

4G public safety network to undergo first tests

Demonstration to begin evaluations of cutting-edge LTE communications technology

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Partners from the telecom industry are being signed up to participate in a demonstration network being established by the Commerce Department to test next-generation communications technology for a nationwide public safety network.

The first vendor, Alcatel-Lucent, signed on in September to provide Long Term Evolution equipment for wireless testing in a controlled environment under a Cooperative Research and Development Agreement. Other companies are in talks with the Public Safety Communications Research program, said Dereck Orr, PSCR program manager for the National Institute of Standards and Technology.

“We want to have multiple manufacturers because the nationwide network is likely to include equipment from multiple vendors,” Orr said.

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The demo network will fill a need for facilities to test and demonstrate behaviors of emerging LTE technologies on the yet-to-be-deployed 700 MHz network. LTE has been identified as the technology that will be used on the proposed network and the lab will provide a neutral site for vendors to work out interoperability issues in a multiple-vendor environment and a learning environment for public safety officials who will be using the equipment.

PSCR is a partnership between NIST’s Law Enforcement Standards Office and the Institute for Telecommunications Sciences of the National Telecommunications and Information Administration. Both agencies are within the Commerce Department.

Two swaths of the 700 MHz band have been set aside for a public safety broadband network that would enable nationwide interoperability and roaming with advanced capabilities. The Public Safety Spectrum Trust holds the nationwide license for this spectrum, which was freed up by last year's switch to digital television broadcasting.

Rules for deployment of the network are awaiting decisions on the disposition of two adjacent swaths of spectrum, originally intended to be auctioned off for commercial development. Although it is generally felt that the additional spectrum should be available for public safety use, there is disagreement as to whether it should be committed exclusively to public safety or to allow commercial development under a sharing agreement.