The American National Standards Institute (ANSI) Homeland Security Standards Panel (HSSP) was launched on February 5, 2003, in direct response to needs expressed for standards and conformity assessment programs in this critical area. The National Strategy for Homeland Security (2002) identified the need for standards to support homeland security and emergency preparedness. However, a January 2, 2003 Congressional Research Service report stated:

“Neither the federal government, nor the nongovernmental sector presently has a comprehensive, consolidated program for developing new preparedness standards.”

The ANSI-HSSP has as its mission to identify existing consensus standards, or, if none exist, assist the U.S. Department of Homeland Security (DHS) and those sectors requesting assistance to accelerate development and adoption of consensus standards critical to homeland security. The Panel has looked to DHS, specifically the Science and Technology (S&T) Directorate, to identify the priority areas for exploration. The Panel also addresses related conformity assessment issues.

The ANSI-HSSP promotes a positive, cooperative partnership between the public and private sectors in order to meet the homeland security standards and conformity assessment needs of the nation. Specific homeland security issues are addressed via workshops. These workshops bring together subject matter experts (i) to identify existing standards and conformity assessment programs, (ii) to determine where there are gaps, and (iii) to make recommendations for addressing these gaps. Further details on the structure, participants, Panel documents and more information are available on the ANSI-HSSP Website (www.ansi.org/hssp).

This report provides a summary of Panel accomplishments during its first three years of existence. It builds upon the items that appeared in the second year accomplishments report, incorporating those from year three. These accomplishments include the production of workshop reports and recommendations, but also less tangible items such as promotion of the crucial role that standards play in the overall homeland security effort, and significant opportunities for networking between and among government and private sector security sector experts. Many of these efforts have elements that are ongoing, but the important groundwork has been laid in the first three years of the Panel’s operation.

Acknowledgements

The accomplishments listed are the result of the hard work, dedication and leadership of the many individuals involved with this initiative. ANSI would like to thank all of the Panel and workshop participants, both past and present, for their service to this important effort. ANSI would further like to thank the members of its Steering Committee for their key role in helping to lead this effort. Special thanks are extended to the following individuals:

- **Mr. Dan Bart**, Telecommunications Industry Association (TIA) and **Ms. Mary Saunders**, National Institute of Standards and Technology (NIST), for their dedicated leadership as co-chairs of the Panel these past three years.

- **Dr. Bert Coursey**, Director of the Standards Portfolio, DHS Science and Technology Directorate, for the crucial support and guidance that he and his department have offered in the area of homeland security standards, as well as his efforts to insure consistent use of appropriate standards within the DHS.
The Forum for Information Sharing and Coordination

- Through the creation of the Panel and its roster of participants, the goal of creating a comprehensive and cross-sectoral body of homeland security experts involved in standardization has been achieved. Successful partnerships with various security initiatives have further solidified the reputation of the ANSI-HSSP as the place for high-level standards matters, across the broad spectrum of homeland security areas, to be initially considered. The four Plenary meetings held to date have allowed the ANSI-HSSP participants and invited stakeholders to meet, strategize, and share information on key homeland security standards issues and efforts underway. The unique forum that the Panel provides has led to many instances where groups were able to learn of complimentary efforts and make contacts that lead to future collaboration and partnerships. Examples of these collaborations include the combining of efforts for security-related conferences and initiatives, and participating in the work of the technical committees of standards developers. The Panel also provides DHS with a single forum to hear from, as well as address, the overall homeland security standards community.

- The ANSI-HSSP Secretary serves as a resource for homeland security standards inquiries, not only to provide answers or further contacts for specific standards questions, but also to connect people and groups working on the same standards issues when similar queries are received.

Support to the Department of Homeland Security (DHS)

- With support from DHS, ANSI completed development of the Homeland Security Standards Database (www.hssd.us), a comprehensive source for homeland security standards information. The HSSD contains more than 6,500 standards categorized in a DHS-developed taxonomy. The ANSI-HSSP workshops provide important data to the HSSD in addition to submissions from standards developers and users. The information in the HSSD will continue to evolve and ANSI is also in the process of finalizing partnerships with other homeland security online systems to share and leverage homeland security information. This database is expected to provide critically needed guidance to state and local first response agencies that need standards for an overwhelming array of new security, personal protective and communication products.

