Public Safety Video Quality
Project Description

SNAPSHOT

Anyone who has seen video action break up or block out while watching a live televised sporting event knows the frustration of missing a key play because of a poor picture. For public safety practitioners using incident video services, however, a clear picture could mean the difference between life and death. Currently, manufacturers are setting the agenda as to what public safety can and can't have with regard to video capability. The Public Safety Communications Research (PSCR) program, on behalf of the Department of Homeland Security Office for Interoperability and Compatibility, is helping to develop quality requirements for public safety video applications.

BACKGROUND

Public safety's forays into video deployment continue to be fractured. A lack of coordinated information causes agencies to implement one-off or stove-pipe systems. Additionally, the use of video by public safety agencies is wide and varied. Despite these different approaches, video is often used in tasks that require the same elements, including:
- Definitions
- Procedural standards and best practices
- Quality measurement method standards and guidelines
- Subjective test design
- Standards for measurement results reporting

AN INNOVATIVE APPROACH

Alongside the public safety practitioner community, PSCR:
- Designed and conducted subjective viewing experiments that enable definition of performance parameters, ensuring video implementations by manufacturers will meet the operational needs of public safety.
- Filled a void in the public safety community by developing this subjective testing methodology. PSCR's work has now been incorporated into International Telecommunication Union (ITU) standards.
- Formed the Public Safety Video Users Group (PSVUG) to coordinate efforts between organizations and agencies that are developing standards for their own use of video, to minimize duplication of effort. In February 2010, PSCR hosted its second Video Quality in Public Safety (VQiPS) conference to gather stakeholders in support of this goal.

VALUE TO PUBLIC SAFETY

Video has been used by public safety organizations for years; it is not new. But as public safety agencies migrate to more powerful broadband systems, the use of video will undoubtedly increase. PSCR has become the bridge between diverse agencies with potentially duplicative or competing efforts to define and deploy video systems. Currently, vendors tell public safety agencies what they need in order to support video, rather than vice versa. PSCR is acting as an objective technical resource to ensure manufacturers are driven by public safety's requirements.

RESULTS

By working with practitioners, PSCR defined video requirements, liberating public safety from manufacturers' claims of "good enough" systems and equipment. These requirements are published in the Statement of Requirements (SoR) for public safety communications interoperability, which is available on the SAFECOM website (www.safecomprogram.gov).