

## **Widespread Emergency Response System in Colombo District**

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Majority of fire emergency and rescue services struggle with the management due to the absence of efficient systems. In the current process of fire emergency and rescue management service, several issues have been identified. Therefore, the present study is suggested to overcome identified inconveniences by developing an efficient & effective automated system to manage time, resources and make correct & timely decisions. Data was collected from the both people who get and don't get the service from this department. Another new set of issues that contains in the current service were identified through the collected data. A method; Widespread Emergency Response System was developed to reengineer the current process using information technology. The objective of the research was to measure the effectiveness of the widespread emergency response system for Fire Rescue and Emergency Service. The literature survey was carried out in order to identify existing methods of controlling emergencies and understand their positive and negative features. Identified factors were applied to the proposed system. The system was developed with three mobile applications and controlled web application. A system which provides facilities to send emergency request with selecting emergency type was developed and after controlling process start user could view the route map and contact the service center. Control room officer assign the task through the system and allocated officer can view their task through the application. The system architecture was designed. The system was functional wise tested according to the test cases created. By using project network techniques, the collected data was analyzed from both current and developed systems. Overall and average values were used to determine more effective method. The results indicated that developed system has shown the less value. This system can be further developed and a method can be developed to find the location from the normal phone.

Keywords: Rescue, Automated system, Project network techniques