- The September 2005 ANSI-HSSP Plenary meeting, attended by Dr. Charles McQueary, Under Secretary, DHS S&T Directorate and Michelle O’Neill, Acting Under Secretary for Technology, Department of Commerce, was planned closely with the DHS S&T Directorate to not only bring together the homeland security standards community, but also facilitate contacts between security user requirements forums and standards developers.

The user requirements forums that participated were: Association of Public Safety Communications Officials (APCO), Biometrics Consortium, the Interagency Board for Equipment Standardization and Interoperability (IAB), Council on Ionizing Radiation and Measurement Standards (CIRMS), the Process Control System Forum (PCSF), and the Federal Geographic Data Committee (FGDC). This effort was highly successful as representatives from each of the six user requirements forums expressed a great appreciation for the convening of this meeting and the connections that were made, as well as their desire to continue working with the ANSI-HSSP.

- The mission of the Standards Portfolio of the DHS S&T Directorate is to develop and coordinate the adoption of national standards and appropriate evaluation methods to meet homeland security mission needs. Towards this mission, DHS has adopted a number of standards and guidelines to assist local, state and federal procurement officials and manufacturers. Included in this list are American National Standards from ANSI-accredited standards developing organizations such as National Fire Protection Association (NFPA) on personal protective equipment for first responders, the Institute of Electrical and Electronics Engineers (IEEE) on radiological and nuclear detection equipment, and the InterNational Committee for Information Technology Standards (INCITS) on biometrics. Both NFPA and IEEE are members of the ANSI-HSSP Steering Committee.

- In addition to working with DHS via the Panel workshops and Plenary meetings, the ANSI-HSSP is a participant each year in the DHS National Preparedness Month, bringing the standards component to this effort.

Promotion of Homeland Security Standards

- The ANSI-HSSP strives to educate and promote the important role that standards play in the area of homeland security. These key roles of the Panel and homeland security standards were cited in the CRS Report for Congress — Homeland Security: Standards for State and Local Preparedness. The leaders of the Panel have delivered presentations focusing on the work of the Panel and homeland security standards at conferences, smaller stakeholder meetings, and also to individual organizations that are new to the process or looking to learn more about this area. Through press releases and inclusion in reports such as the one published by the 9/11 Commission, the work of the Panel has received nationwide press coverage in print and in online journals.

- The ANSI-HSSP Newsletter and Website are two further means for providing information about homeland security standards. The newsletter provides information primarily on homeland...
security standards and related news items pulled from the headlines and submitted by HSSP participants. The ANSI-HSSP Website provides resource pages with links to homeland security information including information on the Panel and its workshops, as well as a meeting calendar to track and help promote other events of interest to those in the homeland security community.

- ANSI featured homeland security as the theme of its 2003 Annual Conference held during World Standards Week, highlighting this key standards area to the overall U.S. standards community.

Emergency Preparedness and Business Continuity

- At the request of the National Commission on Terrorist Attacks Upon the United States, also known as the “9/11 Commission,” the ANSI-HSSP organized a workshop with the goal of identifying an existing standard, or creating the action plan for developing one, in the area of private sector emergency preparedness and business continuity. Following three meetings in 2004 with stakeholders from the private and public sectors, the workshop recommended the American National Standard NFPA 1600 — Disaster/Emergency Management and Business Continuity Programs. Recommendations for future revisions to the standard and supplemental materials were submitted by ANSI to the NFPA 1600 Technical Committee responsible for the maintenance and future revision of the standard.

- The recommendation from ANSI was delivered to the 9/11 Commission Vice-Chairman at an April 2004 event that received national press coverage. This contribution was included in the recommendations section of the final report published by the 9/11 Commission. NFPA 1600 has been referenced in national campaigns (e.g., DHS Ready for Business) and also in national legislation (e.g., U.S. Intelligence Reform Bill and the Private Sector Preparedness Act). The Panel continues to monitor efforts and opportunities to further promote and create incentives for the use of the national preparedness standard and stands ready to provide assistance as needed.

- In 2005, the International Organization for Standardization (ISO) issued a call for a national body to take the lead in the effort to develop an International Workshop Agreement (IWA) on the subject of emergency preparedness. Due to its experience with this issue at the national level, ANSI and the HSSP stepped forward and the ANSI offer to lead was accepted by ISO. With support from the New York University (NYU) International Center for Enterprise Preparedness (InterCEP), an international workshop meeting is planned for April 24-26, 2006 in Florence, Italy. The goal of this workshop is to produce an IWA on emergency preparedness that focuses on organizational preparedness for both public and private sector entities. It is anticipated that this IWA document will then be considered by the appropriate ISO technical committee for transformation into an international standard.

