CONCEPT OF OPERATIONS (CONOPS)

The operation of a tsunami warning center is a vital part of an end-to-end tsunami warning system. A tsunami warning center is not only involved in acquiring and processing data for detecting a tsunami, but also in formulating and disseminating tsunami warnings and connecting with communities at risk to ensure that they understand the warning and have the capacity to respond. Tsunami warning centers must develop partnerships with international organizations; national, sub-national, and local agencies; community leaders and organizations; businesses; and local citizens to ensure warnings are received and understood by local communities. The concept of operations, or CONOPS, describes the operational flow of hazard and non-hazard information between organizations and between departments within an organization. It also includes the decision-making processes required to generate warnings to enable officials to take appropriate actions when needed.

US IOTWS Contribution

The National Oceanic and Administration (NOAA) drew on its experiences over 40 years as part of the Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System to support the development of a regional and national concept of operations in the Indian Ocean region. The Tsunami Warning Center Reference Guide is one of NOAA’s contributions towards that effort. The guide provides a comprehensive reference for countries that are establishing new warning centers or maintaining and
enhancing existing centers as part of an overall end-to-end tsunami warning system. It also provides outreach and education resources for warning centers. During the program, NOAA conducted training for disaster management officials in Sri Lanka on CONOPS.

The U.S. Trade and Development Agency supported Thailand’s National Disaster Warning Center (NDWC) to assess its analysis and decision-making processes. Implemented by the Pacific Disaster Center, the project identified the existing information flow, data collection and transfer, inter-agency communications protocols, organizational structure, and operational processes. Based on findings, the US IOTWS further supported NDWC to develop an integrated environment that supports effective decision making for national disaster warning.

Next Steps
NOAA will continue to gather feedback on the Tsunami Warning Center Reference Guide and improve its technical support to countries in the region. The International Tsunami Training Institute (ITTI), jointly implemented by the Asian Institute of Technology and the University of Washington, will provide capacity building on CONOPS.

For Further Information
- Ed Young, NOAA National Weather Service (edward.young@noaa.gov)
- Stan Goosby, Pacific Disaster Center (sgoosby@pdc.org)