



ANSI Homeland Defense and Security Standardization Collaborative (HDSSC)

**A Roundtable on:
InterAgency Board for
Emergency Preparedness and
Response (IAB) Standards
Development Priorities**

Draft Agenda – Rev. 1

Tuesday, March 27, 2018

Location: ANSI

1899 L Street, NW – 11th Floor

Washington, DC 20036

(WebEx Available: See page 3)

8:30 am – 9:00 am	Registration Desk Opens (Continental Breakfast Available)
9:00 am – 9:15 am	<p>Welcome & Opening Remarks</p> <ul style="list-style-type: none"> • Chris Dubay, HDSSC Co-chair, National Fire Protection Association • Casandra Robinson, IAB Representative, HDSSC Co-chair, National Institute of Standards and Technology <p>Opening remarks about the HDSSC, the InterAgency Board for Emergency Preparedness and Response (IAB), and the roundtable will be provided. Participants will be requested to introduce themselves.</p> <p>A description of each of the standards needs and work to date will be provided (<i>see pages 4–7 for details</i>), and there will be an opportunity for the participants to discuss the need and ask questions. Ms. Robinson, NIST, will facilitate.</p>
9:15 am – 10:45 am (~15 minutes per topic, 15 minutes extra)	<p>Fire/HazMat Topics:</p> <ol style="list-style-type: none"> 1. Guidance for initial first responders at an incident involving chemical agents (IAB SME – TBD) 2. Guidance for initial first responders at an incident involving biological agents (IAB SME – TBD) 3. Test method(s) and performance specification for biological field detection instruments (IAB SME – TBD) 4. Guidance for handling contaminated remains in mass fatality incidents (IAB SME – Gerard Fontana) 5. Guidance for minimizing personnel contamination and performing decontamination related to structural fires (IAB SME – TBD)
10:45 am – 11:00 am	Break

<p>11:00 am – 11:45 am (~15 minutes per topic, 15 minutes extra)</p>	<p>Cross-discipline Topics (Fire and Law Enforcement):</p> <ol style="list-style-type: none"> 6. Test method for security and reliability of wireless links between unmanned aerial systems (UAS) and the controller (IAB SME – TBD) 7. Guidance for tactical medics deployed during law enforcement operations (IAB SME – Tom Nolan)
<p>11:45 am – 12:00 pm</p>	<p>Break and box lunch will be provided for a working lunch</p>
<p>12:00 pm – 1:45 pm (~15 minutes per topic, 15 minutes extra)</p>	<p>Law Enforcement Topics:</p> <ol style="list-style-type: none"> 8. Standard and accreditation program for special weapons and tactics (SWAT) teams (IAB SME – Trish Knudson) 9. Test method for electroshock weapons (IAB SME – Gary Backous) 10. Performance standard for less lethal impact (i.e., kinetic energy) devices using a launching system to fire projectiles (IAB SME – Nick Roberts) 11. Performance standard for distraction devices (IAB SME – Tom Nolan) 12. Performance standard for body worn video cameras used by public safety practitioners (IAB SME – Nick Roberts) 13. Performance standard for tactical operation video cameras (IAB SME – Tom Nolan)
<p>1:45 pm - 2:00 pm</p>	<p>Path Forward</p> <ul style="list-style-type: none"> • Michelle Deane, American National Standards Institute • Casandra Robinson, National Institute of Standards and Technology <p>Ms. Deane and Ms. Robinson will lead a discussion on the next steps on the process for assignment of the standards priorities including any additional discussions that need to be arranged.</p>

See pages 4 through 7 for descriptions of the priorities.

WEBEX DETAILS:

ANSI HDSSC-IAB

Tuesday, March 27, 2018

9:00 am | Eastern Daylight Time (New York, GMT-04:00) |

Meeting number (access code): 737 551 897

Meeting password: Hdssc032718

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Descriptions of 2017 IAB Standard Development Priorities

1. Standard Guidance for Initial First Responders at an Incident Involving Chemical Agents

A guidance document is needed for initial first responders to an incident involving chemical agents. The chemical agents may be toxic industrial chemicals or materials, chemical warfare agents, or pharmaceuticals. The guidance should address minimum resources, personnel, capabilities to perform assigned duties, safety and incident response considerations for determining the feasibility of rescue and recovery operations, line-of-sight with ambulatory and non-ambulatory victims, non-line-of-sight with ambulatory and non-ambulatory victims, rescue operations versus victim recovery, and decontamination. The guidance should provide a systematic process for analyzing the incident, using on-scene indicators to identify any potential hazards (e.g., biological or other), and evaluating potential consequences. It should include an "if this, then that" decision-making strategy and guide the responder to pick the best option based on the facts, science, specific circumstances, and available resources.

