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# Project Initiation Notification System (PINS)

ANSI Procedures require notification of ANSI by ANSI-accredited standards developers (ASD) of the initiation and scope of activities expected to result in new or revised American National Standards (ANS). Early notification of activity intended to reaffirm or withdraw an ANS and in some instances a PINS related to a national adoption is optional. The mechanism by which such notification is given is referred to as the PINS process. For additional information, see clause 2.4 of the ANSI Essential Requirements: Due Process Requirements for American National Standards.

Following is a list of proposed actions and new ANS that have been received recently from ASDs. Please also review the section in Standards Action entitled "American National Standards Maintained Under Continuous Maintenance" for additional or comparable information with regard to standards maintained under the continuous maintenance option. Use the following Public Document Library url to access PDF & EXCEL reports of approved & proposed ANS: [List of Approved and Proposed ANS](#)

Directly and materially affected interests wishing to receive more information or to submit comments are requested to contact the standards developer directly within 30 days of the publication of this announcement.

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## **AAFS (American Academy of Forensic Sciences)**

410 North 21st Street | Colorado Springs, CO 80904 [www.aafs.org](http://www.aafs.org)

Contact: Teresa Ambrosius; [tambrosius@aafs.org](mailto:tambrosius@aafs.org)

### ***New Standard***

BSR/ASB BPR 177-202x, Canine Detection of Scent Identification Line-Ups (new standard)

Stakeholders: Federal, state, local, and private-sector canine detection teams; canine-evaluating officials; prosecution and defense attorneys; and law enforcement community.

Project Need: There are no consensus standards for canine teams (canine and handler), specifically dedicated to scent identification lineups.

Scope: This standard contains requirements for the training, certification, and documentation pertaining to canine teams (canine and handler) trained to conduct human scent lineups. Human scent lineups are canine examinations of human scent traces, in a comparative manner, in order to confirm the presence or absence of an association between objects or scent samples.

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### ***New Standard***

BSR/ASB BPR 178-202x, Canine Detection of Electronic Storage Media (new standard)

Stakeholders: Federal, state, local, and private-sector canine detection teams; canine-evaluating officials, defense and prosecution attorneys; and law enforcement community.

Project Need: There are no consensus standards for canine teams (canine and handler), specifically dedicated to searching for electronic media devices.

Scope: This standard contains requirements for the training, certification, and documentation pertaining to canine teams (canine and handler) trained to conduct detection of media storage devices that include hard drives, Universal Serial Bus (USB) drives, micro secure digital (SD) cards, and subscriber identification module (SIM) cards.

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***New Standard***

BSR/ASB BPR 179-202x, Canine Detection of Accelerants (new standard)

Stakeholders: Federal, state, local, and private-sector canine detection team;; canine-evaluating officials; fire investigators; law enforcement community.

Project Need: There are no consensus standards for canine teams (canine and handler), specifically dedicated to searching for accelerants.

Scope: This standard contains requirements for the training, certification, and documentation pertaining to canine teams (canine and handler) trained to conduct the detection of accelerants. This standard covers accelerants to include: gasoline, light petroleum distillates, medium petroleum distillates, and high petroleum distillates.

**ABYC (American Boat and Yacht Council)**

613 Third Street, Suite 10 | Annapolis, MD 21403 [www.abycinc.org](http://www.abycinc.org)

Contact: Sara Moulton; [smoulton@abycinc.org](mailto:smoulton@abycinc.org)

***Revision***

BSR/ABYC H-24-202x, Gasoline Fuel Systems (revision of ANSI/ABYC H-24-2017)

Stakeholders: Surveyors, consumers, insurance personnel, boat manufacturers, engine manufacturers, accessory manufacturers, government, service specialists, and trade associations.

Project Need: To address safety of construction, installation, repair, and maintenance of all parts of permanently installed gasoline (petrol) fuel systems on all boats with gasoline (petrol) engines, excluding onboard refueling systems.

Scope: This standard addresses the design, choice of materials for, construction, installation, repair, and maintenance of permanently installed gasoline (petrol) fuel systems.

**AMCA (Air Movement and Control Association)**

30 West University Drive | Arlington Heights, IL 60004-1893 [www.amca.org](http://www.amca.org)

Contact: Shruti Kohli-Bhargava; [shrutik@amca.org](mailto:shrutik@amca.org)

***Revision***

BSR/AMCA 230-202x, Laboratory Methods of Testing Air Circulating Fans for Rating and Certification Air (revision of ANSI/AMCA 230-2015)

Stakeholders: Fan manufacturers, building owners, testing laboratories, fan equipment specifiers, fan engineers, HVAC professionals.

Project Need: This standard shall be used as the basis for testing air-circulating fan heads, ceiling fans, box fans, table fans, portable personnel coolers or other air-circulating devices when air is used as the test gas. The diameter of the fan being tested shall be limited by the minimum dimensions as shown in the applicable test figures. Blowers, exhausters, compressors, positive-displacement machines, and positive-pressure ventilators are not within the scope of this standard.

Scope: The purpose of this standard is to establish uniform methods for laboratory testing of air circulating fans to determine performance (forward or reverse flow) in terms of airflow rate for rating, certification or guarantee purposes.

**AWS (American Welding Society)**

8669 NW 36th Street, Suite 130 | Miami, FL 33166-6672 [www.aws.org](http://www.aws.org)

Contact: Kevin Bulger; [kbulger@aws.org](mailto:kbulger@aws.org)

**Revision**

BSR/AWS C3.8M/C3.8-202x, Specification for the Ultrasonic Pulse-Echo Examination of Brazed Joints (revision of ANSI/AWS C3.8M/C3.8-2020)

Stakeholders: Aerospace and commercial brazing and inspection operations.

Project Need: This specification may be used for the inspection of brazements to show conformance to five associated independent brazing process specifications. These are AWS C3.4M/C3.4, Specification for Torch Brazing; AWS C3.5M/C3.5, Specification for Induction Brazing; AWS C3.6M/C3.6, Specification for Furnace Brazing; AWS C3.7M/C3.7, Specification for Aluminum Brazing; and AWS C3.9M/C3.9, Specification for Resistance Brazing.

Scope: This specification provides the minimum requirements for the ultrasonic pulse-echo examination of brazed joints. Its purpose is to standardize brazed-joint ultrasonic examination requirements for all applications in which brazed joints of acceptable quality are required. It provides the minimum requirements for equipment, procedures, and the documentation of such tests.

