TSA Balances Security, Privacy

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Air travelers have privacy concerns with advanced imaging technology (AIT). This is what was formerly known as "whole body imaging."

The U.S. Department of Homeland Security (DHS) and its Transportation Security Administration (TSA) faced a dilemma of nearly biblical proportions—balancing the need for "good," clear images (for examination by search algorithms) and passengers' privacy. The need for a truly innovative solution became apparent.

TSA Administrator John Pistole said, "Our top priority is the safety of the traveling public, and TSA constantly strives to explore and implement new technologies that enhance security and strengthen privacy protections for the traveling public."

TSA worked with the DHS Science & Technology Directorate and private industry to develop new software that eliminates the anatomically graphic image of a passenger and substitutes a generic outline. With this innovative approach, passengers view the same outline that the TSA officer sees, maintaining passenger privacy.

Since 2009, NEMA has worked with DHS on DICOS (Digital Imaging and Communications in Security). NEMA IIC 1 v01 *Digital Imaging and Communications in Security Information Object Definitions (IODs)* specifies an extensible, interoperable data format that enables the integration of security screening technologies.

A DICOS revision addressing AIT among other issues is underway. Extensibility is a DICOS hallmark, so that "new" technologies (such as AIT) that evaluate passengers, checked cargo, and carry-on bags can be accommodated.

The goal of DICOS is to accommodate the dual needs of security examination and passenger privacy.

Learn more at *www.tsa.gov/approach/tech/ait/index.shtm* ☻

Meeting the Need for Mass Notification Systems

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When we speak about evacuating people, our thoughts usually involve a fire alarm system. In today's world, however, we must also think about evacuating people or providing directions based on events like weather, seismic activity, and intruders.

As we try to convey information to occupants of a facility or campus, we also need to remember there are people with divergent needs—hearing impairments, visual impairments, mobility impairments, or a combination thereof. We may need to communicate with them inside, outside, and at their side.

We now must employ various types of systems to evacuate people and communicate with them. For example, visible indication via strobe lights, beacons, text reader message boards, and other systems can augment audio systems. Not all emergency communications systems (ECS) need to convey an emergency. For example, we could have a message providing details about the day's lunch selections.

To implement other technologies, we need to create truly integrated solutions. Integration needs to allow combinations of systems to convey the same message to all people regardless of impairments. Along with integration of systems, we also need to think about messaging types that could be used to inform and direct occupants. With a wide range of events that could happen, we could have a wide range of pre-recorded messages. These messages could convey information about moving to higher ground as flooding occurs or possibly relocating to another building if an intruder is present.

Because of this, we must think of messaging priority. NFPA 72 *National Fire Alarm and Signaling Code* (2010 edition) Section 10.6.1 states, "ECS priority signals, when evaluated by stakeholders through a risk analysis in accordance with 14.4.2.2, shall be permitted to take precedence over all other signals."

Recent and tragic events have illustrated that we need to design, plan, and manage our ECSs differently than we have in the past—they need to work right the first time. ☻

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