Fire detection systems for outdoor environment could be implemented by using specialized cameras, which are able to capture multispectral images. The biggest challenge that arises in these setups is where to place the camera(s) in order to have the best view on the observed territory. Since these systems have their limitations, since they provide stationary point of view, we have decided to investigate a new approach. The platform that is proposed in this paper will use unmanned aerial vehicles, which are going to patrol above the desired territory and will constantly observe for fire-related events. The drones will be equipped with specialized optical and thermal cameras and will be able to capture video or still images. In addition, the drones will also have constant bidirectional connection to the base station and they will be able to provide a feedback about their observations.

We have architected our proposed model based on LTE-M technology which will be mounted on the belt of forest animals. When animals are moving in the forest and come in the range of stationary nodes where ZigBee wireless sensors are deployed then the modules of LTE-M will collect data from ZigBee wireless sensors and will send it to the cloud where the sensor data will be analysed accordingly [11, 12, 13]. Figure 1 shows the WSN system where sensor nodes collect the data from the environment and transmit the data to

the sink node of the cluster. Then sink node will collect the information through all the sensors and form a database. After some threshold time LTE-M module will be transferred the data to the cloud server.