

SDO Matrix

The following matrix is a list of the most common Standards Development Organizations (SDOs) used by the OSAC Subcommittees and Scientific Area Committees (SACs). It is not meant to be an all-encompassing list. This matrix provides an overview of the SDOs, including who they are, what kind of documents they produce, their document process, etc. Of note, the exclusion of SWGDAM, SWGDRUG, and FISWG from this list is solely due to the fact that those scientific working groups are not operating under the principles of OMB Circular A119 (i.e., development of voluntary consensus standards)¹.

See pages 12-14 for a [list of acronyms](#) used throughout the matrix.

	<i>Academy Standards Board (ASB)</i>	<i>ASTM International</i>	<i>American Dental Association (ADA)</i>	<i>Audio Engineering Society (AES)</i>	<i>International Organization for Standardization (ISO)</i>	<i>National Fire Protection Association (NFPA)</i>	<i>Scientific Working Group on Digital Evidence (SWGDE)</i>
About the Organization	<ul style="list-style-type: none"> American Academy of Forensic Sciences (AAFS) is a multidisciplinary forensic science professional organization with 6,500+ members from all 50 states and 71 other countries. AAFS established the ASB in 2015 as a wholly owned subsidiary to develop consensus-based forensic science standards within an American National Standards Institute (ANSI) accredited framework. For more information, go to https://www.aafs.org 	<ul style="list-style-type: none"> Established in 1898, ASTM is one of the world's largest SDOs. Has developed 12,500+ global standards in 150 major global industries. 30,000+ volunteer members from 155+ countries. 150 committees (with over 2,100 subcommittees) Complies with World Trade Organization (WTO) principles for international standards. For more information, go to https://www.astm.org/ 	<ul style="list-style-type: none"> Founded in 1859, ADA is the world's largest and oldest national dental association. 159,000+ members from all 50 states. Started standards development in 1928 when they partnered with the National Bureau of Standards (now NIST). For more information, go to https://www.ada.org/resources/practice/dental-standards 	<ul style="list-style-type: none"> Founded in the U.S. in 1948, AES is an international organization that unites engineers, scientists, students, and other individuals by promoting advances in audio and disseminating new knowledge and research. AES is a 501(c) with 12,000+ members affiliated with 90+ AES professional sections and 120+ AES student sections around the world. For more information, go to https://aes2.org/ 	<ul style="list-style-type: none"> Founded in 1946, ISO is an independent, non-governmental organization that develops international standards. Has developed 25,420 international standards covering almost all aspects of technology, management, and manufacturing. 171 members (national standards bodies). 838 technical committees and subcommittees. For more information, go to 	<ul style="list-style-type: none"> Founded in 1896, NFPA is a global, nonprofit organization devoted to eliminating death, injury, property and economic loss due to fire, electrical and related hazards. NFPA membership totals ~ 80,000 individuals from around the world and more than 80 national trade and professional organizations. For more information, go to https://www.nfpa.org/for-professionals/codes-and-standards 	<ul style="list-style-type: none"> Established in February 1998, as a nonprofit corporation of ~120 forensic experts, practitioners from law enforcement, private examiners, attorneys, and academia engaged in digital and multimedia evidence. Fosters communication, cooperation, consistency, and quality within the forensic community through consensus-based documents. Internationally recognized standards thru delegates of the International Organization on

¹ Executive Office of the President, Office of Management and Budget. (2016, January, 27). *OMB Circular A-119: Federal participation in the development and use of voluntary consensus standards and in conformity assessment activities*. Retrieved January 3, 2025, from https://www.whitehouse.gov/wp-content/uploads/2020/07/revised_circular_a-119_as_of_1_22.pdf

