THE IMPORTANCE OF STANDARDS

The Science and Technology Directorate (S&T), Standards (STN), part of the Systems Engineering and Standards Division (SES), works closely with Department of Homeland Security (DHS) components, homeland security partners and other end users (particularly first responders) to identify and develop relevant standards to address DHS mission needs and promote the use and implementation of such standards in DHS programs. Compliance with standards can reduce program lifecycle costs; decrease risk; establish operability, compatibility, and interoperability of critical products and services; and leverage the expertise of the private sector while encouraging collaboration.

STN provides DHS programs with methods, training, and technical resources, including access to select national and international standards. STN supports metrology and measurement science infrastructure, including the development of voluntary consensus standards and promotion of private sector standards in DHS areas of interest (e.g., chemical, biological, radiological, nuclear, and explosive (CBRNE) countermeasures, response robots and unmanned aircraft systems (UAS), trace contraband detection, wastewater surveillance, and personal protective equipment).

STANDARDS AND THE LAW

In addition to ample benefits to DHS programs, the use of standards, specifically voluntary consensus standards, by federal agencies is mandated by law, primarily through the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) and the Office of Management and Budget Circular A-119: Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities (2016).

The DHS Standards Executive, a position outlined in OMB A-119, leads STN and is responsible for Department standards engagements. The position also serves as the principal advisor on standards to the Office of the Secretary and DHS component heads.

A COLLABORATIVE EFFORT

STN works with DHS components, homeland security partners, and end users on numerous standards activities through participation in inter- and intra-agency standards bodies and technical committees.

Within DHS, STN maintains the Standards Council, featuring representatives from DHS components. Chaired by the Standards Executive, the Council promotes reliance on private sector standards, specifically those developed through a voluntary consensus process, and facilitates the coordination of standards-related activities across the Department. Coordination is also achieved through standards subject area working groups stood up to address DHS mission objectives. These working groups meet to gather, analyze, maintain, and coordinate current information regarding standards and conformity assessment activities.

External to DHS, the Standards Executive represents the Department on the Interagency Committee on Standards Policy (ICSP). STN representatives, including authorized federal employees from various DHS components, participate in several private sector standards development organizations to address program standards needs in key DHS mission areas. Organizations include the American National Standards Institute (ANSI), ASTM International, the InterNational Committee for Information Technology Standards (INCITS), the National Fire Protection Association (NFPA), the Institute of Electrical and Electronics Engineers (IEEE), Underwriters Laboratories (UL), the International Organization for Standardization (ISO), and the International Electrotechnical Committee (IEC).

STANDARDS SAVE LIVES

The impact of standards is highlighted by the effectiveness and reliability of the product or service provided to the end user. The photo shows extensive damage sustained by a firefighter's face mask that did not comply with the latest standard for intense heat exposure. Ensuring and maintaining compliance with standards and other guidance documents helps to prevent incidents and more importantly protect and save lives.