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## World observation system to include tsunamis

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A global warning system for tsunamis will be part of a network that gathers Earth observation data, an official for the National Oceanic and Atmospheric Administration said today.

The tsunami system will be part of the Global Earth Observation System of Systems, said John Kelly Jr., deputy undersecretary of commerce for oceans and atmosphere. GEOSS will be an interoperable system of systems distributed worldwide and based on international cooperation from existing Earth-observing and data management systems. It will collect accurate Earth observation data, products and services, then deliver the results to global decision-makers, Kelly said, speaking this morning at the ESRI Federal User Conference.

"It is not technical. It is human," Kelly said, adding that scientists must find ways to collaborate across disciplines and share information. "We all have to move away from our comfort zone...and find a way to work together."

Some work is already starting. The United Nations has said 10 percent of tsunami aid money will help fund a global tsunami warning system. In two weeks, NOAA Administrator Conrad Lautenbacher will travel to Brussels, Belgium, for Earth Observation Summit III, where officials hope to reach an agreement on a GEOSS implementation plan, put in place a secretariat to measure the effort, and coordinate a global tsunami warning system.

"We've looked at the Earth as having a central nervous system throughout the last few years," said Simon Evans, the NOAA account manager for ESRI, which specializes in geographic information software. "Basically, [GEOSS]' aim is to revolutionize the understanding of the Earth itself."

At previous summits, U.S. officials concluded that the country "needs to get its act together" on global observations, Kelly said. The federal government has established the Interagency Working Group on Earth Observations, aligning NOAA, NASA and the White House's Office of Science and Technology Policy. Implementation plans for GEOSS will focus on interoperability, metadata and mapping the system into the federal enterprise architecture.

Earth observations are at the core of NOAA's mission. The United States has 100 observing systems, measuring 286 environmental parameters.

Officials expect the global observation system will bolster public safety and protection of the Earth's resources. Public users, for example, might access the system's data through a Web portal to find out if a trip to Yosemite National Park will be interrupted by wildfires. Government officials could regulate policy by viewing flood patterns, climate change and ozone levels based on data from the observation system.

Commercial, academic and research organizations have formed their own GEOSS group, the Alliance of Earth Observations. Representatives from 23 countries convened last May for an Alliance workshop to brainstorm ideas about configuring the global observation system, said Nancy Colleton, president of the Institute for Global Environmental Strategies and the Alliance's co-founder. "There's so much the private industry can bring to this whole endeavor," she said.