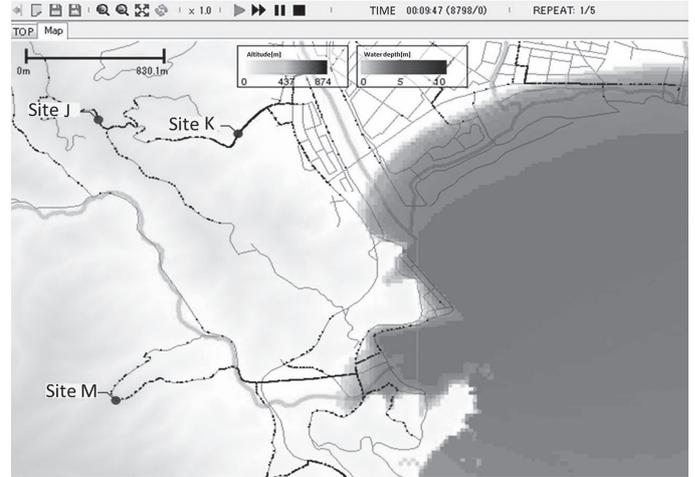
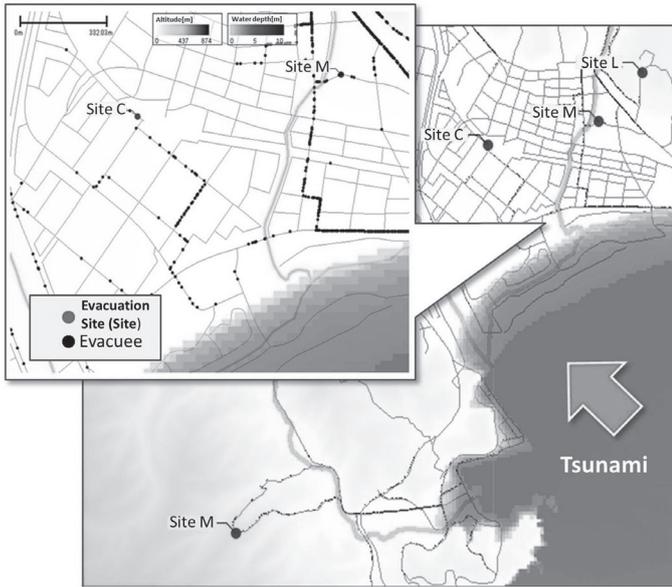


business continuity planning



Computer images show the coming of a tsunami and the movement of people heading to various evacuation sites. KKE

KKE starts consultations for evacuation planning

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SPECIAL TO THE JAPAN TIMES

One lesson learned from the tragic Great East Japan Earthquake disaster on March 11, 2011, is that hardware alone does not suffice to save the lives of so many people in affected areas.

Technically, higher breakwaters and higher seawalls could be built, using taxpayers' money, if available. But almost nobody had anticipated a tsunami measuring as high as 20 meters would strike. The height of conventional seawalls at the



Yasuhiro Kitakami

quake-hit areas was 6 to 7 meters at best.

"We should not undermine

the importance of disaster prevention hardware. But the consensus being formed today is the mixture of hardware and software measures to reduce risks," acknowledged Yasuhiro Kitakami, chief of the Innovative Information Technology Department of Kozo Keikaku Engineering Inc. in Tokyo.

Prompted by ever-growing interest in appropriate and effective measures to reduce risks by the parties concerned, particularly local governments, KKE has developed software to assist the drafting of evacuation plans in case of tsunami or the

flooding of rivers and is providing counseling services primarily to local administrations all over the country so that they could find solutions to their challenges.

The simulation software is called an “evacuation plan-making support system,” an integrated software that simulates and analyzes the outbreaks of an earthquake and the arrival of its ensuing tsunami, while at the same time simulating the behaviors and the movement of local people in disaster-hit communities.

The limitations of hardware are obvious.

The government’s Central Disaster Prevention Council in late August came out with an official assumption that a magnitude 9 quake could strike in the Nan-

kai Trough, which stretches between the Izu Peninsula in Shizuoka Prefecture and the ocean floor off Kyushu. The council forecast that tsunami measuring 30 meters and higher could hit some areas along the Pacific coast.

In releasing the gloomy forecast, Masaharu Nakagawa, then state minister in charge of disaster prevention, admitted, “Prompt evacuation is the best way to prevent deaths from tsunami. Municipalities must come up with concrete (antidi-

saster) plans.”

According to Kitakami, the new software is a combination of the company’s conventional earthquake/tsunami simulation software and its simulation technology to examine the human behavior of evacuation in case of emergency.

“In drafting an evacuation plan, the geographic features of a given community, its population distribution, a network of roads and the availability of evacuation centers at higher and safe places, among oth-

available time to ensure evacuation of as many residents as possible to safe places. Using the outcomes of our simulations and analyses, city planners are able to draft an appropriate evacuation plan,” said Kitakami.

They could eventually draw a better plan to build evacuation facilities, to revise hazard maps and to create new roads, if necessary, he added.

The company is already in agreement with a number of local governments to provide its

consulting services in assisting with the drafting of evacuation plans, using the newly developed software, they said.

Established in 1956, KKE is a specialist in the structural design of buildings. Known for its corporate

philosophy of “industry-academia collaboration,” KKE and its 600-strong employees have been proactively conducting joint research projects and academic studies with university professors. The company’s sphere of business has expanded to earthquake risk assessment, development of software to simulate and analyze natural disasters such as tsunami and floods, and consulting services regarding business continuity planning, among others.

‘It takes a certain time before a tsunami arrives. ... Using the outcomes of our simulations and analyses, city planners are able to draft an appropriate evacuation plan.’

ers, must be taken into full consideration as key factors,” he said.

Kitakami emphasized that the software would help city planners to draw appropriate evacuation routes for local residents and to designate safe evacuation structures or space in a manner best suited to the individual traits of each city, town or village.

“It takes a certain time before a tsunami arrives after the outbreak of a major quake. We must make the best use of the