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FACT SHEET

Tsunami Alert Rapid Notification System (TARNS) for Thailand



Faikhuddin, US IOTWS Program

Interagency Coordination Group discussing the Thai early warning system. TARNS will help improve protocols and communications procedures to ensure that people receive warnings quickly and move to safety.

What is TARNS?

The Tsunami Alert Rapid Notification System (TARNS) is a set of common protocols and procedures used to ensure that tsunami advisories or warning messages are sent from a national focal point to all relevant government officials and the public quickly and accurately. Thailand's National Disaster Warning Center (NDWC) has the lead responsibility to enhance and refine Thailand's national alert rapid notification system. Initially, TARNS was developed as a quick-response system for tsunami alerts, but it is being expanded to include alerts for other disasters as well. A set of common procedures and protocols will be developed for all relevant entities, and will be coordinated based on the government structure, culture, and available technologies.

Government Initiatives for TARNS

On March 24, 2006, NDWC signed a Memorandum of Agreement with the U.S. Agency for International Development (USAID) Regional Development Mission for Asia (RDM/A) to support TARNS in Thailand. This TARNS initiative has helped NDWC to design and implement a robust conceptual plan for adopting the appropriate technologies and procedures to deliver both disaster warnings and "all clear" alerts in a timely and efficient manner. In addition, nation-wide simulation exercises are being conducted to test these procedures. The USAID-funded U.S. Indian Ocean Tsunami Warning System (IOTWS) Program has provided technical support through experts from the U.S. Department of Agriculture's Forest Service (USDA/FS) and the U.S. National Oceanic and Atmospheric Administration (NOAA).

TARNS Conceptual Framework

Since May 2006, a series of workshops have been conducted with NDWC in collaboration with USAID, USDA/FS, and



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NOAA, as well as the United Nations Development Programme, Asian Disaster Preparedness Center (ADPC), and the UN's Intergovernmental Oceanographic Commission (IOC) to build a comprehensive end-to-end model that extends down to the local level for rapid warning communications during emergencies. The TARNs framework consists of:

- System design and plan that include a regulatory framework, the respective roles and responsibilities of government levels, role of the media, a schematic of communication pathways for warning, required interagency agreements, and standard operating procedures that are updated annually.
- Appropriate technology to facilitate the rapid movement of warning information as per the TARNs plan and operating procedures.
- Procedures to test and evaluate all aspects of the system on a routine basis based on the characteristics of the technology being used.

Representatives of the Thai Government formed an interim Inter-agency Workgroup for TARNs. The Interagency Workgroup is responsible for coordination on early warning and developing a comprehensive integrated plan for an effective disaster warning dissemination system. Members have taken initial steps towards establishing an action plan and strategy for TARNs in Thailand.

TARNs Simulation Exercise

A large-scale simulation exercise is scheduled for six provinces along the Andaman coast in July 2007 to test and evaluate the warning system procedures. All 79 siren towers in the six provinces will be activated and tested. At the same time, local evacuations will test the disaster preparedness and response plans in those provinces. The simulation outcomes and the TARNs model will be shared with other Indian Ocean countries during a Regional TARNs workshop in Sanur, Indonesia, in August 2007.

About the U.S. Indian Ocean Tsunami Warning System (IOTWS) Program

The U.S. IOTWS Program is part of the international effort to develop tsunami warning system capabilities in the Indian Ocean following the December 2004 tsunami disaster. The U.S. program adopts an "end-to-end" approach—addressing regional, national, and local aspects of a truly functional warning system—along with multiple other hazards that threaten communities in the region. In partnership with the international community, national governments, and other partners, the U.S. program offers technology transfer, training, and information resources to strengthen the tsunami warning and preparedness capabilities of national and local stakeholders in the region.

For more information please visit www.us-iotws.gov.

