

CASE STUDIES



US Army, Directorate of Information Mgt. - WiMAX



Client: US Army, Directorate of Information Mgt.

Project type: WiMAX

10/14/04 - 10/18/04 Fort Lee, VA

Requirements

- Army Project Manager, Logistics Information Systems, directive to eliminate expensive terrestrial circuits for interconnectivity.
- Create high-speed wireless ethernet connection to replace terrestrial T-3 circuit spanning 10 miles, linking the Northrup Grumman facility in Chester, VA to Ft. Lee.
- Connection must meet all U.S. Army information security requirements because connection links U.S. Army base to off-site, non-Army facility.

Challenges

- Procedural - Receive interim approval to operate WiMAX equipment in conjunction with PM Logistics Information System for local area network.
- To receive full security engineering and information assurance certification to support full system accreditation.
- Implementation - Site conditions do not provide adequate line of sight within established link speed requirements.

Solution

- Designed configuration utilizing 802.16 technology. Installed with 2 point-to-point 4.5 degree 5.8 Ghz antennae to secure connectivity.
- Connection overlaid with 3DES encryption.
- Install custom-fabricated mount on existing tower at Ft. Lee and engineer, assemble, and install tower on Chester, VA facility roof.

Results/Outcome

- Successfully installed and achieved speed of 36 -- 48 Mbs.
- First WiMAX installation on U.S. Army base.