A Study on Multi-media Disaster Information Contents to provide Disaster Alert Service to the Public

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Abstract— Most disaster warning systems currently in operation provide disaster information only through text or voice. Therefore, it would be quite difficult for many of the elderly, the foreigners, and the disabled to recognize the information to respond timely against disaster. In addition, due to the limitations in the information that text format can carry, there are limitations in providing accurate disaster situations. In order to solve these problems, research on technologies to provide more disaster information by including various multi-media contents and on technologies that can automatically generate multi-media contents is being carried out. In Korea, there is a high-level infrastructure that can employ and provide multi-media disaster information by utilizing the latest ICT technologies such as '5G' and 'UHD' along with digital signages and bus information systems. Utilizing this infrastructure, 'Location customized information' and 'multi-media information' can be provided. In particular, while utilizing the standard CAP (Common Alerting Protocol) suitable for the Korean environment, disaster alerts can be immediately transmitted including the localized multimedia information. This study aims to find a way to deliver more disaster information than the current system and contribute to reducing damage to lives and properties of people in case of disaster.

Keywords— Disaster Information, Multi-media, Disaster Alert Service, CAP (Common Alerting Protocol), Customized Information

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