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	/academy-standards-board				https://www.iso.org/home.html		Computer Evidence (IOCE). • For more information, go to https://www.swgde.org/
Accreditation Status	• ANSI-accredited SDO since 2015. ²	• ANSI-accredited SDO since 1995. ³	• ANSI-accredited SDO since 2000. ⁴	• N/A	• U.S. TAG is accredited by ANSI.	• ANSI-accredited SDO since 1981. ⁵	• N/A
Scope of Forensic Science Standards Development Work	• Dedicated to forensic science and develops standards for any forensic area not addressed by another ANSI-accredited SDO. • Provides training to support those standards.	• Develops forensic-related standards in the E30 Technical Committees (established in 1970).	• Defines the electronic health record requirements for dentistry and antemortem data to aid in forensic dentistry examinations. • Participates with the ISO Technical Committee (TC) 106 on Dentistry.	• Devoted exclusively to audio technology. • Facilitates new technologies, improves performance and ensures interoperability.	• Technical Committee (TC) 272 was created in 2012 and develops standards in the field of Forensic Science. • ISO documents tend to NOT be overly prescriptive as they live at the ‘global’ level and must be fit for purpose for the global community.	• Provides resources on fire, electrical, and life safety guidelines and requirements.	• Dedicated to digital and multimedia evidence to include audio, forensic, imaging, photography, quality, and video.
Org Structure	• Governed by ASB Board which reports to AAFS Executive Director. • 15 consensus bodies (CBs) that develop standards for: - Anthropology	• Governed by a 25-member Board of Directors. ⁶ • Technical Committee E30 ⁶ includes Criminalistics, Interdisciplinary, Digital & Multimedia Evidence, and Terminology subcommittees.	• Governed by a House of Delegates (legislative body) and an elected Board of Trustees (ADA’s managing body). • ADA sponsored two standards committees – one for dental products (SCDP) and	• Governed by an elected volunteer Board. • The AES Standards Committee (AESSC) consists of 11 working groups with ~1,200 members working in the digital audio, acoustics,	• Governed by the Technical Management Board (TMB). • TCs are established by the TMB to manage the scope to include developing standards and can	• Governed by the Standards Council (consisting of 30 voting members) which appoints technical committees (TCs) and Panel members and is the official issuer of all NFPA standards.	• Three administrative committees: bylaws, membership, and outreach. • Six technical committees: Audio, Forensics, Imaging, Photography, Video, and Quality and Standards.

² American National Standards Institute. (2024). ANSI accredited standards developers (ASD), American Academy of Forensic Sciences. Retrieved January 3, 2025, from <https://www.ansi.org/american-national-standards/info-for-standards-developers/accredited-standards-developers#q=academy%20standards%20board&sort=%40titlecomputed%20ascending>

³ American National Standards Institute. (2024). ANSI accredited standards developers (ASD), ASTM International. Retrieved January 3, 2025, from <https://www.ansi.org/american-national-standards/info-for-standards-developers/accredited-standards-developers#q=astm&sort=%40titlecomputed%20ascending>

⁴ American National Standards Institute. (2024). ANSI accredited standards developers (ASD), American Dental Association. Retrieved January 3, 2025, from <https://www.ansi.org/american-national-standards/info-for-standards-developers/accredited-standards-developers#q=dental%20association&sort=%40titlecomputed%20ascending>

⁵ American National Standards Institute. (2024). ANSI accredited standards developers (ASD), National Fire Protection Association. Retrieved January 3, 2025, from <https://www.ansi.org/american-national-standards/info-for-standards-developers/accredited-standards-developers#q=national%20fire&sort=%40titlecomputed%20ascending>

⁶ ASTM International. (2020, March). ASTM technical committee officer handbook. Retrieved January 3, 2025, from https://www.astm.org/media/pdf/Handbook_5-11-20.pdf

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	<ul style="list-style-type: none"> - Bloodstain Pattern Analysis - Crime Scene Investigation - DNA - Dogs and Sensors - Firearms and Toolmarks - Footwear and Tire - Forensic Document Examination - Forensic Nursing - Forensic Odontology - Friction Ridge - Mass Fatality Management & Disaster Victim Identification - Medicolegal Death Investigation - Toxicology - Wildlife Forensics • Subgroups (or working groups) may be formed to expedite CB work. 	<ul style="list-style-type: none"> • Forensic-related standards also developed in other Technical Committees (e.g., engineering, fire, quality, statistics). • Technical Subcommittees (e.g., E30.01, E30.11) address specific subjects or areas within the scope of the main committee.⁶ • Task Groups (TGs) are organized to complete a single specific project (i.e., new or revised standard.) 	<p>one for dental informatics (SCDI).</p> <ul style="list-style-type: none"> • In January 2024, 12 consensus bodies were formed from the SCDP, SCDI, and the U.S. Technical Advisory Group for ISO Technical Committee 106 on Dentistry (U.S. TAG), including one for Forensic Odontology, which addresses both national and international standards.⁷ 	<p>interconnections, and metadata for audio fields.</p>	<p>form one or more subcommittees (SCs).</p> <ul style="list-style-type: none"> • U.S. Technical Advisory Group (TAG) are the "mirror committee" for the TC and are primarily responsible for developing U.S. positions on technical matters. • The ANSI-accredited U.S. TAG to TC 272 consists of multiple organizations and represents the U.S. via ANSI as a participating country to ISO/TC 272. 		

