

## **Automated call receiving and forwarding mechanism for supporting integrated disaster management system**

### **ABSTRACT**

Disasters have caused great loss of lives and economic loss besides disruption of services and infrastructure. In any case of a disaster, prolonged arrival of relevant agencies such as the rescue teams means delayed commencement of all restoration work that should be done after the incident. This prolonged arrival is one of the factors that delay in alerting the relevant agencies for them to commence in action. Currently in Malaysia, the call receiving and forwarding procedure is handled by MERS99 with human intervention, i.e telephone operators. This research proposed an algorithm which able to receive a call and identify the relevant agencies to be directed to the event based once the GPS location of the mobile user who made the report. Thus, human intervention in the current procedures is being minimized. The efficiency of the algorithm is evaluated by comparing the response time of the current procedures with the implementation of the algorithm in the proposed prototype. Based on the evaluation, it is shown that the proposed algorithm are able to shorten the length of time between and incident happens and relevant agencies being dispatched to the event.