Under Secretary
U.S. Department of Homeland Security
Washington, DC

Science and Technology

April 8, 2025

MEMORANDUM FOR THE DEPUTY SECRETARY:

FROM: Julie S. Brewer
Acting Under Secretary

SUBJECT: **DHS Response to the National Technology Transfer and Advancement Act (NTTAA) Agency Annual Reporting on Fiscal Year 2024 Standards Activities**

The Department of Homeland Security (DHS), through the Science and Technology Directorate's (S&T) Office of Science and Engineering (OSE), Systems Engineering and Standards Division (SES), responds to the National Technology Transfer and Advancement Act (NTTAA) Agency Annual report on standards use and activities throughout the previous fiscal year (FY). Per the Office of Management and Budget (OMB) Circular A-119 "Federal Participation in the Development and Use of Voluntary Consensus Standards (VCS) and in Conformity Assessment Activities", federal agencies must provide to OMB, through the National Institute of Standards and Technology (NIST), (1) a report of the agency's use of government-unique standards (GUS) in lieu of VCS, along with an explanation of reasons for such usage, as required by Section 12(d) of the NTTAA and as described in Section 5c of the Circular, and (2) a summary of your agency's activities undertaken to carry out the provisions of this Circular. Responses are public and reported to Congress through OMB.

S&T collected input from DHS Components on FY2024 standards activities and compiled the attached report and associated participation in standards development organizations (SDOs). As completed in previous years, this report will be sent to NIST in compliance with federal standards statutes and policy guidance.

Please contact Renee Stevens, renee.stevens@hq.dhs.gov and cc the Standards inbox, standards@hq.dhs.gov, with any questions.

Previous reports can be found at NTTAA Reports | NIST.

Overview:

At the core of federal standards policy are the National Technology Transfer and Advancement Act (NTTAA)[1] and the Office of Management and Budget (OMB) Circular A-119, "Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities". The NTTAA directs agencies to "use technical standards that are developed or adopted by voluntary consensus standards bodies;" consult with voluntary, private sector, and consensus standards bodies and participate in them when it is in the public interest and compatible with the departmental mission. In addition, the NTTAA requires agencies to send OMB explanations of any non-usage of applicable voluntary consensus standards.

[1] Specifically, Pub. L. 104-113 §12(d), 109 Stat. 783, 15 U.S.C. 272 note

OMB Circular A-119 provides policy and guidance on the implementation of the NTTAA. Specifically, OMB Circular A-119 requires agencies "to provide to OMB, through NIST, (1) a report on the agency's use of government-unique standards in lieu of voluntary consensus standards, along with an explanation of the reasons for such usage…and (2) a summary of your agency's activities undertaken to carry out the provisions of this Circular." Agency Standards Executives are responsible for the preparation the report; agency heads are responsible for its transmission.

DHS standards policy is codified in title 6 of U.S. Code section 112 (g)[2], which adopts section 12 (d) of the NTTAA and OMB Circular A-119.

In addition, issuance of DHS Directive 078-04, "Standards Policy Governance and Coordination," created a governance and coordination framework for DHS standards and conformity assessment activities. A key feature of this Directive is the establishment of Component Standards Executives (CSEs). CSEs collaborate on strategies, policies, and other issues related to implementing Directive 078-04 and OMB Circular A-119 and are available to advise and inform the Under Secretary for Science and Technology (USST) on such issues.

DHS standards policy also includes DHS Directive 078-01, "Adoption and Maintenance of the Department of Homeland Security National Standards," which provides general guidance for the review, adoption, revision, or retirement of DHS national standards.

Participation in standards development organizations (SDOs) is facilitated through DHS Management Directive 2300 (MD2300), "Committee Management." Components are individually responsible for implementation of MD2300 which covers procedures for participation of DHS personnel on committees of other organizations (e.g., SDOs). In February 2024, S&T published an internal procedure, Procedure for S&T (PoST) 06-005-000 "Federal Employee Participation in Non-Government Standards Bodies (NGSBs)" covering participation in standards-specific organizations. This procedure complies with the requirements of MD2300 and is specific to S&T and standards participation.

Since 2004, S&T has prepared and submitted the Department's contribution to the NTTAA Agency Annual report. In 2006, S&T established the DHS Standards Council to coordinate the Department's standards activities and improve the quality of the information submitted to NIST. In 2016, OMB revised Circular A-119, which has resulted in significantly less data being requested by NIST and subsequently reducing the reporting burden on the agencies.

NIST also requested information regarding the standards development organizations (SDOs) in which DHS personnel are participating/participated in FY2024.

The following are the questions, received from the National Institute of Standards and Technology (NIST) for this year's National Technology Transfer and Advancement Act (NTTAA) agency annual report on FY2024 standards activities:

1. *Please provide a summary of your agency's activities undertaken to carry out the provisions of OMB Circular A-119, "Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities" and the National Technology Transfer and Advance Act (NTTAA). The summary should contain a link to the agency's standards-specific website(s) where information about your agency's standards and conformity assessment related activities are available; and*

[2] Pub. L 107-296, §102 (g)

2. *Please list the government-unique standards (GUS) your agency began using in lieu of voluntary consensus standards (VCS) during FY 2024. Please note that GUS which are still in effect from previous years should continue to be listed, thus the total number in your agency's report will include all GUS currently in use (previous years and new as of this FY).*

NOTE: *List ALL government-unique standards you are currently using and indicate on your list which, if any, of the standards are new – your Component began using – in FY2024.*

Attachments:

A. DHS Response: FY2024 NTTAA Report
B. DHS Participation in Standards Development Organizations (SDOs)

Science and Technology

April 8, 2025

MEMORANDUM FOR: Cheryl W. Levey
National Institute of Standards and Technology (NIST)
Standards Coordination Office (SCO)

FROM: Renee Stevens
DHS S&T Senior Standards Advisor
DHS Standards Executive

SUBJECT: **DHS Response | Annual National Technology Transfer and Advancement Act (NTTAA) Report on Fiscal Year 2024 Standards Activities**

Attached is the Department of Homeland Security's (DHS) response to the annual National Technology Transfer and Advancement Act (NTTAA) report to the National Institute of Standards and Technology (NIST) on Fiscal Year 2024 Standards Activities and the Identification of Component Standards Executives. The DHS Science and Technology Directorate's (S&T) Office of Science and Engineering (OSE), Systems Engineering & Standards Division (SES), responds to the NTTAA report on behalf of DHS regarding the Department's use of voluntary consensus standards and participation and conformity assessment activities.