⁷ American Dental Association (2024, January 1). *A new day for ADA standards development*. Retrieved January 3, 2025, from https://www.ada.org/~media/project/ada%20organization/ada/ada-org/files/resources/practice/dental%20standards/standards%20reorg/Reorg_Flyer.pdf

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Membership Types	<ul style="list-style-type: none"> • CB member (individual or organization) - participation is voluntary. • CB members serve a 5-year renewable term. 	<ul style="list-style-type: none"> • Participating Member - an individual who participates in a Committee(s). • Organizational Member - an organizational representative that may or may not participate in a Committee(s). • Informational Member - an individual who has an interest in ASTM standards and related technical information but does not participate in a Committee(s). • Student Member is a full-time undergrad or grad student who receives information from ASTM. 	<ul style="list-style-type: none"> • Voting member on a Consensus Body - each organization can appoint one voting member and two alternates. • Observing member on a Consensus Body – unlimited members are permitted. • Voting member on an individual Working Group. • Observing member on an individual Working Group. 	<ul style="list-style-type: none"> • AES Member - an individual active in audio engineering or acoustics who has an academic degree or professional experience in audio engineering. • AES Associate Member - an individual interested in audio engineering but does not meet the requirements of a Member. • AES Student Member - a student interested in audio engineering and enrolled in an audio program at a school, college, or university. 	<ul style="list-style-type: none"> • ISO membership has two levels - international and national - that operate very similarly. • International membership is composed of <u>national standards bodies</u> (one member per country, each gets one vote). ANSI is the U.S. member body to ISO. • There are three member categories: <ul style="list-style-type: none"> - Full members (or member bodies) influence ISO standards development and strategy by participating and voting in ISO technical and policy meetings. - Correspondent members observe the development of ISO standards and strategy by attending ISO technical and policy meetings as observers. - Subscriber members keep up to date on ISO work but cannot participate in it. 	<ul style="list-style-type: none"> • TC members are volunteers (1 vote per interest). • Appointment to a TC is based on such factors as technical expertise, professional standing, commitment to public safety, and the ability to offer point of view of a category of interested people or groups. 	<ul style="list-style-type: none"> • Voting Member - an individual who has attended two meetings as a guest within a year, completed the membership application, and has been voted in by a simple majority vote of current membership. They shall have subject matter expertise relevant to the discipline of digital and multimedia evidence.
Membership Required to Participate / How to Participate	<ul style="list-style-type: none"> • AAFS membership not required. • Applications for ASB voting CB members open annually in the summer. Secretariat 	<ul style="list-style-type: none"> • It depends: <ul style="list-style-type: none"> - Participation in a TG does not require membership. - Participation in a Technical Committee (e.g., E30) or 	<ul style="list-style-type: none"> • It depends: <ul style="list-style-type: none"> - Membership is not required if participating as an observer in standards development activities 	<ul style="list-style-type: none"> • AES membership, although strongly encouraged, is not required to participate in standards development. 	<ul style="list-style-type: none"> • Yes. Standards are developed by groups of experts called TCs. These experts are put forth by ISO's national members. 	<ul style="list-style-type: none"> • No 	<ul style="list-style-type: none"> • Yes • All prospective members must attend two SWGDE meetings as a guest to be considered for membership.