2. Standard Guidance for Initial First Responders at an Incident Involving Biological Agents

A guidance document is needed for initial first responders to an incident involving biological agents. The biological agents may be naturally occurring or potential biothreat agents, pathogens, spores, toxins, or viruses. The guidance should address minimum resources, personnel, capabilities to perform assigned duties, safety and incident response considerations for potential public health emergencies, known point-source, potential area dissemination, and decontamination. The guidance should provide a systematic process for analyzing the incident, using on-scene indicators to identify any potential hazards (e.g., biological or other), and evaluating potential consequences. It should include an "if this, then that" decision-making strategy and guide the responder to pick the best option based on the facts, science, specific circumstances, and available resources.

3. Standard Test Method(s) and/or Performance Specification for Biological Field Detection Instruments

Test methods and/or specifications are needed for instruments intended to detect and identify biological agents, and levels of detection should be included. These devices are used by responders in the field, but there are no standards for assessing whether the devices perform as expected. Following the anthrax attacks in 2001, manufacturers developed several types of field detection instruments. The first generation of equipment fielded to first responders was based on immunoassays which had a limit of detection of about 10 million spores. Newer methods, such as those based on polymerase chain reaction (PCR) technology, are more sensitive with a limit of detection of about 20,000 spores. Agreed upon test methods are needed to allow responders and purchasing agents to assess the limit of detection of the instruments as well as the probability of false positives and false negatives. The standard should not address recommended guidance for response to a biological incident, as that is a separate need.

4. Standard Guidance for Handling Contaminated Remains in Mass Fatality Incidents

Guidance is needed to help responders deal with contaminated remains for a mass fatality incident so that the remains can be further processed, and then turned over to a medical examiner/coroner, and then to families for final disposition. Mass fatality incidents can occur and have occurred in many different ways, and the ways a cadaver can become contaminated will dictate the guidelines and standards for release of the remains by public health authorities. Blood-borne pathogens, biological threat agents, such as Bacillus anthracis spores, stable toxic chemical agents, and long-lived radioactive elements each present unique challenges. Guidance will, by necessity, be modeled on processes and procedures used by the military in handling remains from mass fatality incidents and from overseas war zones.

5. Standard Guidance for Minimizing Personnel Contamination and Performing Decontamination Related to Structural Fires

A guidance document is needed for decontamination following exposure to a fire, including on-scene gross decontamination, on-scene cleaning of exposed skin, isolation of contaminated gear, cleaning of turnout gear (including having a clean spare set), showering as soon as possible, decontamination of equipment and truck, fire station design to minimize cross-contamination, etc. Studies have proven that smoke and residue from structural fires contain carcinogens that can be inhaled and absorbed through the skin, resulting in high instances of fire fighter cancer. Currently, many fire departments are recommending use of wipes to clean exposed skin on-scene, but there is no data to support whether that practice is actually cleaning the skin or doing harm. Best practices would help end users reduce cancer risk by minimizing contamination and performing decontamination as soon as possible.

6. Standard Test Method for Security and Reliability of Wireless Links Between Unmanned Aerial Systems (UASs) and the Controller

Test methods are needed to assess the security of the wireless links between small unmanned aerial systems (UASs) and the flight operations center (base station/controller), including command and control; sensor control; sensor data; autopilot; and navigation. The cybersecurity concerns are similar as those for other wireless systems, such as cell phones.

UASs have a maximum range specified by the manufacturers; however, there are currently no test methods to assess range for devices in varying environments, from rural to suburban to urban, and under varying conditions, such as among trees with leaves or without leaves. Additionally, test methods are needed for assessing the data link integrity when exposed to various other devices operating in the same frequency band under the above conditions. It is anticipated that metro areas will have more interfering devices than urban areas.

7. Standard Guidance for Tactical Medics Deployed During Law Enforcement Operations

A standard is needed for medics that are deployed during law enforcement operations, including tactical team operations, police response to a mass assault, and active shooter responses. The standard should address considerations, recommendations, and best practices.