Per the NTTAA and the revised OMB Circular A-119, DHS reports on the following two questions:

1. *Please provide a summary of your agency's activities undertaken to carry out the provisions of OMB Circular A-119, "Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities" and the National Technology Transfer and Advance Act (NTTAA). The summary should contain a link to the agency's standards-specific website(s) where information about your agency's standards and conformity assessment related activities are available.*

   The itemized summary is detailed in Attachment 1.

2. *Please list the government-unique standards (GUS) your agency began using in lieu of voluntary consensus standards during FY 2024. Please note that GUS which are still in effect from previous years should continue to be listed, thus the total number in your agency's report will include all GUS currently in use (previous years and new as of this FY).*

There are no government-unique standards that were used in lieu of voluntary consensus standards that are new in FY2024. Note that the documented use of GUS is charted in Attachment 2, and no voluntary consensus standards (VCS) apply to current internal standards.

DHS S&T coordinates standards-activities across the Department in compliance with and to implement OMB Circular A-119 and NTTAA. In FY24, DHS S&T focused on coordinating the Department's involvement in artificial intelligence (AI) related standards activities. Within the Department, S&T actively led AI standards engagement through the establishment of the DHS AI Standards Advisory Committee housed under the DHS Standards Council. The Council combines expertise from across DHS to ensure consistency of regulations, rulemaking, and innovation and subsequent standards development reflect DHS mission goals and operational needs. The AI Standards Advisory Committee developed the first DHS "Artificial Intelligence (AI) Standards Roadmap" FY25-FY27, published December 2024 (currently under revision for alignment with applicable Executive Orders (EO), including EO 14179 *Removing Barriers to American Leadership in Artificial Intelligence*) and is in the process of developing a "Guideline for Incorporation of Standards in Procurement of AI Technologies". This guideline will align with DHS policies and support procurement best practices related to AI technologies and operational implementation. Also, AI was reflected in project work as DHS S&T's standards development projects expanded to incorporate AI-capabilities. These projects include work with test methods for response robots and the development of a standard for aerial drone data protection and cybersecurity.

In addition to internal coordination, S&T participated in the InterNational Committee for Information Technology Standards (INCITS) as the DHS Principal Member on the Artificial Intelligence Technical Committee to support the development of AI standards and facilitate cross-component participation in the Department. DHS S&T continues to participate in interagency efforts, including representation on the Interagency Committee on Standards Policy (ICSP) and as co-chair, with the National Institute of Standards and Technology (NIST), of the AI Standards Coordination Working Group (AISCWG).

DHS S&T maintains the essentiality of standards in support of operational tools and methods development and facilitation of community engagement to guide the design and identify strategies for mitigation of AI threats. Advancing trustworthy AI technology via standards protects both individual and National security and amplifies delivery of innovative capabilities.

All questions or additional requests for information should be communicated to DHS S&T OSE via Renee Stevens, Senior Standards Advisor (renee.stevens@hq.dhs.gov) and cc the Standards inbox (standards@hq.dhs.gov).

Attachments

1. Attachment 1: DHS FY 2024 Agency Report
2. Attachment 2: List of Government-Unique Standards (GUS) currently (as of FY2024) in use by DHS Components

Attachment 1
Department of Homeland Security (DHS) Fiscal Year 2024 Agency Report

The Department of Homeland Security (DHS) standards policy was established as part of the Homeland Security Act of 2002, incorporating the National Technology Transfer and Advancement Act of 1995 and the Office of Management and Budget Circular A-119. Implementation of the Circular was delegated to the Under Secretary for Science and Technology by the Secretary of Homeland Security.

A summary of DHS Components that were active in FY2024 in carrying out the provisions of OMB Circular A-119 includes multiple Components and divisions. For more information about DHS visit www.dhs.gov. Summaries of the responses are presented in the following pages and categorized by Component.

1. ***Please provide a summary of your agency's activities undertaken to carry out the provisions of OMB Circular A-119, "Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities" and the National Technology Transfer and Advance Act (NTTAA). The summary should contain a link to the agency's standards-specific website(s) where information about your agency's standards and conformity assessment related activities are available.***

CUSTOMS AND BORDER PROTECTION (CBP)

CBP Laboratories and Scientific Services (LSS) utilizes consensus standards from the following groups:

- AAFS – American Academy of Forensic Sciences
- AATCC - American Association of Textile Chemists and Colorists
- ABC - American Board of Criminalistics
- ACS – American Chemical Society
- AIC - Arizona Identification Council (AIC)
- ANAB - ANSI National Accreditation Board
- ANSI - American National Standards Institute
- AOAC – Association of Official Agricultural Chemists
- API - American Petroleum Institute
- ASB - Auditing Standards Board (under American Institute of Certified Public Accountants)
- ASCP - American Society for Clinical Pathology)
- ASME - American Society of Mechanical Engineers
- ASTM - American Society of Testing and Materials
- ASTM- ASTM International (formerly American Society for Testing and Materials)
- CFSRE – Center for Forensic Science Research & Education
- CFTT - National Institute of Standards (NIST) Computer Forensics Tool Testing Program
- CSAFE – Center for Statistics and Application in Forensic Evidence
- IACIS - International Association of Computer Forensic Examiners
- IAI - International Association for Identification
- ICUMSA - International Commission for Uniform Methods of Sugar Analysis
- ISO – International Organization for Standardization
- IEEE - Institute of Electrical and Electronics Engineers Standards Association
- NAFTZ - National Association of Free Trade Zones
- NFPA - National Fire Protection Association
- OSAC - Organization of Scientific Area Committees for Forensic Science
- SAE - Society of Automotive Engineers
- SAFS - Southern Association of Forensic Scientists
- SANS - SANS Institute Best Practices (SysAdmin, Audit, Network and Security)
- SWAFS - Southwestern Association of Forensic Scientists
- SWGDE - Scientific Working Group on Digital Evidence

