DEVELOPMENT OF IMMEDIATE EARTHQUAKE INTENSITY INFORMATION AGGREGATION SYSTEM USING PC BUILT-IN SENSORS AND IP MULTICAST

Akihiro SHIBAYAMA[1], Tohru OKAMOTO[2], Susumu OHNO[3], Kazuhiro SEO[4] and Osamu TAKIZAWA[5]

[1] Member of JAEE, Assistant Professor, Tohoku University Disaster Control Research Center, Dr. Eng. ashiba@archi.tohoku.ac.jp
[2] Nippon Sogo Systems, Inc.
[3] Member of JAEE, Assistant Professor, Tohoku University Disaster Control Research Center, Dr. Eng.
[4] Nippon Sogo Systems, Inc.
[5] National Institute of Information and Communications Technology, Dr. Eng.

ABSTRACT: We developed the immediate earthquake intensity information aggregation system using PC built-in sensors and IP multicast. This system detects earthquake motion using the PC built-in acceleration sensor and transmits the information of earthquake motion to other PC using IP multicast communication. This also records earthquake motion at the same time, which will be very useful for firefighters to rescue victims. We confirmed the usability of this system by carrying out the vibration tests.

Key Words: Real-time earthquake disaster prevention, 3D-Eathquake damage estimation, Acceleration sensor, IP multicast