.15.4. The datas running through them eventually can be seen in a change log or history of their position in Google Maps.

In the simulation set for this research, we can conclude that this system succeeded to identify all the tags used to represent the vehicle. As well as the simulation designed to track the vehicle location, the three tags that pass five different coordinates can be maped and printed on Google Maps. All in all the author hopes that this research will prevent bigger number on motor vehicle theft and provide a better security and faster data collecting problem.

Keyword : RFID, WSN, Google Maps.