Abstract Title

A Study on Utilization Information of Disaster Site for Real-Time Situation Management

Abstract Text

In the event of a disaster, most of the response systems are divided into final decision makers who direct overall situation management, preparation, response, and restoration work, and field managers who share the status of the actual disaster at the site and perform the tasks they are directed to.

Although major means of sharing situations between decision makers and field managers in Korea are used, such as telephone, messenger, and report, the information provided in simple text format was inconvenient to decision makers who have to issue business instructions after considering the surrounding status information and concerns over possible future damage.

In response, a GIS-based smart disaster situation management system was established to manage the situation quickly at the site of a disaster.

The system presents 32 types of information related to disaster safety produced by 12 agencies (the Korea Meteorological Administration, the National Transport Information Center, Korea Hydrographic and Oceanographic, etc.) on a single screen (e.g. weather/ocean observation information, CCTV video information, etc.) and provides detailed location of disaster areas, location of damage sites and photos, and visualizing the weather information on a multidisciplinary basis to enable the decision panel to provide visualisation.

Through mobile applications, we have developed a function that allows field managers to upload information obtained from professional equipment (photo, radar, chemical measuring, etc.) directly into the system and will study various disaster site investigation information so that it can be used to support professional situation management in the future.