NetComm - Keeping Watch on Tsunami

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The company’s Commercial division specializes in providing business,enterprise and government with broadband technologies designed to meetthe latest requirements of modern telemetry, M2M communication, WAN andlegacy serial applications. Rugged 3G and 4G products are designed to providereliable data communications to resource hungry applications in areas such asmeteorology.

Business challenge

Monitoring a coastline as vast and remote as Australia’s is challenging for anyauthority. It requires a full suite of data to be uploaded every minute of everyday across multiple locations. This was the challenge facing Australia’s Bureauof Meteorology when implementing its component of the Australian Tsunami Warning System.

The Australian Bureau of Meteorology used NetComm to develop a robustand reliable warning system for the Australian coastline. NetComm turned toSierra Wireless to integrate reliable and advanced wireless connectivity to theirnetworking devices.

“NetComm was commissioned to develop rugged CallDirect 3G routers formounting on offshore and onshore stations to ensure greater connectionreliability while reducing the costs associated with having PC units attached toeach station,” said David Stewart, Managing Director, NetComm.

Many of the installations are within cellular range of the shoreline and includeradar units that collect data from sensors to monitor sea level changes. Thesea level data is collated and uploaded to the Bureau’s headquarters where it iscombined with tidal measurements, seismic readings and data from a variety ofother ocean sensors to form the basis of regional tsunami alerts.



Sierra wireless AirPrime Embedded Wireless Module

The installation and operation of sensor equipment in remote and offshorelocations required a robust wireless solution. After careful consideration,NetComm selected the AirPrime MC Series module as it is a proven solutionalready used in critical networking devices.

“With lives depending on the protection offered by the Tsunami Warning Systemit was crucial for us to use a reputable supplier for premium functionality andperformance,” said Mr Stewart.

NetComm’s CallDirect cellular routers use AirPrime modules to offerundisrupted high-speed broadband connectivity using the 3G network toeliminate the need for installing expensive PCs between the radar andmodem. The antenna diversity of the AirPrime module improves fringeperformance in remote locations such as the offshore stations of the TsunamiWarning System. Moreover, Sierra Wireless has been providing integrationand verification support that guarantee the overall performances of NetcommCallDirect router.



Results

AirPrime embedded wireless modules provided an effective and reliablesolution to help safeguard the lives of many people living in low-lying areasalong Australia’s northern coast. Precisely because this solution is so costeffective, greater numbers of people throughout the Asia-Pacific region cannow benefit from increased levels of protection afforded by the network.AirPrime modules benefit Netcomm by providing:

- High-speed connectivity
- Improved fringe performance thanks to antenna diversity
- Proven performance, quality and reliability
- Easy integration

Solution:

- Sierra Wireless AirPrime MC Series Embedded WIreless Module

Key Benefits:

- High-speed connectivity
- Improved fringe performance thanks to antenna diversity
- Proven performance, quality and reliability
- Easy integration