

INFORMED RESILIENCY

KINEMATRICS AND ITS OASISPLUS EARTHQUAKE TECHNOLOGY

LOOKING AT HOSPITAL DEPLOYMENTS

By Editorial staff

FIRST DEPLOYED IN THE UNITED ARAB EMIRATES at the Burj Khalifa in Dubai, OasisPlus is a piece of technology platform that provides critical information before, during, and after an earthquake, in real time, on and offsite.

Devised as a tool to save lives and minimize business disruptions, OasisPlus is perhaps getting its second wind as resiliency continues to trend upward. It doesn't hurt that OasisPlus, a product created by OSS, the system's division of Kinemetrics, is based in Southern California, ground zero for the resiliency movement.

OasisPlus and Kinemetrics are making their push into the hospital systems in California. The time is right, said Ogie Kuraica, Kinemetrics president and CEO. Via the ShakeAlertLA app, earthquake early warning has already arrived in Southern California. State officials are hoping to introduce the world's most sophisticated early-warning system, similar to systems now active in Mexico and Japan, statewide in the near future.

"We see a new wave of opportunity," Kuraica said. "We'd like to get into the major hospitals in California."

So far, so good. Kuraica said the OasisPlus system is being deployed at Seattle Children's Hospital with deals finalizing at medical centers in San Francisco and Los Angeles. Earthquakes can be particularly dangerous for those staying in hospitals as surgeries and other treatments can be disrupted during a quake and a subsequent evacuation.

In terms of minimizing business disruptions, Kuraica looks back to 2013 and finds a good reason why the OasisPlus technology is important. Earthquakes in Iran and Pakistan forced evacuations in Abu Dhabi and Dubai, but those evacuations didn't need to happen. The post-quake data available to decisions makers at the time was insufficient. And in Abu Dhabi and Dubai, both important international financial centers, evacuations can create exorbitant – and unnecessary – losses.

Kuraica wants to curb such disruptions.

"Not every earthquake deserves the same notification," he said.

For good reason, panic sets in when there is a quake. After the shaking stops, people are confused as to what they're supposed to do. Should they stay or should they go? That's the big question OasisPlus, Kuraica, and chief designer Mauricio Ciudad-Real seek to answer, and



Ogie Kuraica, President & CEO, Kinemetrics, Inc. Photo: Kinemetrics

OasisPlus is a technology platform designed to provide the tools and information you need before, during, and after an earthquake to control impact and ensure business continuity.

- Avoid unnecessary evacuations and business process interruptions to secure ongoing critical operations
- Enable better-informed decision making during an earthquake to assure continuity of operations
- Protect your brand from damage associated with mishandling of emergency situations
- Minimize expensive downtime and distress

OasisPlus empowers response teams to:

Understand how the earthquake has affected their building
 Know the location and condition of building occupants
 Target their emergency response to the areas that need it most
 Communicate instructions directly to occupants via the smart phone app



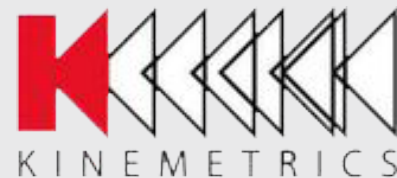
Mauricio Ciudad-Real, senior program manager, OSS. Photo: Kinematics

“WHEN YOUR BUILDING SHAKES, SENSORS MEASURE THE MOVEMENT, AND OASISPLUS EVALUATES THE RESULTS BASED UPON DETAILED UNDERSTANDING OF YOUR BUILDING’S PERFORMANCE AGAINST THE TYPE OF MOTION MEASURED.

“THIS EVALUATION IS TRANSLATED INTO A SET OF ALERT LEVELS THAT INDICATE THE IMPACT YOU SHOULD EXPECT IN THE DIFFERENT AREAS OF YOUR BUILDING.” — OASIS PLUS

When an earthquake hits, we all feel a moment of panic. As soon as your building moves, OasisPlus sends a Building Alert to each occupant who uses the mobile app. This alert snaps them out of that momentary panic, and reminds them of the proper response: Do Not Evacuate – Drop, Cover, and Hold On.

A detailed SAFE Report is automatically sent out to your designated list of recipients. This can be your leadership, response team, or even your structural engineering firm. The SAFE Report includes information on the alert levels across your building, as well as detailed building response information such as inter-story drift that your engineers will find helpful in assessing your structure. – OasisPlus



in the shortest amount of time possible. Post-quake inspections can take weeks, or even months, to conclude. In regard to mission-critical structures like schools and hospitals, or a vital business district, that’s too long.

But most of the time, a quake does not do enough damage to warrant an evacuation or an assessment, said Kuraica, citing a statistic that 80 percent of quakes cause no damage.

“A decision has been made without understanding what happened to the building,” he said, referring to the distinct lack of post-quake knowledge available to stakeholders.

The OasisPlus system is autonomous, meaning it is installed – sensors throughout the building and a console – then organization staff that is onsite as well as offsite (including remote leadership and consultants) are trained on how to monitor the system, so they are self-contained and can function on their own.

“It provides enough information to save a human life,” Kuraica said. “Sometimes staying is much safer than going.”