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**Revision**

BSR/AWS C3.9M/C3.9-202x, Specification for Resistance Brazing (revision of ANSI/AWS C3.9M/C3.9-2020)

Stakeholders: Electrical component and other manufacturers conducting resistance brazing

Project Need: Provide specific fabrication, equipment, material, and process procedure requirements, as well as discontinuity limits for the resistance brazing.

Scope: This specification provides the minimum fabrication, equipment, material, and process procedure requirements, as well as discontinuity limits for the resistance brazing of steels, copper, copper alloys, heat- and corrosion-resistant alloys, and other materials that can be adequately resistance brazed (the resistance brazing of aluminum alloys is addressed in AWS C3.7M/C3.7, Specification for Aluminum Brazing). This specification provides criteria for classifying resistance-brazed joints based on the loading and the consequences of failure and quality-assurance criteria defining the limits of acceptability in each class. This specification defines acceptable resistance-brazing equipment, materials, and procedures, as well as the required inspection for each class of joint.

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**Revision**

BSR/AWS C3.14M/C3.14-202x, Standard Method for Evaluation of Brazed Joints Using Visual and Metallographic Techniques (revision of ANSI/AWS C3.14M/C3.14-2020)

Stakeholders: All laboratories, other facilities, and personnel involved in assessing the metallurgical quality of the brazed assemblies; braze-processing facilities on process control; aerospace and other consumers of brazed assemblies in evaluating and qualifying braze joint designs.

Project Need: This is an industry standard and guideline for the evaluation of brazed joint (external) and internal (microstructural) features. Aerospace primes are faced with increasing demand for third-party accreditation of suppliers for various brazing processes; yet are faced with a lack of reliable methods for assessing the supplier skills and capabilities in this area.

Scope: This standard describes and illustrates the test methods used to obtain information related to brazed joint quality and structural integrity. Verification methods include visual observation, as well as metallography of such parameters as braze wetting, braze joint erosion, brazing filler metal penetration, differences between excess wetting, lack of wetting and dewetting, and formation of voids, cracks, and features which may be detrimental to end use. Additionally, methods to determine diffusion of braze alloying elements and procedures to qualify such methods are described. Photographs illustrating visual inspection, schematic illustrations, and photomicrographs illustrating various aspects of brazed joint integrity are presented.

**CSA (CSA America Standards Inc.)**

8501 E. Pleasant Valley Road | Cleveland, OH 44131 [www.csagroup.org](http://www.csagroup.org)

Contact: Debbie Chesnik; [ansi.contact@csagroup.org](mailto:ansi.contact@csagroup.org)

**New Standard**

BSR/CSA HGV 5.2-202x, Compact Hydrogen Fueling Systems (new standard)

Stakeholders: Manufacturers, component suppliers, testing laboratories, certification bodies, and users.

Project Need: This standard is intended to provide manufacturers, suppliers, and users with performance requirements for compact hydrogen fueling systems.

Scope: This standard details the mechanical, electrical, and safety requirements for newly manufactured compact hydrogen fueling systems (cHFS) and similar integral hydrogen generation, compression, storage, and dispensing systems intended for fueling non-Hydrogen Powered Industrial Trucks, on- or off-road hydrogen motor vehicles equipped with onboard fuel containers compliant with SAE J2579 or UN Global Technical Regulation No 13.

**CSA (CSA America Standards Inc.)**

8501 E. Pleasant Valley Road | Cleveland, OH 44131 [www.csagroup.org](http://www.csagroup.org)

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**New Standard**

BSR/CSA Z21.106-202x, Hydrogen fueled appliances and related accessories (new standard)

Stakeholders: Consumers, manufacturers, gas suppliers, certification agencies, regulatory authorities.

Project Need: New standard to support the industry with the shift to hydrogen and hydrogen blends.

Scope: This standard specifies safety, performance, and installation requirements for residential and commercial appliances and accessories fueled by hydrogen and hydrogen blends.

**ESTA (Entertainment Services and Technology Association)**

271 Cadman Plaza, P.O. Box 23200 | Brooklyn, NY 11202-3200 [www.esta.org](http://www.esta.org)

Contact: Karl Ruling; [standards@esta.org](mailto:standards@esta.org)

***New Standard***

BSR E1.77-202x, Secure Authentication for ESTA Streaming Protocols (new standard)

Stakeholders: Control equipment manufacturers, equipment specifiers, and network designers.

Project Need: There have been requests by end-users for a securable version of streaming protocols. Also, legislative requirements for “connected devices” security have an impact on existing ESTA standards. This standard is the beginning of a suite of ESTA protocol security standards.

Scope: This standard will describe a method for securing ESTA streaming control protocols, such as ANSI E1.31 and ANSI E1.59, by implementing a secure authentication wrapper. This standard is intended to provide authorization and authentication only and is not intended to provide full encryption of the streaming data. This standard would only apply to streaming protocols and not to bi-directional protocols, such as ANSI E1.33, which will require a higher level of security.

**IAPMO (Z) (International Association of Plumbing & Mechanical Officials)**

4755 East Philadelphia Street | Ontario, CA 91761 <https://www.iapmostandards.org>

Contact: George Istefan; [george.istefan@iapmo.org](mailto:george.istefan@iapmo.org)

***New Standard***

BSR/IAPMO Z1095-202x, Pipe Support Hangers and Hooks (new standard)

Stakeholders: Manufacturers, users, inspectors, distributors designers, and contractors.

Project Need: Needed for testing and certification purposes.

Scope: This Standard covers pipe support hangers and hooks intended for use in plumbing-supply and drain-waste vent systems and specifies requirements for material, physical characteristics, performance testing, and markings.

Products covered by this standard can include: (a) Hangers for cast iron pipe; (b) Plastic pipe support hooks used to support 12.7 through 31.8 mm (1/2 through 1- 1/4 in) CTS and 38.1 through 101.6 mm (1-1/2 through 4 in) schedule 40 PVC and ABS DWV piping systems; and (c) Steel hangers used to support up to NPS-6, metallic and plastic, supply and DWV pipe. This Standard strictly applies to hangers and pipe support hooks used solely as supporting and/or suspending devices and not to pipe alignment and secondary support system.