This guidance should not specify requirements. These medics need specific guidance to coordinate their efforts with law enforcement. While the NTOA SWAT standard mentions tactical emergency medical support throughout, it does not give specific guidance for the medics. The 3 basic types of guidance required include minimum tactical emergency casualty care training (this is different than typical emergency medical services training), knowledge and use of personal protective equipment, and training on tactical movements.

8. Standard Practice and Accreditation Program for Special Weapons and Tactics (SWAT) Teams

A standard and an accreditation program are needed (1) to increase the confidence in SWAT teams and their capabilities and (2) to enhance consistency and interoperability among SWAT teams. There are some existing standards for SWAT teams; however, they do not meet the need for an accreditation program. The standard should specify the minimum number of people and specialty positions on a team, equipment list (including equipment for the team and for the specialty positions), and training (initial and periodic) for teams and individuals, including certification of individual team members.

9. Standard Test Method for Less Lethal Conducted Energy Weapons

Conducted energy weapons (CEWs) (e.g., TASERs) are used by more than 16,000 law enforcement agencies as a less lethal force option. CEWs are designed to introduce electrical charge into a human body for the purpose of creating pain and incapacitation. Although they are commonly used, CEWs are not tested to any standards and have been found in field use to be inconsistent in their electrical output. The biggest problem is “cold” weapons that do not have high enough output to cause pain much less incapacitation. Situations in which CEWs are deployed and have low output could result in the use of lethal force. A test method is needed to allow for consistent, independent testing of CEWs prior to purchase and deployment in the field.

10. Performance Standard for Less Lethal Impact (i.e., kinetic energy) Devices Using a Launching System to Fire Projectiles

Less lethal impact devices are widely used by law enforcement officers to de-escalate potential deadly force situations. Identified issues include improper velocity, inaccuracy, and deficient projectile integrity. Performance requirements and test methods need to be developed to address the performance of less lethal impact devices, such as polyurethane projectiles, plastic projectiles (e.g., Pepperball, FN), wooden batons, foam batons, and bean bags, fired from a launching system. The standard should address intended use, appropriate launching systems (such as single shot, over-under, multi-launcher, pump type; hand-held or shoulder-fired), projectile type, materials, and number in cartridge, accuracy and velocity of projectile, impact energy in foot-pounds (for pain compliance or incapacitation), effective distance range (minimum to maximum), resistance to moisture from rain and high humidity, potential hazards, and black powder/smokeless. Examples of how less lethal impact devices are used in the field include crowd control, targeting instigators, incapacitating threatening, hostile, or non-compliant subjects, and incapacitating suicidal subjects.

11. Performance Standard for Distraction Devices

A performance standard is needed for noise flash diversionary devices, also known as distraction devices or flash-bangs. These devices are used by law enforcement and corrections to temporarily disorient subjects by overwhelming the senses, allowing officers to gain tactical advantage. Several issues have been identified by end users and could be addressed by having a performance standard. These issues include distraction devices exploding in the user's hand causing injury or death, devices not remaining stationary after deployment and rolling or propelling to unintended locations, devices producing so much smoke that visibility becomes limited, the sound output of a device is neither consistent nor specified by the manufacturer, the brightness and duration of the light produced by a device is inconsistent, and some devices have burned so hot that they caused unintended structural fires.

12. Performance Standard for Body Worn Video Cameras Used by Public Safety Practitioners

The field deployment of body worn video camera systems by public safety practitioners (e.g., patrol, corrections, SWAT and other tactical responders) offers significant advantages in keeping officers safe, enabling situational awareness, and providing evidence for trial. A major issue with the use of body worn video cameras is a lack of performance standards, test methods, and operational standards. The current concerns with body worn video cameras include lack of ruggedness for the environment in which they are used, insufficient mounting/positioning options, failure to power on and record, and no interoperability between systems and associated software. Further, standards are needed to ensure that evidence gathered from body worn cameras meets courtroom standards. Without such standards in place, practitioners lack adequate information to select the proper system that meets their requirements.

13. Performance Standard for Tactical Operation Video Cameras

A performance standard is needed to assess capabilities of video cameras used by law enforcement in tactical operations for surveillance and situational understanding. These systems are available in several configurations: covert placement, hand-deployed, and pole-mounted. During field use, operators are experiencing breakage of equipment, specifically wiring, connectors, and attachment points. Interference between the camera and the monitor(s) is also a problem. The standard must address all system features such as image quality, audio quality, ruggedness of both the camera and monitoring device, length of operation on battery, and remote-control capabilities.