

Networks secure subways, transit systems

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A new surveillance network being built for the New York City subway system may serve as a model in the coming years for other metropolitan transit authorities, experts tell UPI's Networking column.

The New York Metropolitan Transit Authority is developing a security network that will link motion-detectors, decision-support software, closed-circuit TV cameras, and wireless networking technologies, to monitor for terrorist threats below the terra firma.

The three-year, \$212 million contract for the project is going to Lockheed-Martin Corp., the defense contractor, which will network 277 subway stations in New York City.

This kind of surveillance technology was "previously only available to government agencies," said Wendy Artman, a spokesman for San Francisco-based 3VR, a networking security provider.

The installation of the network for the New York subway may motivate other, large authorities, and non-profits, which run the nation's infrastructure, to adopt similar technology strategies and tactics. "Eighty-five to ninety percent of our nation's critical infrastructure systems are owned by the private sector," said Tom Noonan, a founding member of President Bush's National Infrastructure Advisory Council, who is also president and CEO of Atlanta-based Internet Security Systems.

These networks, being installed across the country, are called Supervisory Control and Data Acquisition, or SCADA, systems.

The cutting-edge system in New York City, announced in late August, is being financed with the nearly \$600 million authorized for the transit system there in the wake of Sept. 11, 2001.

Security cameras on the network will be able to spot suspect conduct -- and perhaps prevent terrorism on the subways.

The system is said to be an even more advanced version of what the London police used during their investigation of bombers there this past summer. More than 1,000 closed-circuit cameras, and 3,000 motion sensors will be installed in the New York City subway system, enabling authorities to discern between moving, and static subjects. Command and control software will automatically prioritize alerts, and forward the messages to police, Lockheed said.

The advanced systems like these can "send alerts -- e-mails, calls, etc. -- directly to security managers, warning them of certain threats, such as a suspicious person entering a building," said Artman. "For example, an enterprise can be notified when a former employee is on the premises or if someone enters corporate headquarters after hours."

The security networks enable literally thousands of cameras to operate simultaneously.

A number of companies -- in addition to Lockheed, based in suburban Washington D.C. -- vied for the project. "CellAntenna was one of the bidders to supply the New York transit authority and London Underground with a telecommunications system," said Deborah Schaller, a spokeswoman for CellAntenna Corp., based in Coral Springs, Fla.

Some very cool technologies, potentially, could be used for these networks in the future. "Among the fastest and most secure mechanisms for processing large volumes of users in 3C facial biometrics," said

Suzanne Matick, a spokeswoman for A4Vision, a biometrics technology developer, based in Sunnyvale, Calif. "Now, with sub-second processing speeds, a single face reader can handle at least 3,600 individual scans per hour, provided the individuals are pre-enrolled."

One day, transit debit cards could be networked to the security system, as well as facial biometrics, to provide an even higher level of security. The systems will increase the speed with which individuals travel through security, while reducing the risk of suspects getting onto the trains and buses.

"Mass transit will require a network of communicating security systems that optimally combine security factors to effect tighter security," said Matick. "Global demand for security has promoted a multi-factor security model in which proven security methods combine in new ways."

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