**ISA (International Society of Automation)**

67 Alexander Drive | Research Triangle Park, NC 27709 [www.isa.org](http://www.isa.org)

Contact: Charley Robinson; [crobinson@isa.org](mailto:crobinson@isa.org)

***Revision***

BSR/ISA 96.02.01-202x, Guidelines for the Specification of Electric Valve Actuators (revision of ANSI/ISA 96.02.01-2016)

Stakeholders: Those who are involved in specifying electric valve actuators as used in a wide variety of industrial processes.

Project Need: To update the 2016 version of the standard.

Scope: This standard covers the development of specifications, minimum design requirements, and sizing criteria for electric valve actuators.

**ITI (INCITS) (InterNational Committee for Information Technology Standards)**

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***National Adoption***

INCITS/ISO/IEC 9797-3:2011/AM1:2020 [202x], Information technology - Security techniques - Message Authentication Codes (MACs) - Part 3: Mechanisms using a universal hash-function - Amendment 1 (identical national adoption of ISO/IEC 9797-3:2011/AM1:2020)

Stakeholders: ICT industry.

Project Need: Adoption of this International Standard is beneficial to the ICT industry.

Scope: Amendment 1 to ISO/IEC 9797-3:2011.

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***National Adoption***

INCITS/ISO/IEC 9798-4:1999/COR1:2009 [202x], Information technology - Security techniques - Entity authentication - Part 4: Mechanisms using a cryptographic check function - Technical Corrigendum 1 (identical national adoption of ISO/IEC 9798-4:1999/COR1:2009)

Stakeholders: ICT industry.

Project Need: Adoption of this International Standard is beneficial to the ICT industry.

Scope: Technical Corrigendum 1 to ISO/IEC 9798-4:1999.

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***National Adoption***

INCITS/ISO/IEC 9798-4:1999/COR2:2012 [202x], Information technology - Security techniques - Entity authentication - Part 4: Mechanisms using a cryptographic check function - Technical Corrigendum 2 (identical national adoption of ISO/IEC 9798-4:1999/COR2:2012)

Stakeholders: ICT industry.

Project Need: Adoption of this International Standard is beneficial to the ICT industry.

Scope: Technical Corrigendum 2 to ISO/IEC 9798-4:1999.

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***National Adoption***

INCITS/ISO/IEC 10118-1:2016/AM1:2021 [202x], Information technology - Security techniques - Hash-functions - Part 1: General - Amendment 1: Padding methods for sponge functions (identical national adoption of ISO/IEC 10118-1:2016/AM1:2021 [ ])

Stakeholders: ICT industry.

Project Need: Adoption of this International Standard is beneficial to the ICT industry.

Scope: Amendment 1 to ISO/IEC 10118-1:2016.

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***National Adoption***

INCITS/ISO/IEC 10118-2:2010/COR1:2011 [202x], Information technology - Security techniques - Hash-functions - Part 2: Hash-functions using an n-bit block cipher - Technical Corrigendum 1 (identical national adoption of ISO/IEC 10118-2:2010/COR1:2011)

Stakeholders: ICT industry.

Project Need: Adoption of this International Standard is beneficial to the ICT industry.

Scope: Technical Corrigendum 1 to ISO/IEC 10118-2:2010.

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***National Adoption***

INCITS/ISO/IEC 11770-3:2015/AM1:2017 [202x], Information technology - Security techniques - Key management - Part 3: Mechanisms using asymmetric techniques - Amendment 1: Blinded Diffie-Hellman key agreement (identical national adoption of ISO/IEC 11770-3:2015/AM1:2017)

Stakeholders: ICT industry.

Project Need: Adoption of this International Standard is beneficial to the ICT industry.

Scope: Amendment 1 to ISO/IEC 11770-3:2015.

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***National Adoption***

INCITS/ISO/IEC 13888-2:2010/COR1:2012 [202x], Information technology - Security techniques - Non-repudiation - Part 2: Mechanisms using symmetric techniques - Technical Corrigendum 1 (identical national adoption of ISO/IEC 13888-2:2010/COR1:2012)

Stakeholders: ICT industry.

Project Need: Adoption of this International Standard is beneficial to the ICT industry.

Scope: Technical Corrigendum 1 ISO/IEC 13888-2:2010.

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***National Adoption***

INCITS/ISO/IEC 18033-2:2006/AM1:2017 [202x], Information technology - Security techniques - Encryption algorithms - Part 2: Asymmetric ciphers - Amendment 1: FACE (identical national adoption of ISO/IEC 18033-2:2006/AM1:2017)

Stakeholders: ICT industry.

Project Need: Adoption of this International Standard is beneficial to the ICT industry.

Scope: Amendment 1 to ISO/IEC 18033-2:2006.



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***National Adoption***

INCITS/ISO/IEC 18033-3:2010/AM1:2021 [202x], Information Technology - Security Techniques - Encryption Algorithms - Part 3: Block Ciphers - Amendment 1: SM4 (identical national adoption of ISO/IEC 18033-3:2010/AM1:2021)

Stakeholders: ICT industry.

Project Need: Adoption of this International Standard is beneficial to the ICT industry.

Scope: Amendment 1 to ISO/IEC 18033-3:2010.

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***National Adoption***

INCITS/ISO/IEC 20009-2:2013 [202x], Information Technology - Security Techniques - Anonymous Entity Authentication - Part 2: Mechanisms Based on Signatures Using a Group Public Key (identical national adoption of ISO/IEC 20009-2:2013)

Stakeholders: ICT industry.

Project Need: Adoption of this International Standard is beneficial to the ICT industry.

Scope: Specifies anonymous entity authentication mechanisms based on signatures using a group public key in which a verifier verifies a group signature scheme to authenticate the entity with which it is communicating, without knowing this entity's identity. Provides: a general description of an anonymous entity authentication mechanism based on signatures using a group public key; a variety of mechanisms of this type. Describes: the group membership-issuing processes; anonymous authentication mechanisms without an online Trusted Third Party (TTP); and anonymous authentication mechanisms involving an online TTP.

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***National Adoption***

INCITS/ISO/IEC 20009-4:2017 [202x], Information technology - Security techniques - Anonymous entity authentication - Part 4: Mechanisms based on weak secrets (identical national adoption of ISO/IEC 20009-4:2017)

Stakeholders: ICT industry.

Project Need: Adoption of this International Standard is beneficial to the ICT industry.

Scope: Specifies anonymous entity authentication mechanisms based on weak secrets. The precise operation of each mechanism is specified, together with details of all inputs and outputs. This document is applicable to situations in which the server only verifies that the user belongs to a certain user group without obtaining any information that can be used to identify the user later on.