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	<p>reviews and submits to ASB Board for approval by majority vote.</p> <ul style="list-style-type: none"> • Non-members can participate as observers. • Join the ASB Newsletter list (asb@aafs.org) to receive notification of applications being open. 	<p>Subcommittee (e.g., E30.01) requires ASTM membership.</p> <ul style="list-style-type: none"> • Submit application: https://www.astm.org/get-involved/membership-types.html. 	<p>- Membership is required if participating in voting in standards development activities.</p> <ul style="list-style-type: none"> • Submit application: https://www.ada.org/resources/practice/dental-standards/ada-standards-program-reorganization. 	<ul style="list-style-type: none"> • AESSC working groups are open to all directly and materially affected individuals. • Request working group membership: https://www.aes.org/standards/participation-507.cfm. 			<ul style="list-style-type: none"> • Application submitted before the second meeting and voted on at the close of the second meeting. Submit application: https://www.swgde.org/membership.
Membership Fees	<ul style="list-style-type: none"> • \$0 – free 	<ul style="list-style-type: none"> • \$115 per year for Participating and Informational Members. • \$400 per year for an Organizational Member. • No fee for Student Members. 	<ul style="list-style-type: none"> • \$600 per year for Consensus Body Membership (with voting rights) • \$300 per year for Observer status. • \$150 per year for Working Group Membership (with voting rights) • \$75 per year for Observer status on Working Group. 	<ul style="list-style-type: none"> • \$125 for one-year for AES Member and Associate Member. 	<ul style="list-style-type: none"> • Each member organization of the ANSI-accredited U.S. TAG to TC 272 pays an annual fee to take part in the TAG. This fee is dependent upon the number of member entities in the U.S. TAG. • The U.S. TAG for TC 272 pays an annual fee to ANSI in order to administer the TAG and develop standards. . 	<ul style="list-style-type: none"> • \$0 – free 	<ul style="list-style-type: none"> • \$0 – free
Types of Documents the SDO develops	<ul style="list-style-type: none"> • Technical report (TR): Provides scientific, technical, terminology, or operational information relevant to a standard, a field of activity, or a profession. TRs are explanatory, 	<p>Note: While the documents below all serve a specific purpose, ASTM refers to all of them as “standards”.</p> <ul style="list-style-type: none"> • Terminology: Comprises definitions of terms, explanation of 	<p>Note: While ADA does not specifically define their document types, they do coordinate with ISO, ANSI.</p> <ul style="list-style-type: none"> • Standard⁸ 	<p>Note: AES produces five different types of standards.</p> <ul style="list-style-type: none"> • Practice/Recommended Practice: Recommendations, requirements, or both for configuring a device or operation and that 	<ul style="list-style-type: none"> • Standard⁸ 	<p>Note: While the documents below all serve a specific purpose, NFPA refers to all of them as “standards”. Glossary of Terms page number is provided</p>	<ul style="list-style-type: none"> • Standard and minimum requirements: Establishes objectively measurable and verifiable requirements, rules, or characteristics for a given topic or set of actions.

⁸ American Dental Association (n.d.). *ADA standards program structure (PDF)*. Retrieved January 3, 2025, from https://www.ada.org/-/media/project/ada-organization/ada/ada-org/files/resources/practice/dental-standards/standards-reorg/ada_standards_program_structure.pdf?rev=abd1e63f97fc4066a53316eac84b5194&hash=A4EA18EC7B82A1A4D0A8B3E31ACD3CD9