- SWGDRUG – Scientific Working Group for the Analysis of Seized Drugs
- TIC Council - Testing, Inspection, and Certification Council (formerly IFIA – International Federation of Inspection Agencies)
- USP – US Pharmacopeia

Government Standards:

- CISA – Cybersecurity and Infrastructure Security Agency
- EPA – Environmental Protection Agency

CBP-LSS is directly involved in the development of consensus standards for the following:

- ASTM – American Society of Testing and Materials
  - D02 Committee – Petroleum Products, Liquid Fuels, and Lubricants
  - E30 Committee - Forensics
- American Petroleum Institute (API)
  - Committee on Petroleum Measurement Standards (COPM)
- NIST Organization of Scientific Area Committees (OSAC)
  - Forensic Science Dogs and Sensors Subcommittee (affiliate member)
  - Seized Drugs Subcommittee (affiliate member)
- AIC
  - Member, Board of Directors

CBP standards-specific websites:

- *https://www.cbp.gov/about/labs-scientific-svcs/technical-documents/lab-methods*
- Directory of Accredited Organizations - ANAB (Search Customs and Border Protection)

COUNTERING WEAPONS OF MASS DESTRUCTION (CWMD)

CWMD – Chief Data Office (CDO)

CWMD, from a CDO scope, has been working with NIST to create an ASTM Bio Standard. The CDO linkage is to the National Information Exchange Model (NIEM), which is now called NIEM Open. NIEM is a DHS mandate, so the CDO wants to ensure that the ASTM Bio Standard is in conformance with NIEM.

There are no links from the CDO perspective; those are kept by CWMD Systems Support Directorate (SSD), since they are the Components' Standards Executive (CSE).

CWMD – Systems Support Directorate (SSD)

In 2024, CWMD continued activities in accordance with OMB Circular A-119 which directs that "agencies must consult with voluntary consensus standards bodies in the development of standards when consultation and participation is in the public interest and is compatible with their missions, authorities, priorities, and budgetary resources." To this end, CWMD continued to sponsor and participate in the development and maintenance of the Institute of Electrical and Electronics Engineers (IEEE) and American National Standards Institute (ANSI) voluntary consensus standards for radiation and nuclear threat detection systems used in homeland security and American Society for Testing and Materials (ASTM) International voluntary consensus standards for biological threat detection systems. The Program continued the revision of the IEEE N42.35 standard for Radiation Portal Monitors which is on track to be published in 2025. CWMD continued support and participation in of an ASTM Task Group, WK83732, to develop a Data Format Standard for Biodetection Instruments. The draft standard is currently undergoing a thorough check for compliance with the interagency NIEM framework for emergency response information exchange. CWMD continued participation with the U.S. National Committee for International Electrotechnical Commission (IEC) international standards for radiation detection systems. In 2024 CWMD participated in the efforts of an IEC Standards Working Group for the development of a standard for radiation detection equipment replay tools.

CWMD continued to sponsor free access to IEEE Series N42 standards for radiation detection for homeland security that are available at: https://ieeexplore.ieee.org/browse/standards/get-program/page.

CYBERSECURITY AND INFRASTRUCTURE SECURITY AGENCY (CISA)

The Cybersecurity and Infrastructure Security Agency (CISA) partners with standards organizations, consistent with CISA authorities, strategic plan, and DHS International Cybersecurity priorities, to drive policies and create standards to improve interoperability and automate cybersecurity operations, among other outcomes. CISA works with domestic and international partners and engages in standards development at the national and international levels. CISA participates in the following standards bodies: 3rd Generation Partnerships Project (3GPP), Institute of Electrical and Electronic Engineers (IEEE), International Telecommunication Union (ITU), Global Systems for Mobile Communication Alliance (GSMA), Internet Engineering Task Force (IETF), Alliance for Telecommunications Industry Standards (ATIS), Wi-Fi Alliance, O-RAN Alliance, Wireless Broadband Alliance, and OASIS Open. Within those bodies, CISA participates to monitor, support, and influence standards development activities relevant to agency mission objectives.

The CISA ECD participates and influence the work in industry standard development organizations (SDOs) and standards groups developing standards for telecommunications/information communication technologies and mobile communication networks in support of the PTS programs. Specifically, CISA ECD participates and contributes to the development of industry standards to ensure continued support of WPS and GETS and the support of planned Next Generation Network Priority Services (NGN-PS) for voice/video, data and messaging services in evolving communications networks.

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

The Federal Emergency Management Agency (FEMA) Resilience staff, to include Building Science Division, Floodplain Management Division, and Hazard Mitigation Assistance, participate as members of committees involved in the ASCE flood standards to ensure the consensus standards comply with the minimum standards set forth in Code of Federal Regulations, Part 60 – Criteria For Land Management and Use, Subpart A-Requirements for Flood Plain Management Regulations which sets forth participation requirements for communities for the National Flood Insurance Program, specifically 60.3 (https://www.ecfr.gov/current/title-44/chapter-I/subchapter-B/part-60). In addition, FEMA provides subject matter experts to participate on design standards committees and the update cycles of the consensus-based model codes. These standards include:

- ICC 500: Standard for the Design and Construction of Storm Shelters
- ICC 600: Standard for Residential Construction in High Wind Regions
- ASCE 7: Minimum Design Loads and Associated Criteria for Buildings and Other Structures
- ASCE/SEI/AMS: Wind Speed Estimation Standard
- ASCE 24: Flood Resistant Design and Construction
- ASCE/SEI 41: Seismic Evaluation and Retrofit of Existing Buildings
- ICC 605: Standard for Residential Construction in Regions with Seismic Hazard
- ASTM E3075: Standard Test Method for Water Immersion and Drying for Evaluation of Flood Damage Resistance
- ASTM E3369: Standard Specification for Determining the Flood Damage Resistance Rating of Building Materials
- ICC 1300: Standard for the Vulnerability-Based Seismic Assessment and Retrofit of One- and Two-Family Dwellings; and other applicable standards as needed. FEMA's building code-related resources can be found here: https://www.fema.gov/emergency-managers/risk-management/building-science/building-codes.