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***National Adoption***

INCITS/ISO/IEC 20085-1:2019 [202x], IT Security techniques - Test tool requirements and test tool calibration methods for use in testing non-invasive attack mitigation techniques in cryptographic modules - Part 1: Test tools and techniques (identical national adoption of ISO/IEC 20085-1:2019)

Stakeholders: ICT industry.

Project Need: Adoption of this International Standard is beneficial to the ICT industry.

Scope: Provides specifications for non-invasive attack test tools and provides information about how to operate such tools. The purpose of the test tools is the collection of signals (i.e., side-channel leakage) and their analysis as a non-invasive attack on a cryptographic module implementation under test (IUT).

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***National Adoption***

INCITS/ISO/IEC 27034-1:2011 [202x], Information technology - Security techniques - Application security - Part 1: Overview and concepts (identical national adoption of ISO/IEC 27034-1:2011)

Stakeholders: ICT industry.

Project Need: Adoption of this International Standard is beneficial to the ICT industry.

Scope: Provides guidance to assist organizations in integrating security into the processes used for managing their applications. ISO/IEC 27034-1:2011 presents an overview of application security. It introduces definitions, concepts, principles, and processes involved in application security. ISO/IEC 27034 is applicable to in-house developed applications, applications acquired from third parties, and where the development or the operation of the application is outsourced.

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***National Adoption***

INCITS/ISO/IEC 27034-1:2011/COR1:2014 [202x], Information technology - Security techniques - Application security - Part 1: Overview and concepts - Technical Corrigendum 1 (identical national adoption of ISO/IEC 27034-1:2011/COR1:2014)

Stakeholders: ICT industry.

Project Need: Adoption of this International Standard is beneficial to the ICT industry.

Scope: Technical Corrigendum 1 to ISO/IEC 27034-1:2011.

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***National Adoption***

INCITS/ISO/IEC 29192-1:2012 [202x], Information technology - Security techniques - Lightweight cryptography - Part 1: General (identical national adoption of ISO/IEC 29192-1:2012)

Stakeholders: ICT industry.

Project Need: Adoption of this International Standard is beneficial to the ICT industry.

Scope: Provides terms and definitions that apply in subsequent parts of ISO/IEC 29192. ISO/IEC 29192-1:2012 sets the security requirements, classification requirements, and implementation requirements for mechanisms that are proposed for inclusion in subsequent parts of ISO/IEC 29192.

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***National Adoption***

INCITS/ISO/IEC 18367:2016 [202x], Information technology - Security techniques - Cryptographic algorithms and security mechanisms conformance testing (identical national adoption of ISO/IEC 18367:2016)

Stakeholders: ICT industry.

Project Need: Adoption of this International Standard is beneficial to the ICT industry.

Scope: Gives guidelines for cryptographic algorithms and security mechanisms conformance-testing methods.

Conformance testing assures that an implementation of a cryptographic algorithm or security mechanism is correct whether implemented in hardware, software, or firmware. It also confirms that it runs correctly in a specific operating environment. Testing can consist of known-answer or Monte Carlo testing, or a combination of test methods. Testing can be performed on the actual implementation or modelled in a simulation environment.

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***National Adoption***

INCITS/ISO/IEC 20543:2019 [202x], Information technology - Security techniques - Test and analysis methods for random bit generators within ISO/IEC 19790 and ISO/IEC 15408 (identical national adoption of ISO/IEC 20543:2019)

Stakeholders: ICT industry.

Project Need: Adoption of this International Standard is beneficial to the ICT industry.

Scope: Specifies a methodology for the evaluation of non-deterministic or deterministic random bit generators intended to be used for cryptographic applications. The provisions given in this document enable the vendor of an RBG to submit well-defined claims of security to an evaluation authority and shall enable an evaluator or a tester, for instance a validation authority, to evaluate, test, certify, or reject these claims.

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**National Adoption**

INCITS/ISO/IEC 21827:2008 [202x], Information technology - Security techniques - Systems Security Engineering - Capability Maturity Model® (SSE-CMM®) (identical national adoption of ISO/IEC 21827:2008)

Stakeholders: ICT industry.

Project Need: Adoption of this International Standard is beneficial to the ICT industry.

Scope: Specifies the Systems Security Engineering - Capability Maturity Model® (SSE-CMM®), which describes the essential characteristics of an organization's security engineering process that must exist to ensure good security engineering. ISO/IEC 21827:2008 does not prescribe a particular process or sequence, but captures practices generally observed in industry.

**ITI (INCITS) (InterNational Committee for Information Technology Standards)**

700 K Street NW, Suite 600 | Washington, DC 20001 [www.incits.org](http://www.incits.org)

Contact: Deborah Spittle; [comments@standards.incits.org](mailto:comments@standards.incits.org)

**National Adoption**

INCITS/ISO/IEC 21878:2018 [202x], Information technology - Security techniques - Security guidelines for design and implementation of virtualized servers (identical national adoption of ISO/IEC 21878:2018)

Stakeholders: ICT industry.

Project Need: Adoption of this International Standard is beneficial to the ICT industry.

Scope: Specifies security guidelines for the design and implementation of VSs. Design considerations focusing on identifying and mitigating risks, and implementation recommendations with respect to typical VSs are covered in this document. This document is not applicable to (see also 5.3.2, Exclusions): desktop, OS, network, and storage virtualization; and vendor attestation. This document is intended to benefit any organization using and/or providing VSs.

**ITI (INCITS) (InterNational Committee for Information Technology Standards)**

700 K Street NW, Suite 600 | Washington, DC 20001 [www.incits.org](http://www.incits.org)

Contact: Deborah Spittle; [comments@standards.incits.org](mailto:comments@standards.incits.org)

**National Adoption**

INCITS/ISO/IEC 27021:2017 [202x], Information technology - Security techniques - Competence requirements for information security management systems professionals (identical national adoption of ISO/IEC 27021:2017)

Stakeholders: ICT industry.

Project Need: Adoption of this International Standard is beneficial to the ICT industry.

Scope: Specifies the requirements of competence for ISMS professionals leading or involved in establishing, implementing, maintaining, and continually improving one or more information security management system processes that conforms to ISO/IEC 27001.