Training Programs for First Response to Weapons of Mass Destruction Events

- To assist the first responder community, a workshop was established to focus on standards that support training programs and can be used to help measure their effectiveness. During 2004 and 2005, three meetings were held at which participants identified the key issues and means for capturing standards. A matrix document was created, which organizes existing standards by first responder category, cross-referenced against the DHS Office for Domestic Preparedness (ODP) target capability categories. This workshop also examined the important role that accreditation and certification to identified standards plays in this area.

- The final report from this workshop was published in February 2006. The workshop and its participants stand ready to further support ODP and first responder organizations with any further standards analysis efforts.

Emergency Communications

- Communications in an emergency situation are critical for the safety of citizens and protection of critical infrastructure, as well as for response and recovery efforts. The emergency communications workshop convened meetings in December 2004 and December 2005. The workshop agreed to focus on standards for emergency communications in the categories of:

(i) individuals/organizations-to-individuals/organizations (including employer-to-employee, employer-to-employer, and employer-to-customer),

(ii) individuals/organizations-to-government, and

(iii) government-to-individuals/organizations.

Government-to-government emergency communications is being addressed by other programs such as DHS SAFECOM. At the December 2005 meeting, task groups were created to identify the existing standards and gap areas in each of the categories listed, as well as necessary accreditation and certification programs.

- A breakout session on Citizen Preparedness was held in conjunction with the December 2004 meeting and the discussions from that session led to the creation of the citizen preparedness resource Web page on the ANSI-HSSP Website.
Enterprise Power Security and Continuity

Many practical challenges exist related to keeping critical operations, equipment or facilities powered when the electric grid is not available. Continual availability of electric power at the enterprise level is increasingly critical to operations that are essential for business functions, safety, and the public well-being. The ANSI-HSSP workshop met in March 2005 in conjunction with a larger summit on this issue. A task group was created to identify existing standards, gaps and make recommendations for further work in the power security area. A March 2006 meeting will further address these tasks and the final report from this workshop will be published shortly thereafter.

Perimeter Security

Perimeter security involves rapidly advancing technology that is needed to complement and enhance guards, gates, personnel verification and other more traditional means of perimeter security. Both new and current technology benefit from the role that standards can play towards the goal of protecting critical facilities. The ANSI-HSSP workshop met in May 2005 in conjunction with a larger summit on perimeter security challenges and solutions. A task group was created to identify existing standards, identify gaps, and make recommendations for further work in the perimeter security area. Its work will continue in 2006, with completion of the final workshop report expected by year’s end.

Biological and Chemical Threat Agents

Biological and chemical threat agents are clearly an important concern for the nation’s homeland security. In 2004, three workshop meetings were held on this subject and the workshop’s final report was published in December 2004 and submitted to DHS. This 400-page final report contains the listing of relevant published standards and projects under development in the areas of biological and chemical threat agents, categorized by a subject-specific taxonomy developed by workshop participants.

Biometrics

Biometric technologies are key to homeland security, as they are becoming the foundation of many highly secure identification and verification solutions. In September 2003, a workshop meeting of subject matter experts was convened to explore the area of biometric standardization. The workshop produced a report of existing standards and projects under development. The report also contained five key issues related to biometric standardization and conformity assessment and recommendations for addressing these issues. A revised report, containing updates to the table of standards and actions taken on the key issues will be issued shortly.

DHS adopted the American National Standard INCITS 385-2004 — Information technology — Face Recognition Format for Data Interchange. The standard, developed by the M1 committee of HSSP participant INCITS, is designed to be consistent with international standards for biometrics used in such applications as travel documents. This standard will also be used to specify definitions of photographic properties and digital image attributes and as a standard format for relevant applications, including human examination and computer-automated face recognition.