FEDERAL LAW ENFORCEMENT TRAINING CENTERS (FLETC)

The Federal Law Enforcement Training Centers (FLETC) reviewed OMB Circular A-119 and DHS Directive 078-04 and determined FLETC is currently not involved in or actively participating with standards development organizations to develop voluntary consensus standards. FLETC will continue to examine its programs to ensure compliance with DHS Directive 078-04.

MANAGEMENT DIRECTORATE (MGMT)

MGMT – Program Accountability and Risk Management (PARM)

The DHS Program Accountability and Risk Management (PARM) office is committed to implementing the provisions of OMB Circular A-119 and the National Technology Transfer and Advancement Act (NTTAA) by integrating industry standards into our acquisition program management policies and procedures. This approach ensures that our engineering, logistics, and sustainment processes across the entire acquisition lifecycle are efficient, effective, and aligned with best practices.

Key Activities:

1. Policy Development and Maintenance: PARM develops and maintains acquisition program management policies that emphasize the use of industry standards. This ensures that DHS acquisition programs leverage external expertise, promote interoperability, and minimize reliance on unique government standards.
2. Stakeholder Collaboration: PARM collaborates with DHS leadership, Component Acquisition Executives (CAEs), program managers, and other stakeholders to develop acquisition strategies that incorporate these standards. This collaboration ensures that standards are effectively utilized to maximize mission impact and uphold high standards of efficiency and effectiveness.
3. Transparency and Data Governance: PARM ensures data transparency and governance across the DHS acquisition enterprise. By making programmatic acquisition information readily available, empowering decision-makers with the insights needed for data-driven decision-making and strategic program execution.
4. Proactive Risk Management: PARM provides expertise in risk management, schedule development, systems engineering, and life cycle logistics planning. This proactive approach ensures that programs are structured for success from the outset, with industry standards playing a critical role in mitigating risks and accelerating capability delivery.
5. Workforce Development: PARM ensures that DHS acquisition programs have the right personnel with the necessary skills to deliver mission-critical capabilities. By advancing acquisition certification skills and promoting best practices, and we support the effective implementation of these standards across the workforce.

MGMT – Office of Biometric Identity Management (OBIM)

- Use of Voluntary Consensus Standards
  - Adoption of Biometrics Standards: OBIM applies widely recognized voluntary consensus standards for biometric modalities (e.g., fingerprints, facial images, iris images), including ANSI/NIST-ITL standards and ISO/IEC Joint Technical Committee (JTC) 1 standards.
  - Open, Consensus-Based Process: By using standards from ANSI/NIST and ISO/IEC, OBIM ensures these documents have been developed with multi-stakeholder input, balance of representation, and transparent procedures, per the definitions in OMB Circular A-119.
- Conformity Assessment & Interoperability
  - Testing & Certification: OBIM leverages recognized conformity assessment practices (e.g., accreditation of test labs, third-party testing) to confirm that biometric collection and matching solutions comply with adopted standards.
  - Data Exchange: Conforming to consensus standards helps OBIM systems securely exchange biometric data with partner agencies and foreign governments, reducing duplicate testing or custom processes.

- Participation in Standards Committees
  - Technical Expertise: OBIM regularly assigns subject-matter experts to committees within ANSI/NIST, ISO/IEC JTC 1/SC 37 (Biometrics), and other forums, representing DHS's interests and contributing operational insights.
  - Coordination: OBIM's involvement ensures emerging biometric standards account for current operational requirements and support advanced identity management solutions in a manner that protects privacy and civil liberties.
- Reporting & Documentation
  - Avoiding Government-Unique Standards: Consistent with the NTTAA, OBIM reports any instance in which a government-unique standard is used (which is rare), along with justification of why no voluntary consensus standard was suitable.
  - Retrospective Review: OBIM reviews references to older standards periodically and updates them, aligning with Circular A-119 guidance to keep standards current and relevant.
- Standards-Specific Information: OBIM's main webpage provides materials on interoperability and biometric standards work. From there, visitors can locate references to specific guidance, federal register notices, and standards activities.
  - Website: https://www.dhs.gov/obim
- MGMT-OBIM standards-specific websites:
  - Exchanging Biometric Data | Homeland Security
  - https://www.dhs.gov/obim

OFFICE OF IMMIGRATION DETECTION OMBUDSMAN (OIDO)

The Office of Immigration Detention Ombudsman (OIDO) adheres to the guidelines to use voluntary consensus standards wherever feasible. This approach allows OIDO to aim for eliminating redundant efforts, reduce costs, enhance efficiency, determine the right technology systems that meet internal and external needs, and ensure alignment with operational and statutory requirements. However, OIDO has not undertaken any new activities.

ODIO standards-specific websites:

- OIDO Publications | Homeland Security

OFFICE OF STRATEGY, POLICY, AND PLANS (PLCY)

Please find below a summary of OHSS's key activities related to standards participation, along with the requested information:

In FY24 OHSS managed operational standards for immigration domain and began to transition management of these standards to the DHS Chief Data Officer which was completed in FY25 Q1. OHSS also participated in the BGN FNC (U.S. Board on Geographic Names, Foreign Names Committee) in FY24 and FY25Q1 when this function was redesignated to DHS PLCY. This participation aligns with our department's mission and enhanced data-sharing and coordination across DHS to support cross component alignment of immigration data standards.

Government-Unique Standards (GUS) for FY24:

- DHS Immigration Data Standards (Published Date: FY2019): In continued use, ensuring uniformity and data quality across DHS components, particularly in the BGN FNC application of the Geopolitical Entity Naming Conventions (GENC) standard.
- DHS Standard Reference Tables (Published Date: FY2020): In continued use, supporting all DHS systems requiring aligned classifications, with particular relevance to the BGN FNC activities.
- DHS Statistical Standards Documentation (Published Date: FY2024): Newly adopted in FY24 to streamline statistical reporting across DHS components. Our data governance statistical standards

are working definitions for the reporting methodology of DHS operational data for statistical reporting.

OHSS has focused its efforts within the BGN FNC for FY24, ensuring that our contributions align with the goals of improving data interoperability and enhancing border governance across DHS agencies. We have not participated in broader standards committees outside of the BGN FNC this year.

BGN FNC Participation: OHSS has worked collaboratively within the BGN FNC to support the development of country data standards that promote consistency across immigration-related data systems within DHS components, including USCIS, ICE, and CBP.