**ITI (INCITS) (InterNational Committee for Information Technology Standards)**

700 K Street NW, Suite 600 | Washington, DC 20001 [www.incits.org](http://www.incits.org)

Contact: Deborah Spittle; [comments@standards.incits.org](mailto:comments@standards.incits.org)

***National Adoption***

INCITS/ISO/IEC 27031:2011 [202x], Information technology - Security techniques - Guidelines for information and communication technology readiness for business continuity (identical national adoption of ISO/IEC 27031:2011)

Stakeholders: ICT industry.

Project Need: Adoption of this International Standard is beneficial to the ICT industry.

Scope: Describes the concepts and principles of information and communication technology (ICT) readiness for business continuity and provides a framework of methods and processes to identify and specify all aspects (such as performance criteria, design, and implementation) for improving an organization's ICT readiness to ensure business continuity.

**ITI (INCITS) (InterNational Committee for Information Technology Standards)**

700 K Street NW, Suite 600 | Washington, DC 20001 [www.incits.org](http://www.incits.org)

Contact: Deborah Spittle; [comments@standards.incits.org](mailto:comments@standards.incits.org)

***National Adoption***

INCITS/ISO/IEC 29150:2011/COR1:2014 [202x], Information technology - Security techniques - Signcryption - Technical Corrigendum 1 (identical national adoption of ISO/IEC 29150:2011/COR1:2014)

Stakeholders: ICT industry.

Project Need: Adoption of this International Standard is beneficial to the ICT industry.

Scope: Technical Corrigendum 1 to ISO/IEC 29150:2011.

**NEMA (ASC C12) (National Electrical Manufacturers Association)**

1300 North 17th Street, Suite 900 | Rosslyn, VA 22209 [www.nema.org](http://www.nema.org)

Contact: Paul Orr; [orrpaul@aol.com](mailto:orrpaul@aol.com)

***New Standard***

BSR C12.30-202x, Test Requirements for Meters Equipped with Service Switches (new standard)

Stakeholders: Meter manufacturers, electrical utilities, test agencies.

Project Need: This work and contributions will help facilitate proper testing of electricity meters with integral Service Switches.

Scope: This standard identifies test requirements for meters containing a Service Switch. Most of the tests included in this report are tailored to fit Service-Switch-type meters and originate from the ANSI C12.1 standard. Sections within the ANSI C12.1 standard have been referenced within these tests where applicable. The intent is to use this standard in conjunction with ANSI C12.1. Other tests that are specific to the Service Switch have been added for completeness.

**NEMA (ASC C12) (National Electrical Manufacturers Association)**

1300 North 17th Street, Suite 900 | Rosslyn, VA 22209 [www.nema.org](http://www.nema.org)

Contact: Paul Orr; [orrrpaul@aol.com](mailto:orrrpaul@aol.com)

***New Standard***

BSR C12.31-202x, Electricity Meters - Measurement of VA and Power Factor (new standard)

Stakeholders: Electricity meter manufacturers, electric utilities, testing organizations.

Project Need: Previous ANSI C12 Standards have only defined the value for VAh when the waveforms for current and voltage were sinusoidal. Since in the modern world this is seldom the case outside of the laboratory, this standard is a first step to bring definitions and testing more in line with the real world.

Scope: This document establishes standard definitions for active energy (Wh), apparent energy (Vah) and power factor (PF) defined in terms of sampled voltage and current measurements. Definitions are provided for computations in the time domain and frequency domain.

**NENA (National Emergency Number Association)**

1700 Diagonal Road, Suite 500 | Alexandria, VA 22314 [www.nena.org](http://www.nena.org)

Contact: Delaine Arnold; [darnold@nena.org](mailto:darnold@nena.org)

***Revision***

BSR/NENA STA-010.4-202x, NENA i3 Standard for Next Generation 9-1-1 (revision and redesignation of ANSI/NENA STA-010.3-2021)

Stakeholders: Emergency Communication Center employees, 9-1-1 Authorities at county, regional, and state levels, 9-1-1 industry solution providers, state, and federal regulatory entities, other telecom- related SDOs.

Project Need: Standardizes the Core Functions and Interfaces necessary to provide Next Generation 9-1-1 multimedia call processing in an IP environment.

Scope: This work will review and update the current standard for the Next Generation 9-1-1 core service architecture that provides call and data handling functionality between 9-1-1 call originators and 9-1-1 call centers (PSAPs). The existing standard has been developed to provide detailed functional and interface specifications for a post- transition IP-based multimedia telecommunications system, including the Core Services and legacy gateways necessary to support delivery of emergency calls via an IP-based Emergency Services IP network. It has formed the basis for NG9-1-1 implementations in the U.S. and Canada and has provided a model for standards development work in Europe as well. Major topics being addressed in the V4 update to this standard include: (1) Network routing, performance, and security, including spoofing mitigation; (2) Core, ancillary, and transitional functions; (3) Data definition, including location, GIS, and additional data; (4) Multimedia callback and emergency call transfer; and (5) Next generation PSAP management interface. The work will be informed by real-world experience in implementing, deploying, and operating Next-Generation 9-1-1 systems.

**UL (Underwriters Laboratories)**

333 Pfingsten Road | Northbrook, IL 60062-2096 <https://ul.org/>

Contact: Jeff Prusko; jeffrey.prusko@ul.org

***New Standard***

BSR/UL 1349-202x, Standard for Safety for LP-Gas Vaporizers (new standard)

Stakeholders: Manufacturers of LP-gas vaporizers.

Project Need: Taking UL Outline of Investigation 1349 and harmonizing it with ULC/ORD-C1349-13 would allow for the consolidation and consistency between American and Canadian requirements and meet the demands of the SCC and ANSI. The new/revised requirements of this standard are intended to meet current Codes and provide a simple Dual Certification path for the same products in a single test program.

Scope: These requirements cover liquefied petroleum gas (LP-Gas) vaporizers of the stationary type. Vaporizers covered by these requirements are intended to be installed and used in accordance with the applicable Codes and Regulations as determined by the Authority Having Jurisdiction (AHJ), such as, but not limited to: (a) In the United States: (1) Liquefied Petroleum Gas Code, NFPA 58, and (2) National Electrical Code, NFPA 70; (b) In Canada: (1) Natural Gas and Propane Installation Code, CAN/CSA-B149.1; (2) Canadian Propane Storage and Handling Code, CAN/CSA-B149.2; (3) Canadian Electrical Code, CSA C22.1, Part I; and (4) Provincial or other regulations.