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	<p>information-only documents, do not set requirements or recommendations, and are not suitable for conformity assessment.</p> <ul style="list-style-type: none"> • Best practice Recommendation (BPR): Identifies and sets forth the optimal way to carry out an action or actions. A BPR is written in ‘should’ language. Imperative or ‘shall’ language can be used in a secondary context when necessary to clarify a recommended action or approach. • Guideline: Provides information and advice on processes and activities contained in a standard or best practice recommendation, or guides users on the implementation of a standard or series of 	<p>symbols, abbreviations, or acronyms.</p> <ul style="list-style-type: none"> • Classification: Systematic arrangement or division of materials, products, systems, or services into groups based on similar characteristics such as origin, composition, properties, or use. • Guide: Suggests an approach method or agreed way of measuring, testing, or specifying what is reliably repeatable in different circumstances and places, wherever it needs to be applied. A compendium of information or series of options that does not recommend a specific course of action. • Practice: Set out requirements and contains a set of instructions for performing one or more specific 	<ul style="list-style-type: none"> • Technical Specification (TS)^{9,10:} Sets forth requirements, recommendations and test methods. Follows ANSI requirement that it is entirely informative in nature (i.e., not normative, and therefore not an ANS). Follows ISO publication of work still under technical development and has not yet reached consensus for a Standard. • Technical Report (TR)^{10:} Contains information that may include data obtained from a survey, an informative report, or information of a perceived “state of the art”. 	<p>does not produce a test result.</p> <ul style="list-style-type: none"> • Test Method: Procedural recommendations, requirements, or both to produce a test result • Specification: Recommendations, requirements, or both to be satisfied by a device or operation • Classification: Arrangement of items based on a hierarchy of properties • Terminology: Definitions of terms, abbreviations and symbols <p>Note: AES also produces three additional classes of documents.</p> <ul style="list-style-type: none"> • Information Document: A summary of scientific and technical information; originated by a technically competent writing group; important to the 		<p>in parenthesis after term.^{11,12}</p> <ul style="list-style-type: none"> • Code (p. 894): Describes “what needs to be done”. An extensive compilation of provisions covering broad subject matter or that is suitable for adoption into law independently of other codes and standards. • Standard (p.4349): Describes “how to do it”. Establishes a minimum level of safety for people and property. Contains only mandatory provisions using the word “shall” to indicate requirements and generally suitable for mandatory reference by another standard or code or for adoption into law. Nonmandatory provisions should be included as appendix, 	<ul style="list-style-type: none"> • Best Practice (BP): Identifies the optimal way to carry out an action or actions. A BP may include choices and the variants between them as a means of demonstrating optimal choices in different circumstances. • Guideline: Provides information and advice on processes and activities contained in a standard or BP, or guides users on the implementation of a standard or series of standards. A Guideline may include recommendations but does not establish best practices. • Technical Note (TN): An explanatory, information-only document. A TN does not set requirements or recommendations

⁹ American National Standards Institute. (2024, January). *Procedures for the registration of technical reports with ANSI*. https://share.ansi.org/Shared%20Documents/Standards%20Activities/American%20National%20Standards/Procedures,%20Guides,%20and%20Forms/TR_2024.pdf

¹⁰ International Organization for Standardization. (n.d.). *ISO deliverables: The different types of ISO publications*. <https://www.iso.org/deliverables-all.html#TR>

¹¹ National Fire Protection Association. (2025). *Introduction to the NFPA Standards Development Process (video)*. Retrieved January 3, 2025, from <https://www.nfpa.org/videos/basics-of-the-standards-development-process/introduction>

¹² National Fire Protection Association. (2024, May 31). *NFPA Glossary of Terms (2024)*. Retrieved January 3, 2025, from <https://www.nfpa.org/downloadable%20resources/Definitions/NFPA%20Glossary%20of%20Terms>

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	<p>standards. It may include recommendations but does not establish best practices. A guideline is written in ‘should’ language and is informative rather than directive. A guideline in and of itself is not appropriate for conformity assessment.</p> <p>• Standard: Established by consensus and approved by a recognized body, that provides requirements and is written to establish objectively measurable requirements for a given topic or set of actions. It is aimed at the achievement of the optimum degree of order in a given context.</p> <p>For additional information, see (https://www.nist.gov/organization-scientific-area-committees-forensic-science/types-asb-documents)</p>	<p>operations that does not produce a test result. A practice underscores a general usage principle.</p> <p>• Test Method: Sets out requirements and is a definitive procedure that produces a test result.</p> <p>• Specification: Contains an explicit set of requirements to be satisfied by a material, product, system, or service.</p> <p>For additional information, see (https://www.nist.gov/organization-scientific-area-committees-forensic-science/types-astm-documents)</p>		<p>preparation and justification of an AES standard or to the understanding and application of such information to a specific technical subject.</p> <p>• Trial Use Standard: Provides opportunity for discussion and trial use before the document is presented as a call for comment leading to consensus and finalization of the standard.</p> <p>• Standards Project Report: Implies a consensus of those directly and materially affected by its provisions who have approved it as representing the views of their AESSC subcommittee but not of the AES as a whole.</p>		<p>annex, footnote, informational note, or as permitted in NFPA Style guide.</p> <p>• Recommended Practice (p.3475): Provides guidance and is advisory in nature. Contains only non mandatory provisions using the word “should” to indicate recommendations in the body of the text.</p> <p>• Guide (p.2096): Provides guidance and is advisory in nature. Contains only non mandatory provisions or mandatory statements describing when a guide can be used, but as a whole is not suitable for adoption into law.</p>	<p>and can include scientific, technical, terminology, or operational information related to an activity, application, or standard.</p> <p>• Position and Consideration: Provides guidance, considerations, or positions on particular topics.</p>