OHSS does not have a Component Standards Executive (CSE).

SCIENCE AND TECHNOLOGY DIRECTORATE (S&T)

S&T – Systems Engineering and Standards Division (SES) – Standards (STN)

DHS S&T SES – STN is responsible for implementation of OMB Circular A-119 and NTTAA policies, procedures, and guidance across DHS as STN is led by the DHS Standards Executive/Senior Standards Advisor. STN facilitates participation in external standards development organizations (SDOs), coordinates said participation across DHS Components so that representatives are on the same page when participating in the SDOs and funds standards development projects as well as contracts to provide access to standards critical to the homeland security mission and operational component activities.
STN serves to integrate and coordinate standards across DHS via research and development, acquisition, strategic sourcing, grants, regulation and rulemaking for implementation into DHS operational technology and procedures. STN does this in multiple ways:

- Direct consensus standards committee participation (INCITS, ASTM, NFPA, AIA, OASIS)
- Sponsoring foundational research for consensus standards development (IEEE, ASTM, OASIS, IEC)
- Providing standards access services to DHS, and
- Leading the DHS Standards Council, a cross-Component group chartered to (1) support the responsibility of the Undersecretary of S&T to coordinate standards activities in the Department and (2) support the responsibilities of the agency Standards Executive as identified in OMB Circular A-119.

Link to S&T's standards-specific website: Systems Engineering and Standards | Homeland Security

S&T – Technology Centers Division (TCD)

Entry 1:

DHS S&T TCD participates in the INCITS/Biometrics Technical Committee. This committee develops standards to support interoperability and data interchange among biometric applications, systems, and common file frameworks. Areas of focus are Biometric Vocabulary Harmonization, Biometric Technical Interfaces, Biometric Data Interchange Formats, Technical Implementation of Biometric Systems, Biometric Performance Testing, and Cross -Jurisdictional/Societal Aspects of Biometrics. Standardization efforts encompass Governmental and Commercial applications, both domestic and international. Specific activity includes:

- S&T TCD serves as editor for ISO/IEC 19795-10: Biometric Performance Testing and Reporting – Part 10: Quantifying Biometric System Performance Variation Across Demographic Groups. This standard will help establish the appropriate guidance to help government and industry organizations that deploy biometric technology to perform appropriate testing and report results. Most recently, in October of 2024, this standard was published, after a four-year S&T TCD led effort, as an international standard. 19795-10 received unanimous approval for publication from all 26 participating member bodies of ISO/IEC SC37.
- S&T TCD participates in ISO/IEC JTC1/SC37 WG3 Ad-Hoc Working Group on Demographic

Variability of Quality Measures. This working group is tasked by SC37 with investigating demographic variability in the quality measures produced by the Open Source Face Image Quality (OFIQ) implementation of ISO/IEC 29794-5. Most recently, in December 2024, this working group published its unofficial findings as an ISO/IEC WG3 working item. A public copy was also made available.

- S&T TCD provides input to ISO/IEC 29794-5: Biometric Sample Quality – Part 5: Face image data. This standard establishes a uniform technique for quantifying the utility of a face biometric sample for matching, i.e. its "quality". Adopting such a standard should help organizations harmonize requirements for sample acceptance across locations and use cases. Most recently, in December 2024, this draft standard was submitted for a ballot to move to the publication stage of the ISO/IEC process.

Entry 2:

- S&T owns and manages the Project 25 Compliance Assessment Program (P25 CAP) for land mobile radios. P25 CAP, a voluntary program, allows suppliers to publicly attest to their products' compliance through P25 CAP testing at DHS-recognized laboratories. As proof, suppliers are required to submit Summary Test Report (STR) and Supplier's Declaration of Compliance (SDOC) documents. These documents are available on the Approved (Grant-Eligible) Equipment page. Project 25 is a suite of standards for Land Mobile Radio systems that is managed by the Telecommunications Industry Association (TIA). S&T uses these voluntary consensus standards published by TIA to develop test cases for P25 advertised equipment to ensure that it meets DHS Component needs.
- S&T is a member of the 3rd Generation Partnership Project. (3GPP) standards development organization. 3GPP is the SDO for mobile broadband standards globally. S&T participates in 3GPP working groups that are critical to DHS Component end users including SA1 and SA2 working groups. S&T has introduced multiple work study items that initiate the standards development process in support of DHS component end user needs.
- S&T participates in IEEE's Future Networks Technical Community (FNTC) which is focused on the successful development and deployment of 5G systems. The FNTC works with other IEEE working groups to contribute to IEEE standards to address a breadth of networking areas, including wireless, small-cell and machine-to-machine technologies, dynamic spectrum allocation, among others.
- S&T participates in IEEE's IoT Sensor Devices Advisory Committee. The focus of this committee is on network cybersecurity and interoperability for IoT sensor devices. Recently, the committee published a cybersecurity framework white paper to help address IoT sensor vulnerabilities and develop mitigation tactics.

S&T-TCD standards-specific websites: https://www.dhs.gov/science-and-technology/p25-cap

TRANSPORTATION SECURITY ADMINISTRATION (TSA)

The Transportation Security Administration (TSA) continues to support and fund the development of the industry supported/sponsor data format standard "DICOS" (Digital Imaging and Communication in Security) IIC 1 v05 through the governing body of NEMA (National Electrical Manufacturers Association). NEMA serves as both the facilitator for the development of the standard (with industry members participating in the development process) and publishing entity of the standard. This process and standard would be considered a "Voluntary Consensus" approach.

The TSA is actively involved in using the standard from The Institute of Electrical and Electronics Engineers (IEEE), PN42.59: *Standard for Measuring the Imaging Performance of Active Millimeter-Wave Systems for Security Screening of Humans*. This standard has beneficial practical uses for both test and evaluation as well as fleet management of fielded systems. The TSA and DHS S&T are working toward an automated software that utilizes the methodology of the standard allowing for widespread use. This process and standard would be considered a "Voluntary Consensus" approach.