# Call for Comment on Standards Proposals

## American National Standards

This section solicits public comments on proposed draft new American National Standards, including the national adoption of ISO and IEC standards as American National Standards, and on proposals to revise, reaffirm or withdraw approval of existing American National Standards. A draft standard is listed in this section under the ANSI-accredited standards developer (ASD) that sponsors it and from whom a copy may be obtained. Comments in connection with a draft American National Standard must be submitted in writing to the ASD no later than the last day of the comment period specified herein. Such comments shall be specific to the section (s) of the standard under review and include sufficient detail so as to enable the reader to understand the commenter's position, concerns and suggested alternative language, if appropriate. Please note that the ANSI Executive Standards Council (ExSC) has determined that an ASD has the right to require that interested parties submit public review comments electronically, in accordance with the developer's procedures.

### Ordering Instructions for "Call-for-Comment" Listings

1. Order from the organization indicated for the specific proposal.
2. Use the full identification in your order, including the BSR prefix; for example, Electric Fuses BSR/SAE J554.
3. Include remittance with all orders.
4. BSR proposals will not be available after the deadline of call for comment.

Comments should be addressed to the organization indicated, with a copy to the Board of Standards Review, American National Standards Institute, 25 West 43rd Street, New York, NY 10036. e-mail: [psa@ansi.org](mailto:psa@ansi.org)

\* Standard for consumer products

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## Comment Deadline: November 28, 2021

### MHI (Material Handling Industry)

8720 Red Oak Boulevard, Suite 201, Charlotte, NC 28217 | [pdavison@mhi.org](mailto:pdavison@mhi.org), [www.mhi.org](http://www.mhi.org)

#### Revision

BSR/MHI MH16.1-202X, Design, Testing, and Utilization of Industrial Steel Storage Racks (revision of ANSI MH16.1-2012 (R2019))

The purpose of this standard is to specify minimum requirements for the structural design, testing, and utilization of industrial steel storage racks constructed of cold-formed and/or hot-rolled steel structural members. Such rack types also include push-back rack, pallet-flow rack, case-flow rack, pick modules, and rack-supported platforms. This standard is also intended to be applied to the design of the storage rack portion of any rack structure that provides support to the exterior walls and roof, except as noted. It does not apply to other types of racks, such as drive-in or drive-through racks, cantilever racks, portable racks, or to racks made of material other than steel.

[Click here to view these changes in full](#)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Patrick Davison; [pdavison@mhi.org](mailto:pdavison@mhi.org)



## Comment Deadline: November 28, 2021

### UL (Underwriters Laboratories)

333 Pfingsten Road, Northbrook, IL 60062-2096 | Megan.M.VanHeirselee@ul.org, <https://ul.org/>

#### Revision

BSR/UL 1973-202x, Standard for Safety for Batteries for Use in Stationary, Vehicle Auxiliary Power and Light Electric Rail (LER) Applications (revision of ANSI/UL 1973-2018)

(1) Testing of modules during the short circuit test; (3) Addition of an exception to the General Performance Section for the test time for lithium ion cells or batteries; (4) Revision to Table 12.1, Note (d) for loss of primary control; (5) Addition of an exception for the drop impact test SOC; (7) Moving all lithium cell requirements into UL 1973; (8) Addition of requirements for repurposing batteries; (9) Clarification of lead acid battery requirements; (11) Revisions to the External Fire Test; (14) Addition of measurement of cell voltages during overcharge and overdischarge tests; (15) Clarification of the single cell failure design tolerance test; (16) Proposals for flowing electrolyte batteries; (19) Inclusion of EMC testing for electronic safety controls; (22) Revisions to Section 7.1 to address all non-metallic materials; (26) Inclusion of sodium ion technology batteries; (31) Addition of criteria for transformers; (32) Overload under discharge.

[Click here to view these changes in full](#)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: <https://csds.ul.com/Home/ProposalsDefault.aspx>

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | Vickie.T.Hinton@ul.org, <https://ul.org/>

#### Revision

BSR/UL 120002-202X, Recommended Practice for Certificates for Equipment for Hazardous (Classified) Locations (revision of ANSI/UL 120002-2009 (R2014))

This proposal for UL 120002 covers the Redesignation of the Standard for Safety for the Certificate Standard for AEx Equipment for Hazardous (Classified) Locations to the Recommended Practice for Certificates for Equipment for Hazardous (Classified) Locations.

[Click here to view these changes in full](#)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: <https://csds.ul.com/Home/ProposalsDefault.aspx>

## Comment Deadline: December 13, 2021

### AAFS (American Academy of Forensic Sciences)

410 North 21st Street, Colorado Springs, CO 80904 | [tambrosius@aafs.org](mailto:tambrosius@aafs.org), [www.aafs.org](http://www.aafs.org)

#### New Standard

BSR/ASB Std 169-202x, Standard for Veterinary Forensic Live Animal Examination (new standard)

This document provides minimum requirements for the forensic veterinary examination of a live animal and the collection of physical evidence. This includes the physical examination, ancillary testing, documentation, evidence handling, and training specific to the examination of live animals encountered in potential civil or criminal forensic cases involving animals.

Single copy price: Free

Obtain an electronic copy from: Document and comments template can be viewed on the AAFS Standards Board website at: <http://www.asbstandardsboard.org/notice-of-standard-development-and-coordination//>

Order from: Document will be provided electronically on AAFS Standards Board website ([www.asbstandardsboard.org](http://www.asbstandardsboard.org)) free of charge.

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [asb@aafs.org](mailto:asb@aafs.org)

## Comment Deadline: December 13, 2021

### **AAFS (American Academy of Forensic Sciences)**

410 North 21st Street, Colorado Springs, CO 80904 | [tambrosius@aafs.org](mailto:tambrosius@aafs.org), [www.aafs.org](http://www.aafs.org)

#### ***New Standard***

BSR/ASB Std 170-202x, Standard for Veterinary Forensic Postmortem Examination (new standard)

This standard defines services rendered by a veterinarian acting in a forensic capacity and performing veterinary forensic postmortem examinations. The standard establishes minimum practices and procedural requirements for receipt of the body, external and internal examinations, identification, documentation, and sets ancillary testing and diagnostic support requirements. The standard also provides a reference for legal or law enforcement professionals.