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OSAC Subcommittees that could use this SDO	<ul style="list-style-type: none"> • Forensic Toxicology • Bloodstain Pattern Analysis • Firearms & Toolmarks • Footwear & Tire • Forensic Document Examination • Friction Ridge • Crime Scene Investigation & Reconstruction • Dogs & Sensors • Forensic Anthropology • Forensic Nursing • Forensic Odontology • Medicolegal Death Investigation • Human Forensic Biology • Wildlife Forensic Biology 	<ul style="list-style-type: none"> • Digital Evidence • Facial & Iris Identification • Speaker Recognition • Video/Imaging Technology and Analysis • Seized Drugs • Ignitable Liquids, Explosives & Gunshot Residue • Trace Materials 	<ul style="list-style-type: none"> • Forensic Odontology 	<ul style="list-style-type: none"> • Speaker Recognition 	<ul style="list-style-type: none"> • Interdisciplinary 	<ul style="list-style-type: none"> • Fire & Explosion Investigation 	<ul style="list-style-type: none"> • Digital Evidence • Facial & Iris Identification • Speaker Recognition • Video/Imaging Technology and Analysis
Standards Development Process	<ul style="list-style-type: none"> • New work item is proposed and approved by CB and ASB Board. • Document is developed by CB or Working Group (WG) within a CB. • Document is announced for public review and comment through ASB and ANSI (open for 45 days). 	<ul style="list-style-type: none"> • New work item is proposed and approved. • Work item (WK) is registered and draft is developed. • Subcommittee ballot is initiated. • Negative votes are considered and must be resolved. • Main Committee (E30) ballot is initiated. • Concurrently with the Main Committee ballot, 	<ul style="list-style-type: none"> • New work item is proposed and approved. • Draft is developed by working group (WG) • Notice posted on ADA website (ADA News/Practice) and draft standard can be requested at standards@ada.org. • Comment period of 40-60 days. • Comments are addressed. 	<ul style="list-style-type: none"> • Project initiation - new project is proposed and approved.¹⁴ • Task group assignment - the project is assigned to a new or existing TG. • Proposed task-group draft (PTD) - a draft is developed by the TG. • Proposed working-group draft (PWD) - the draft is reviewed by the WG. 	<ul style="list-style-type: none"> • Proposal stage - new work item is proposed and approved.¹⁵ • Working Draft (WD)/Preparatory stage - WD is prepared by a WG composed of nominated experts from participating countries. Only countries in WG can comment on the document. At this 	<ul style="list-style-type: none"> • Input stage - new idea is considered for draft development • Comment stage - First Draft Report is opened for public comment. Comments are reviewed and adjudicated into a Second Draft. Then another Public Comment to submit a Notice of Intent to Make a Motion (NITMAM). 	<ul style="list-style-type: none"> • New idea is proposed, and a draft is developed. • Draft is circulated for internal review, discussion, and vote to release for public comment (open for 60 days). • Comments are reviewed and adjudicated. • Final version approved and published.

