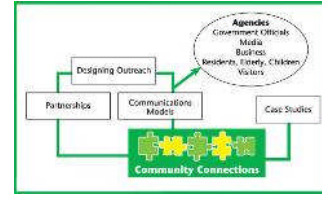


# RADIO AND INTERNET TECHNOLOGIES FOR THE COMMUNICATION OF HYDRO-METEOROLOGICAL AND CLIMATE-RELATED INFORMATION (RANET)



The Radio and Internet Technologies for the Communication of Hydro-Meteorological and Climate-Related Information (RANET) initiative is a collaborative effort of many national hydro-meteorological services, non-governmental organizations (NGO), and communities. RANET aims to make weather and climate information available to rural and remote populations, which are often among the most in need of environmental forecasts, observations, and warnings. While significant advances have been made in our ability to predict and observe our environment, much of this valuable information remains inaccessible to those outside major cities.

The concept of RANET was articulated by a number of national agencies and the African Center of Meteorological Applications for Development in the late 1990s. By 2001 the program had begun setting up networks and working with a number of communities. Although it began in Africa to address infrastructure problems facing national meteorological and hydrologic services (NMHS) and the development community, practitioners soon found that RANET could be used in Asia, the Pacific, and other parts of the world.

## US IOTWS Contribution

The US IOTWS Program introduced this critical communications technology to Indonesia's tsunami warning system, and other countries in the region. The National Oceanic and Atmospheric Administration (NOAA) distributed radio phones and trained disaster management technicians from the region on RANET warning communications. Technical field staff from ten Asian countries participated in RANET training events, including national workshops that were held in Indonesia and Sri Lanka. Through the US IOTWS Program, 150 RANET units have been disseminated to tsunami-affected communities in Indonesia and another 50 units in Sri Lanka.



One of several models of digital satellite receiver used to download RANET content

To close the communications gaps in reaching vulnerable people at the "last mile", RANET is a solution that is inexpensive to initially deploy, does not require much training, and that can be maintained and serviced with local resources. The Program has encouraged partners to utilize the RANET network for other educational and humanitarian purposes beyond that of earth science and services. This has increased the sustainability of the program and ensures that people will continue to receive vital tsunami and other hazard information.

## Next Steps

To support the continued flow of information and the RANET network, NOAA will maintain satellite broadcast operations on the WorldSpace satellite for approximately eight years. Partners in government agencies will manage the deployment, utilization, tracking, and deployment of RANET while continuing to support multiple uses of the technology.

## For Further Information

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- <http://www.ranetproject.net>