Single copy price: Free

Obtain an electronic copy from: Document and comments template can be viewed on the AAFS Standards Board website at: <http://www.asbstandardsboard.org/notice-of-standard-development-and-coordination//>

Order from: Document will be provided electronically on AAFS Standards Board website ([www.asbstandardsboard.org](http://www.asbstandardsboard.org)) free of charge.

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [asb@aafs.org](mailto:asb@aafs.org)

### **APCO (Association of Public-Safety Communications Officials-International)**

351 N. Williamson Boulevard, Daytona Beach, FL 32114-1112 | [apcostandards@apcointl.org](mailto:apcostandards@apcointl.org), [www.apcointl.org](http://www.apcointl.org)

#### ***Revision***

BSR/APCO 3.107.2-202x, Core Competencies and Minimum Training Requirements for Public Safety Communications Technician (revision and redesignation of ANSI/APCO 3.107.1-2015)

This is a revision of the standard identifying the core competencies and minimum training requirements for Public Safety Communications Technicians, sometimes referred to as Technician or Specialist. This position is typically tasked with planning, monitoring, maintaining, managing and/or installing technology systems, including radio systems, computer aid dispatch (CAD) systems, geographic information systems (GIS), and associated equipment, to ensure continuity of mission-critical operations.

Single copy price: Free

Obtain an electronic copy from: <https://www.apcointl.org/services/standards/standards-review-comment/>

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Mindy Adams, [apcostandards@apcointl.org](mailto:apcostandards@apcointl.org)

### **ASME (American Society of Mechanical Engineers)**

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 | [ansibox@asme.org](mailto:ansibox@asme.org), [www.asme.org](http://www.asme.org)

#### ***Revision***

BSR/ASME NQA-1-202x, Quality Assurance Requirements for Nuclear Facility Applications (revision of ANSI/ASME NQA-1-2019)

This Standard provides requirements and guidelines for the establishment and execution of quality assurance programs during siting, design, construction, operation and decommissioning of nuclear facilities.

Single copy price: Free

Obtain an electronic copy from: <https://cstools.asme.org/csconnect/PublicReviewPage.cfm>

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Adam Maslowski; [maslowskia@asme.org](mailto:maslowskia@asme.org)

## Comment Deadline: December 13, 2021

### ASME (American Society of Mechanical Engineers)

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 | [ansibox@asme.org](mailto:ansibox@asme.org), [www.asme.org](http://www.asme.org)

#### Revision

BSR/ASME/ANS RA-S-1.1-202x, Standard for Level 1 / Large Early Release Frequency Probabilistic Risk Assessment for Nuclear Power Plant Applications (revision and redesignation of ANSI/ASME RA-S-2008 (R2019))

This Standard sets forth requirements for probabilistic risk assessments (PRAs) used to support risk-informed decisions for commercial nuclear power plants, and prescribes a method for applying these requirements for specific applications.

Single copy price: Free

Obtain an electronic copy from: <https://cstools.asme.org/csconnect/PublicReviewPage.cfm>

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Oliver Martinez; [martinezo@asme.org](mailto:martinezo@asme.org)

### ASTM (ASTM International)

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 | [accreditation@astm.org](mailto:accreditation@astm.org), [www.astm.org](http://www.astm.org)

#### Revision

BSR/ASTM E2536-202x, Guide for Assessment of Measurement Uncertainty in Fire Tests (revision of ANSI/ASTM E2536-2015A)

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [accreditation@astm.org](mailto:accreditation@astm.org)

Order from: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Same

### CSA (CSA America Standards Inc.)

8501 E. Pleasant Valley Road, Cleveland, OH 44131 | [ansi.contact@csagroup.org](mailto:ansi.contact@csagroup.org), [www.csagroup.org](http://www.csagroup.org)

#### Reaffirmation

BSR Z83.20-2016 (R202x), Gas-fired tubular and low-intensity infrared heaters (reaffirmation of ANSI Z83.20-2016)

This Standard applies to newly produced, gas-fired low-intensity infrared heaters and infrared radiant tube heaters (see Clause 3, Definitions), referred to in this standard as heaters or appliances, constructed entirely of new, unused parts and materials with inputs up to and including 400 000 Btu/hr (117.23 kW) per burner: (a) for use with natural gas; (b) for use with manufactured gas; (c) for use with mixed gas; (d) for use with propane gas; (e) for use with LP gas-air mixtures; and (f) convertible for use with natural gas and propane gas, when provision is made for the simple conversion from one gas to the other.

Single copy price: Free

Obtain an electronic copy from: [ansi.contact@csagroup.org](mailto:ansi.contact@csagroup.org)

Order from: Debbie Chesnik; [ansi.contact@csagroup.org](mailto:ansi.contact@csagroup.org)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Same

## Comment Deadline: December 13, 2021

### EOS/ESD (ESD Association, Inc.)

7900 Turin Road, Building 3, Rome, NY 13440 | [jkirk@esda.org](mailto:jkirk@esda.org), [www.esda.org](http://www.esda.org)

#### Revision

BSR/ESD STM9.1-202x, ESD Association Standard Test Method for the Protection of Electrostatic Discharge Susceptible Items - Footwear and Foot Grounders - Resistive Characterization (revision, redesignation and consolidation of ANSI/ESD STM9.1-2014, ANSI/ESD SP9.2-2020)

This standard test method applies to all footwear and foot grounders, including but not limited to shoes, boots, heel straps, toe grounders, sole grounders, and shoe covers/booties.

Single copy price: \$145.00 (List)/\$115.00 (EOS/ESD Members) (Hard Cover); \$135.00 (List)/\$105.00 (EOS/ESD Members) (Soft Cover)

Obtain an electronic copy from: [cearl@esda.org](mailto:cearl@esda.org)

Order from: Christina Earl; [cearl@esda.org](mailto:cearl@esda.org)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Same

### ESTA (Entertainment Services and Technology Association)

271 Cadman Plaza, P.O. Box 23200, Brooklyn, NY 11202-3200 | [standards@esta.org](mailto:standards@esta.org), [www.esta.org](http://www.esta.org)

#### Revision

BSR E1.22-202x, Entertainment Technology - Fire Safety Curtain Systems (revision of ANSI E1.22-2016)

This standard, a revision of ANSI E1.22-2016, governs the design, materials, fabrication, installation, operation, testing, and maintenance of fire safety curtain systems used for proscenium opening protection in theatres.