The TSA utilizes the International Electrotechnical Commission IEC 63391:2024 ED1 *Active millimeter-wave systems for security screening of humans - General requirements*. Specifically, this standard applies to systems used to detect objects carried on the body of the individual being screened at a security checkpoint. It applies to systems that screen people using radiation in the range between 3 GHz and 150 GHz (100 mm to 2 mm). This document specifies the technical requirements, test methods, and signage of the active millimeter wave systems for security screening of humans. This process and standard would be considered a "Voluntary Consensus" approach.

The TSA contributes to the creation of the standard from IEEE P3395: *Standard for the Implementation of Safeguards, Controls, and Preventive Techniques for Artificial Intelligence (AI) Models*. This standard addresses Artificial Intelligence (AI) risks such as malicious use, AI race, organizational risks, and rogue AI's. The standard defines the relevant terminology, potential applications, and a risk abatement strategy for the behavior of AI models. The standard is in a developmental stage at the time of this writing and considered to be a "Voluntary Consensus" approach.

The TSA contributes to the creation of the standard from IEEE P3144: *Standard for Digital Twin Maturity Model and Assessment Methodology in Industry*. This standard defines a digital twin maturity model for industry, including digital twin capability domains and corresponding subdomains. This standard also defines assessment methodologies, including assessment content, assessment processes, and assessment maturity levels. The methodologies and output from this forthcoming standard have applicability toward the TSA desire to use synthetically created digital images which can be more cost effective than attaining real original digital images. Ultimately a digital twin capability could increase efficiency in test and evaluation and the ability to rapidly respond to emerging threats. The standard is in a developmental stage at the time of this writing and considered to be a "Voluntary Consensus" approach.

TSA standards-specific websites:

- https://www.nema.org/membership/nema-councils/imaging-and-communications-council/dicosusa
- PN42.59/D9.8, Feb 2024 - IEEE Draft Standard for Measuring the Imaging Performance of Active Millimeter-Wave Systems for Security Screening of Humans | IEEE Standard | IEEE Xplore
- IEC SC 45B Dashboard > Projects: Work programme, Up-to-Date Project plan, Publications, Maintenance cycle, Project files, TC/SC in figures
- https://standards.ieee.org/ieee/3395/11378/
- https://standards.ieee.org/ieee/3144/10837/

U.S. COAST GUARD (USCG)

The Coast Guard supports the provisions of OMB Circular A-119 and maintains one of the most robust standards programs in the Federal Government to meet our regulatory and research and development objectives. The Coast Guard remains committed to developing and adopting nationally and internationally recognized standards as a means to improve maritime safety, security, and environmental stewardship, and to promote the competitiveness of U.S. businesses in the global marketplace. Incorporating voluntary consensus standards helps the Coast Guard fulfill its regulatory functions more efficiently, develop the Government/industry partnerships crucial to our missions, and gain valuable public feedback necessary for effective policy development. The Coast Guard aggressively supports a broad range of standards development organizations through funding, active engagement, and membership on numerous committees. This vigorous participation helps us raise and resolve genuine issues related to public safety, national security, and preservation of the marine environment with our industry partners.

The Coast Guard participates in the DHS Standards Council and the Interagency Council on Standards Policy. We also regularly collaborate with the National Institute for Standards and Technology Standards

Directorate on training and conformity assessment issues. Visit our Director of Commercial Regulations & Standards website at for further information.

USCG standards-specific website: http://www.dco.uscg.mil/Our-Organization/Assistant-Commandant-for-Prevention-Policy-CG-5P/Commercial-Regulations-standards-CG-5PS

U.S. CITIZENSHIP AND IMMIGRATION SERVICES (USCIS)

U.S. Citizenship and Immigration Services (USCIS) has developed and is implementing data standards in its information technology systems. USCIS partnered with the DHS Immigration Data Integration Initiative (IDII) and the DHS Chief Data Officer Directorate (CDOD) to promote consistent data standards across the department. USCIS standards are maintained locally and made available via the Reference Data as a Service (RefDaaS) platform, USCIS SharePoint site, and a DHS-hosted instance of Collibra.

USCIS has 111 approved data standards, 23 of which are DHS-approved data standards.

U.S. SECRET SERVICE (USSS)

USSS uses several Voluntary Consensus Standards (ISO, ASTM, MIL SPEC, IBC Building Codes, etc.) to conduct the development, testing and procurement of equipment and technology and facilities. The USSS has participated in the development of Voluntary Consensus Standards. USSS does not maintain a standards-specific website. The USSS does not utilize Government Unique Standards.

Attachment 2:
List of Government-Unique Standards (GUS) currently (as of FY2024) in use by DHS Components

2. ***Please list the government-unique standards (GUS) your agency began using in lieu of voluntary consensus standards (VCS) during FY 2024. Please note that GUS which are still in effect from previous years should continue to be listed, thus the total number in your agency's report will include all GUS currently in use (previous years and new as of this FY).***

NOTE: List ALL government-unique standards you are currently using and indicate on your list which, if any, of the standards in use are new – your Component began using – in FY2024.

There are **no** government-unique standards that were used **in lieu of** voluntary consensus standards that are **new** in FY2024.

Attachment 2 lists all GUS used by DHS Components prior to and beginning in FY2024.

The following Components responded with no inputs for the FY2024 reporting timeframe:

- Office of Civil Rights and Civil Liberties (CRCL)
- Office of the Citizenship and Immigration Services Ombudsman (CISOMB)
- U.S. Immigration and Customs Enforcement (ICE)
- Office of Intelligence and Analysis (I&A)
- Office of the General Counsel (OGC)
- Office of Health Security (OHS)
- Office of Legislative Affairs (OLA)
- Privacy Office (PRIV)
- Management Directorate (MGMT), Office of Chief Information Officer (OCIO)