¹⁴ Audio Engineering Society. (2015, May 26). *Audio Engineering Society standards committee guideline for members - document progress*. Retrieved January 3, 2025, from <https://www.aes.org/standards/development/aessc-doc-prog-150526.pdf>

¹⁵ International Organization for Standardization. (2025). *Stages and resources for standards development*. <https://www.iso.org/stages-and-resources-for-standards-development.html>

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	<ul style="list-style-type: none"> • Comments are adjudicated by the CB and must be approved by majority. • Document must be approved by a 2/3 majority of the eligible voting members of the CB. • Proof of compliance with the ANSI process is submitted to ANSI for approval as an ANS (American National Standard). • Documents must be reviewed every 5-years.¹³ 	<p>the standard is opened for public comment through ANSI (open for 45 days).</p> <ul style="list-style-type: none"> • Any negative votes are considered and must be resolved. • The Committee on Standards (COS) approves that procedures were followed correctly in resolving any negative votes. • Document is submitted to ANSI for approval as an ANS. • Document is published by ASTM. • Documents must be reviewed every 5-years.¹⁴ 	<ul style="list-style-type: none"> • Final draft is balloted through the Standards Committee. • Document is submitted to ANSI for approval as an ANS. • Documents must be reviewed every 5-years.¹³ 	<ul style="list-style-type: none"> • Proposed call for comment (PCFC) - the draft is placed on the WG site. • Forward of revisions to secretariat - any changes to the draft are incorporated and reposted to the WG site. • Call for Comment (CFC) on public draft - document is posted for public comment. • Comments on the public draft - public comments will be posted on the website. • Publication of document - comments are reviewed and adjudicated. Document is published to the on-line AES Store. 	<p>point, the draft can go to either the Committee stage or Enquiry stage.</p> <ul style="list-style-type: none"> • Committee Draft (CD)/Committee stage (optional). If the TC uses this stage, the CD is circulated to all countries in the TC for comment. • Draft International Standard (DIS)/ Enquiry stage - the DIS is submitted to all ISO national members to vote and comment on it. Draft standards at this stage are also open for public comment for 12 weeks (preceded by a 8 week translation period).¹⁶ If the DIS is approved and no technical changes are introduced in the draft, the document goes straight to publication. However, if technical changes are introduced, the FDIS stage is mandatory. • Final Draft International Standard (FDIS)/Approval stage If this stage is used, the FDIS is submitted and then 	<ul style="list-style-type: none"> • NFPA Technical Meeting (Tech Session) - valid motions are certified and presented for vote. • Standards Council Action - the standard is issued or other actions are taken. • Standards are reviewed every 2-years. 	<ul style="list-style-type: none"> • Documents must be reviewed every 5-years. revision.

¹³ American National Standards Institute. (2025, January). *ANSI essential requirements. 3.0 normative American National Standards policies*. Retrieved January 3, 2025, from <https://www.ansi.org/american-national-standards/ans-introduction/essential-requirements>

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					circulated to all ISO members for a vote. • Publication stage - international standard is published.		
Style Guides	<ul style="list-style-type: none"> Manual and Style Guide for ASB Standards, Guidelines, Best Practice Recommendations, and Technical Reports: https://www.aafs.org/sites/default/files/media/documents/ASB%20Manual%202022%20revision.pdf ASB Supplemental Guide: https://www.aafs.org/sites/default/files/media/documents/ASB%20Supplemental%20Guide%202022%20revision.pdf 	<ul style="list-style-type: none"> Form and Style Manual for ASTM Standards (or “Blue Book”): https://www.astm.org/form-style-for-astm-stds.html 	<ul style="list-style-type: none"> None available at this time. 	<ul style="list-style-type: none"> Style for AES Standards: https://www.aes.org/standards/development/aessc-style-080913.pdf 	<ul style="list-style-type: none"> ISO templates: https://www.iso.org/iso-templates.html ISO House Style: https://www.iso.org/ISO-house-style.html 	<ul style="list-style-type: none"> Manual of Style for NFPA Technical Committee Documents: https://www.nfpa.org/for-professionals/codes-and-standards/standards-development/regulations-and-policies 	<ul style="list-style-type: none"> SWGDE Style Guide
Other Resources	<ul style="list-style-type: none"> ASB information and education: https://www.aafs.org/academy-standards-board/information-education 	<ul style="list-style-type: none"> ASTM key documents and forms: https://www.astm.org/get-involved/technical-committees/key-documents.html 	<ul style="list-style-type: none"> ADA Dental standards info: https://www.ada.org/resources/practice/dental-standards 	<ul style="list-style-type: none"> About AES Standards: https://www.aes.org/standards/about/ 	<ul style="list-style-type: none"> Developing ISO standards: https://www.iso.org/developing-standards.html Terms and expressions used in ISO standards: https://www.iso.org/foreword-supplementary-information.html ISO Online Browsing Platform (OBP): https://www.iso.org/obp/ui 	<ul style="list-style-type: none"> NFPA standards development process: https://www.nfpa.org/For-Professionals/Codes-and-Standards/Standards-Development AB04FF86BD4 NFPA Glossary of Terms: https://www.nfpa.org/downloadable-resources/definitions/nfpa-glossary-of-terms 	<ul style="list-style-type: none"> SWGDE Glossary: https://www.swgde.org/glossary/ SWGDE Positions and Considerations: https://www.swgde.org/documents/positions-and-considerations/