International Security Initiatives

The International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC) Strategic Advisory Group (SAG) on Security oversees standardization activities in ISO and IEC relevant to the field of security, provides advice and guidance to ISO and IEC leadership bodies relative to the coordination of work relevant to security, and in particular, identifies areas where new standardization initiatives may be warranted. As ANSI was a leader in the formation of this ISO/IEC group, the U.S. was asked to provide the chairman and the ANSI-HSSP Steering Committee serves as the body to provide inputs to the U.S. representatives. The U.S. plays an active role in this international body, and at the November 2005 meeting in Geneva, Switzerland, the U.S. was tasked to lead several subgroups to further examine key aspects of international security standardization.

Recognizing that security standardization is a global effort, the ANSI-HSSP has incorporated international outreach into its activities. In addition to the ISO/IEC initiative referenced above, a partnership has been forged with the European Committee for Standardization (CEN) and its working group on “Protection and Security of the Citizen.” Information and ideas are shared between both organizations. The ANSI-HSSP co-chairs were active participants in the ANSI and European Standards Organizations (ESO) meetings in 2004 and 2005 that addressed security standardization among other issues, and representatives of the European Telecommunications Standards Institute (ETSI) have participated in Plenary meetings and workshops of the Panel.

When possible, the ANSI-HSSP seeks to facilitate discussions with other countries that are looking to work with the U.S. in the
security standards arena. In 2005, the HSSP reached a formal agreement with Standards Australia’s National Centre for Security Standards (NCSS) to cooperate on security standards issues. Under the agreement, the ANSI-HSSP and NCSS will collaborate to create an integrated security standards framework that will help concerned parties find useful and relevant guidance materials. Providing for an open dialogue between the two organizations, the agreement allows for the exchange of information related to identifying industry and community needs or trends for security standards. The ANSI-HSSP has also had representatives of other national standards organizations participating in its work.

Partnerships with Other Homeland Security Initiatives

- Protecting critical infrastructure is a key aspect of homeland security. The ANSI-HSSP works closely with groups dedicated to this effort, such as The Infrastructure Security Partnership (TISP). The Panel is a member of TISP, with each group participating in the other’s working groups and presenting at each other’s conferences on standards issues.

- To avoid the duplication of effort, there are several areas for which it was determined that the Panel would not organize workshops, but rather monitor the progress of existing initiatives and lend support as needed. The American Society of Mechanical Engineers (ASME), an ANSI-HSSP Steering Committee member, launched the ASME Critical Assets Protection Initiative (CAPI) to strengthen the Risk Assessment and Management for Critical Asset Protection (RAMCAP) approach and guidance document from the perspective of the security professional community. Status updates were provided at the ANSI-HSSP Steering Committee and Plenary meetings.

- In the area of cyber security, the ANSI-HSSP Secretary and one of the co-chairs participate as members of the National Cyber Security Partnership (NCSP). The NCSP is a public-private partnership that was established to develop shared strategies and programs to better secure and enhance the nation’s critical information infrastructure. The Panel has also been a supporter of National Cyber Security Awareness Month in October each year.

- One of the ANSI-HSSP co-chairs is also a Sector Coordinator under Presidential Decision Directive 63 and Homeland Security Presidential Directive 7, and, thus, provides linkage and information about Panel activities to the other Sector Coordinators, Sector Coordinating Councils, the Department of Commerce’s Economic Security Working Group, the National Institute for Urban Search and Rescue (NIUSR), and the Information Sharing and Analysis Centers Council. This also includes providing information about the Panel’s work to the Partnership for Critical Infrastructure Security (PCIS), and Presidential advisory committees: the National Infrastructure Advisory Council (NIAC) and the National Security Telecommunications Advisory Committee (NSTAC).

Looking Forward

Entering its fourth year of existence, the ANSI-HSSP looks to continue the momentum that was established during its first three years as it examines the vast landscape of homeland security standardization. The importance of this effort is evidenced by the new reference in the United States Standards Strategy to the importance of standards coordination in areas of emerging national priorities, such as homeland security. At the September 2005 ANSI-HSSP Plenary meeting, a number of potential new areas of exploration were proposed by Panel participants. It was agreed that in 2006, workshops would be convened in the areas of “lessons learned from Hurricane Katrina and the role for standards and conformity assessment programs in prevention, response and recovery” and “mass/public transportation security.” ANSI-HSSP participants are encouraged to continue to actively participate and submit ideas for new areas and ways that the Panel can continue to effectively serve the homeland security standards community. Much progress has been made in the area of homeland security standardization, but there is a great amount of work left to be done as ANSI and the HSSP continue to support this critical national priority.