Name of the GUS (include associated number)	*Publication Date*	*New – Component began using – in FY2024? (Yes or No)*	*Name(s) and version(s) of the VCS(s) that might have been used, but after review, found to be inappropriate*	*Brief rationale on why the VCS(s) was not chosen.*
Technical Capability Standard for Handheld Instruments Used for the Detection and Identification of Radionuclides 500-DNDO-117250v2.0	November 2019	No	N/A	These Technical Capability Standards were developed in collaboration with NIST in accordance with Congressional direction in the Safe Port Act of 2006. They were specifically developed to supplement existing voluntary consensus standards and do not duplicate or contradict them.
Technical Capability Standard for Backpack Based Radiation Detection Systems 500-DNDO-119420v0.00	August 2013	No	N/A	"
Technical Capability Standard for Vehicle Mounted Mobile Systems 500-DNDO-119430v0.00	August 2013	No	N/A	"
Technical Capability Standard for Aerial Mounted Radiation Detection Systems 500-DNDO-119430v0.00	February 2017	No	N/A	"
Technical Capability Standard for Radiation Portal Monitor Systems with Energy Analysis Capability 500-CWMD-130170v0.00	November 2019	No	N/A	"
DHS Immigration Data Standards	FY2019	No		No VCS apply to these internal standards
DHS Standard Reference Tables	FY2020	No		No VCS apply to these internal standards

Name of the GUS (include associated number)	*Publication Date*	*New – Component began using – in FY2024? (Yes or No)*	*Name(s) and version(s) of the VCS(s) that might have been used, but after review, found to be inappropriate*	*Brief rationale on why the VCS(s) was not chosen.*
DHS Statistical Standards Documentation	FY2024	Yes		No VCS apply to these internal standards
MIL-R-21607E(SH), Military Specification, Resins, Polyester, Low Pressure Laminating, Fire-Retardant.	1990	No	None	NA
42S5, Screws, machine, cap and set, and nuts.	1999	No	None	NA
43B1, Bolts, nuts, studs, and tap-rivets (and materials for same).		No	None	NA
DDS 300-2, A.C. Fault Current Calculations	1988	No	None	NA
DDS 304-2, Electrical Cable, Ratings and Characteristics	1984	No	None	NA
DHHS Publication No. PHS 84-2024 The Ship's Medicine Chest and Medical Aid at Sea	1984	No	None	NA
EPA/600/R-10/146, Generic Protocol for the Verification of Ballast Water Treatment Technologies.	2010	No	None	NA
Federal Information Processing Standards Publication 55DC, Guideline: Codes For Named Populated Places, Primary County Divisions, And Other Locational Entities of the United States and Outlying Areas.	1987	No	None	NA

Name of the GUS (include associated number)	*Publication Date*	*New – Component began using – in FY2024? (Yes or No)*	*Name(s) and version(s) of the VCS(s) that might have been used, but after review, found to be inappropriate*	*Brief rationale on why the VCS(s) was not chosen.*
Federal Specification CCC-C-426 D, entitled "Cloth, Drill, Cotton."	1979	No	None	NA
Federal Specification CCC-C-443 E, entitled "Cloth, Duck, Cotton (Single and Plied Filling Yarns, Flat)."	1979	No	None	NA
Federal Specification L-P-375 C, "Plastic Film, Flexible, Vinyl Chloride."	1979	No	None	NA
Federal Specification L-S-300 B, entitled "Sheeting and Tape, Reflective: Nonexposed Lens, Adhesive Backing."	1979	No	None	NA
Federal Specification ZZ-H-451, Hose, Fire, Woven-Jacketed Rubber or Cambric-Lined, with Couplings, F.	None	No	None	NA
Federal Specifications (5) V-T-295E, Thread, Nylon.	1986	No	None	NA
Federal Standard 595C, Colors Used in Government Procurement.	2008	No	None	NA
Federal Standard No. 751a, Stitches, Seams, and Stitching.	1965	No	None	NA
Federal Standards and Test Methods (1) Method 4010, Length-Weight Relation; Thread; Yards Per Pound (m/kg).	1978	No	None	NA
Federal Standards and Test Methods (2) Method 4100,	1978	No	None	NA

Name of the GUS (include associated number)	*Publication Date*	*New – Component began using – in FY2024? (Yes or No)*	*Name(s) and version(s) of the VCS(s) that might have been used, but after review, found to be inappropriate*	*Brief rationale on why the VCS(s) was not chosen.*
Strength and Elongation, Breaking; and Tenacity; of Thread and Yarn; Single Strand.				
Federal Standards and Test Methods (3) Method 5804, Weathering Resistance of Cloth; Accelerated Weathering Method.	1978	No	None	NA
Federal Test Method Standard 141a, entitled "Paint, Varnish, Lacquer and Related Materials; Methods of Inspection, Sampling and Testing."	1979	No	None	NA
Federal Test Method Standard 370, "Instrumental Photometric Measurements of Retroreflective Materials and Retroreflective Devices."	1979	No	None	NA
Federal Test Method Standard No. 191a, Method 5304.1, Abrasion Resistance of Cloth, Oscillatory Cylinder (Wyzenbeek) Method.	1971	No	None	NA
In Federal Test Method Standard No. 191A	1978	No	None	NA
Method 5100, Strength and Elongation, Breaking of Woven Cloth; Grab Method.	1978	No	None	NA

Name of the GUS (include associated number)	*Publication Date*	*New – Component began using – in FY2024? (Yes or No)*	*Name(s) and version(s) of the VCS(s) that might have been used, but after review, found to be inappropriate*	*Brief rationale on why the VCS(s) was not chosen.*
Method 5132, Strength of Cloth, Tearing; Falling-Pendulum Method	1978	No	None	NA
Method 5134, Strength of Cloth, Tearing; Tongue Method	1978	No	None	NA
Method 5762, Mildew Resistance of Textile Materials; Soil Burial Method.	1978	No	None	NA
Method 5804.1, Weathering Resistance of Cloth; Accelerated Weathering Method	1978	No	None	NA
MIL-C-17415F, Military Specification, Cloth, Coated, and Webbing, Inflatable Boat and Miscellaneous Use.	1989	No	None	NA
MIL-C-19663D, Military Specification, Cloth, Woven Roving, For Plastic Laminate.	1988	No	None	NA
MIL-C-24640A—Military Specification Cables, Light Weight, Electric, Low Smoke, for Shipboard Use, General Specification for Supplement 1	2011	No	None	NA
MIL-C-24640A—Military Specification Cables, Light Weight, Electric, Low Smoke, for Shipboard Use, General Specification for Supplement 2	1995	No	None	NA

