

## Mobile Kit-Disaster Assistant (MKA) : A Mobile System to Assist Relief in Large-Scale Disasters

Mohd Khairul Azmi Hassan (mh42@hw.ac.uk) Yun-Heh Chen-Burger (y.j.chenburger@hw.ac.uk)

MKA is a mobile smart system that based on a set of innovative technologies, it provides effective communication to assist coordination among victims, communities, public helpers, rescuers and relief organizations during and after earthquake disasters. This mobile application can track and communicate with people in need who are trapped or needed medical attention in a disaster area even when no internet connection is available. This innovative system will help rescuers or nearby members of public to find victims near their locations quicker and safer; and help take them to the nearest shelters. With this system, we propose innovative mobile communication framework and technologies to assist individuals at a personalised level that was not tackled by any previous systems.

## **Key Features :**

- 1. Earthquake alerts and monitoring
- 2. Assist personalised help to suit each individual's needs
- Personalised communication strategy with family, friends and carers
  Victim discovery, monitoring, tracking
  Innovative P2P mobile communication framework during network disruption
  Energy efficient reliable semanticsbased communication strategies

## **Applications :**

- Personalised Earthquake Emergency Assistance for Personal Discovery, Tracking, Rescue and Relief
- 2. This set of technologies are aimed to be used by individuals, such as
  - i. Earthquake victims people in need
  - ii. Official/NGO rescue organisations
  - iii. Ad-hoc public helpers

