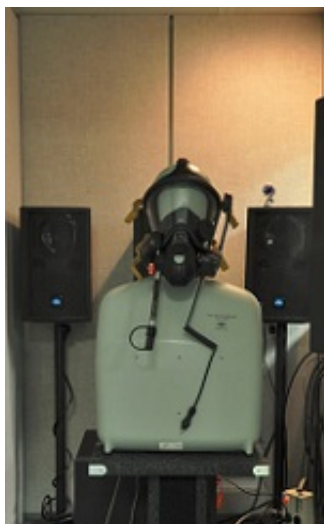


VoLTE outshines emergency communications radios

Voice over LTE (VoLTE) provides clearer communications than what is being delivered by equipment currently used by first responders, according to a recent government study.



A simulator is set up in a sound isolation booth and used to prepare sound clips for subjective testing.

Source: NTIA

That finding was made during laboratory tests comparing speech intelligibility over two types of VoLTE technologies with speech intelligibility over both legacy analog radios and Project 25 digital land mobile radios. The testing was conducted by the Institute for Telecommunication Sciences (ITS), a part of the National Telecommunications and Information Administration. Five companies loaned equipment or provided support for equipment used in this and related work.

A panel of 15 public-safety practitioners from 14 agencies and jurisdictions tested VoLTE transmissions under seven different simulated field conditions, and in only one of 14 cases was VoLTE intelligibility lower than that of current standard equipment, said ITS.

Speech intelligibility testing was conducted on the VoLTE Adaptive Multi-Rate (AMR) speech coder in seven different environments simulating emergency response conditions and especially fire-ground conditions, said ITS. Conditions included background noises of various types, as well as a mask associated with a self-contained breathing apparatus.

The ITS lab in Boulder, Colo., is testing next-generation technology that will be used in the nationwide public-safety broadband network being planned by the First Responder Network Authority (FirstNet).

For more:

- see this [NTIA blog post](#)