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How to Access Standards	<ul style="list-style-type: none"> Free access from the ASB website: https://www.aafs.org/academy-standards-board 	<ul style="list-style-type: none"> OSAC and ASTM have an agreement for free access to E30 standards via the OSAC Registry webpage. https://www.nist.gov/organization-scientific-area-committees-forensic-science/osac-registry 	<ul style="list-style-type: none"> OSAC and ADA have an agreement for free access to the ADA standards on the OSAC Registry. https://www.nist.gov/organization-scientific-area-committees-forensic-science/osac-registry 	<ul style="list-style-type: none"> Available for individual purchase from the AES Standards Store: https://aes2.org/publications/standards-store/ Free access to AES standards for AES members. 	<ul style="list-style-type: none"> Available for individual purchase from the ISO store: https://www.iso.org/store.html 	<ul style="list-style-type: none"> Free online public access (read only). Printed copies available for a fee. NFPA Webpage for Standards Access 	<ul style="list-style-type: none"> Free access from the SWGDE website SWGDE Webpage for Standards Access
Contact	Teresa Ambrosius, ASB Secretariat tambrosius@AAFS.org	technicalcontactsQA@gmail.com ;	standards@ada.org ; Sharon Stanford Director, Standards Administration standfors@ada.org	standards-at-aes.org	Jody Wolf, Secretariat (U.S. TAG) jody.wolf@phoenix.gov Erin Forry, Chair of the U.S. TAG erinforry@gmail.com	custserv@nfpa.org Dawn Michele Bellis Director, Standards Administration dbellis@nfpa.org	chair@swgde.org

List of Acronyms:

AAFS	American Academy of Forensic Sciences
ADA	American Dental Association
AES	Audio Engineering Society
AESSC	Audio Engineering Society's Standards Committee
ANS	American National Standard
ANSI	American National Standards Institute
ASB	Academy Standards Board
BP	Best Practice
BPR	Best Practice Recommendation
CB	Consensus Body
CD	Committee Draft
CFC	Call for Comment
DIS	Draft International Standard
FDIS	Final Draft International Standard
FISWG	Facial Identification Scientific Working Group
IOCE	International Organization on Computer Evidence
ISO	International Organization for Standardization
NFPA	National Fire Protection Association
NIST	National Institute of Standards and Technology
NITMAM	Notice of Intent to Make a Motion

OMB	Office of Management and Budget
OSAC	Organization of Scientific Area Committees for Forensic Science
PCFC	Proposed Call for Comment
PTD	Proposed Task-Group Draft
PWD	Proposed Working-Group Draft
SAC	Scientific Area Committee
SC	Subcommittee
SCDI	Standards Committee on Dental Informatics
SCDP	Standards Committee on Dental Products
SDO	Standards Development Organization
SWGDM	Scientific Working Group on DNA Analysis Methods
SWGDE	Scientific Working Group on Digital Evidence
SWGDRUG	Scientific Working Group for the Analysis of Seized Drugs
TAG	Technical Advisory Group
TC	Technical Committee
TG	Task Group
TMB	Technical Management Board
TN	Technical Note
TR	Technical Report
WD	Working Draft
WG	Work(ing) Group

WK	Work Item
WTO	World Trade Organization