Name of the GUS (include associated number)	*Publication Date*	*New – Component began using – in FY2024? (Yes or No)*	*Name(s) and version(s) of the VCS(s) that might have been used, but after review, found to be inappropriate*	*Brief rationale on why the VCS(s) was not chosen.*
MIL-C-24643A—Military Specification Cables and Cords, Electric, Low Smoke, for Shipboard Use, General Specification for, Amendment 2	2011	No	None	NA
MIL-C-24643A—Military Specification Cables and Cords, Electric, Low Smoke, for Shipboard Use, General Specification for, Amendment 3	1996	No	None	NA
MIL-DTL-24640C with Supplement 1, Detail Specification Cables, Lightweight, Low Smoke, Electric, for Shipboard Use	2011	No	None	NA
MIL-DTL-24643C with Supplement 1A, Detail Specification Cables, Electric, Low Smoke Halogen-Free, for Shipboard Use, General Specification for	2011	No	None	NA
MIL-DTL-76E, Military Specification Wire and Cable, Hookup, Electrical, Insulated, General Specification for Supplement 1	2016	No	None	NA
MIL-HDBK-299(SH), Cable Comparison Handbook Data Pertaining to Electric Shipboard Cable	1991	No	None	NA
Military Specification MIL-C-17415 E, "Cloth, Coated, and	1979	No	None	NA

Name of the GUS (include associated number)	*Publication Date*	*New – Component began using – in FY2024? (Yes or No)*	*Name(s) and version(s) of the VCS(s) that might have been used, but after review, found to be inappropriate*	*Brief rationale on why the VCS(s) was not chosen.*
Webbing, Inflatable Boat and Miscellaneous Use"				
Military Specification MIL-C-43006 E, entitled "Cloth and Strip Laminated, Vinyl Nylon High Strength, Flexible."	1978	No	None	NA
Military Specification MIL-P-21929C, Plastic Material, Cellular Polyurethane, Foam-in-Place, Rigid (2 and 4 pounds per cubic foot)	1991	No	None	NA
Military Specification MIL-R-21607 D, entitled "Resins, Polyester, Low Pressure Laminating, Fire-retardant."	1979	No	None	NA
Military Specification MIL-R-21607E(SH), Resins, Polyester, Low Pressure Laminating, Fire Retardant	1990	No	None	NA
Military Specifications (6) MIL-T-43548C—Thread, Polyester Core: Cotton-, Rayon-, or Polyester-Covered.	1986	No	None	NA
Military Specifications (7) (7) MIL-T-43624A—Thread, Polyester, Spun.	1982	No	None	NA
MIL-L-24611, Life Preserver Support Package For Life Preserver, MK 4	1982	No	None	NA
MIL-P-17549D(SH), Military Specification, Plastic	1981	No	None	NA

Name of the GUS (include associated number)	*Publication Date*	*New – Component began using – in FY2024? (Yes or No)*	*Name(s) and version(s) of the VCS(s) that might have been used, but after review, found to be inappropriate*	*Brief rationale on why the VCS(s) was not chosen.*
Laminates, Fibrous Glass Reinforced, Marine Structural.				
MIL-P-21929B, Military Specification, Plastic Material, Cellular Polyurethane, Foam-in-Place, Rigid (2 Pounds per Cubic Foot).	1991	No	None	NA
MIL-R-21607E(SH), Military Specification, Resins, Polyester, Low Pressure Laminating, Fire-Retardant.	1990	No	None	NA
MIL-R-24719(SH), Military Specification, Resins, Vinyl Ester, Low Pressure Laminating.	1989	No	None	NA
MIL-R-7575C, Military Specification, Resin, Polyester, Low-Pressure Laminating	1966	No	None	NA
MIL-W-76D, Military Specification Wire and Cable, Hook-Up, Electrical, Insulated, General Specification for Amendment 1	2003	No	None	NA
National Bureau of Standards Special Publication 440—Color, Universal Language and Dictionary of Names.	1976	No	None	NA

Name of the GUS (include associated number)	*Publication Date*	*New – Component began using – in FY2024? (Yes or No)*	*Name(s) and version(s) of the VCS(s) that might have been used, but after review, found to be inappropriate*	*Brief rationale on why the VCS(s) was not chosen.*
Publication No. (PHS) 84, The Ship's Medicine Chest and Medical Aid at Sea.	No date.	No	None	NA
Special Pub. 440 (SD Cat. No. C13.10:490), "Color: Universal Language and Dictionary of Names."	1976	No	None	NA
Standard Alphabets for Highways Signs	1966	No	None	NA
TSO-C13d, Federal Aviation Administration Standard for Life Preservers	1983	No	None	NA
Type Accepted Category 1, 406 MHz EPIRB, Emergency Position Indicating Radiobeacon	No date.	No	None	NA

SDO Name
3nd Generation Partnership Project
Alliance for Telecommunications Industry Solutions
American Academy of Forensic Sciences, Academy Standards Board
American Boat and Yacht Council
American Bureau of Shipping
American National Standards Institute
American Society of Civil Engineers
American Society of Mechanical Engineers
American Welding Society
ASTM International
Comite International Radio-Maritime
Global Maritime Distress and Safety System
GSM Association
Institute of Electrical and Electronics Engineers
Inter-American Telecommunication Commission of the Organization of American States
International Association of Marine Aids to Navigation and Lighthouse Authorities
International Code Council
International Committee for Information Technology Standards
International Electrotechnical Commission (U.S. National Committee)
International Hydrographic Organization
International Organization for Standardization
International Telecommunications Union, Telecommunications Sector
Internet Engineering Task Force
National Association of State Boating Law Administrators
National Electrical Manufacturers Association
National Fire Protection Association
National Information Exchange Model
National Institute of Standards and Technology
National Marine Electronics Association
Open Radio Access Network Alliance
Organization of Scientific Area Committees for Forensic Science
Radio Technical Commission For Maritime Services
Society of Automotive Engineers
Society of Naval Architects and Marine Engineers
Telecommunications Industry Association
U.S. Board on Geographic Names
Underwriters Laboratories
Wi-Fi Alliance
Wireless Broadband Alliance
World Radiocommunication Conference

SDO Abbreviation
3GPP
ATIS
AAFS/ASB
ABYC
ABS
ANSI
ASCE
ASME
AWS
ASTM
CIRM
GMDSS
GSMA
IEEE
CITEL
IALA
ICC
INCITS
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WFA
WBA
WRC