Single copy price: Free

Obtain an electronic copy from: [https://tsp.esta.org/tsp/documents/public\\_review\\_docs.php](https://tsp.esta.org/tsp/documents/public_review_docs.php)

Order from: Richard Nix; [standards@esta.org](mailto:standards@esta.org)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Same

### ESTA (Entertainment Services and Technology Association)

271 Cadman Plaza, P.O. Box 23200, Brooklyn, NY 11202-3200 | [standards@esta.org](mailto:standards@esta.org), [www.esta.org](http://www.esta.org)

#### Revision

BSR E1.41-202x, Recommendations for the Measurement of Entertainment Luminaires Utilizing Solid State Light Sources (revision of ANSI E1.41-2016)

This standard is intended to be used for the presentation of photometric data for luminaires employing solid-state light sources used in the entertainment and performance industries. This standard defines photometric data that may be presented on documents purporting to accurately describe the photometric performance of these luminaires when producing both white and colored light.

Single copy price: Free

Obtain an electronic copy from: [https://tsp.esta.org/tsp/documents/public\\_review\\_docs.php](https://tsp.esta.org/tsp/documents/public_review_docs.php)

Order from: Karl Ruling; [standards@esta.org](mailto:standards@esta.org)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Same

## Comment Deadline: December 13, 2021

### NEMA (ASC C8) (National Electrical Manufacturers Association)

1300 North 17th Street, Suite 900, Arlington, VA 22209 | Khaled.Masri@nema.org, www.nema.org

#### Revision

BSR NEMA WC 75-202x, Standard for Controlled Impedance in Internal Electrical Cable (revision of ANSI/NEMA WC 75-2015)

This standards publication was developed to cover specific requirements for finished cables with controlled impedance twisted pair(s). This standard uniquely enables a user to specify various numbers of pairs (1-61) with a required impedance requirement, and tailor the materials to meet a specific end application. The cables are intended for wiring of electrical equipment.

Single copy price: \$79.00

Order from: Khaled Masri; Khaled.Masri@nema.org

Send comments (copy psa@ansi.org) to: Same

### NENA (National Emergency Number Association)

1700 Diagonal Road, Suite 500, Alexandria, VA 22314 | darnold@nena.org, www.nena.org

#### New Standard

BSR/NENA STA-041.1-202X, NENA Standard for Telecommunicator Cardiopulmonary Resuscitation (T-CPR) (new standard)

Agencies who provide Emergency Medical Dispatch (EMD) instructions to emergency callers are required to become CPR certified. This certification and training is geared for field (hands-on) CPR and is great knowledge for anyone. However, it does not directly translate to how CPR instructions are given over the telephone.

Telecommunicators must extrapolate the knowledge they get from traditional CPR classes and apply that to their job and the way CPR instructions are given in a 9-1-1 center. There is a new trend in the industry to provide a Telecommunicator-CPR (T-CPR) certification for telecommunicators. T-CPR includes training and practical examination of CPR skills that directly relate to providing these instructions remotely (typically via phone). The need is for a standard that identifies the need for training and practical skill assessment needed by telecommunicators performing CPR remotely.

Single copy price: Free

Obtain an electronic copy from: Download & submit comments at [https://dev.nena.org/higherlogic/ws/public/document?document\\_id=24246&wg\\_id=e6292969-ffa9-4c69-85fc-df1f47af4f13](https://dev.nena.org/higherlogic/ws/public/document?document_id=24246&wg_id=e6292969-ffa9-4c69-85fc-df1f47af4f13) or

email [standardscoord@nena.org](mailto:standardscoord@nena.org)

Order from: Download & submit comments at [https://dev.nena.org/higherlogic/ws/public/document?document\\_id=24246&wg\\_id=e6292969-ffa9-4c69-85fc-df1f47af4f13](https://dev.nena.org/higherlogic/ws/public/document?document_id=24246&wg_id=e6292969-ffa9-4c69-85fc-df1f47af4f13) or email [standardscoord@nena.org](mailto:standardscoord@nena.org)

Send comments (copy psa@ansi.org) to: Download & submit comments at [https://dev.nena.org/higherlogic/ws/public/document?document\\_id=24246&wg\\_id=e6292969-ffa9-4c69-85fc-df1f47af4f13](https://dev.nena.org/higherlogic/ws/public/document?document_id=24246&wg_id=e6292969-ffa9-4c69-85fc-df1f47af4f13) or

email [standardscoord@nena.org](mailto:standardscoord@nena.org)

### SCTE (Society of Cable Telecommunications Engineers)

140 Philips Rd, Exton, PA 19341 | kcooney@scte.org, www.scte.org

#### New Standard

BSR/SCTE 265-202x, Broadband Radio Frequency Hardline Passives for Cable Systems (new standard)

The purpose of this document is to recommend mechanical, environmental, and electrical standards hardline passives. This specification addresses passives capable of at least 1794 MHz with a housing capable of 3000 MHz.

Single copy price: \$50.00

Obtain an electronic copy from: [admin@standards.scte.org](mailto:admin@standards.scte.org)

Order from: Global Engineering Documents, (800) 854-7179, [www.global.ihs.com](http://www.global.ihs.com)

Send comments (copy psa@ansi.org) to: [admin@standards.scte.org](mailto:admin@standards.scte.org)

## Comment Deadline: December 13, 2021

### **SCTE (Society of Cable Telecommunications Engineers)**

140 Philips Rd, Exton, PA 19341 | [kcooney@scte.org](mailto:kcooney@scte.org), [www.scte.org](http://www.scte.org)

#### ***Reaffirmation***

BSR/SCTE 137-1-2017 (R202x), Modular Head End Architecture - Part 1: DOCSIS Timing Interface (reaffirmation of ANSI/SCTE 137-1-2017)

The requirements for timing and synchronization of the DOCSIS® system come from the following areas: Existing DOCSIS® Specification & ATP Requirements, Remote PHY System Requirements, Implementation Requirements, Emerging Services like T-Services and wireless.

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### **SCTE (Society of Cable Telecommunications Engineers)**

140 Philips Rd, Exton, PA 19341 | [kcooney@scte.org](mailto:kcooney@scte.org), [www.scte.org](http://www.scte.org)

#### ***Reaffirmation***

BSR/SCTE 137-2-2017 (R202x), Modular Head End Architecture - Part 2: M-CMTS Downstream External PHY Interface (reaffirmation of ANSI/SCTE 137-2-2017)

This specification is part of the DOCSIS® family of specifications, and in particular, is part of a series of specifications that define a Modular Cable Modem Termination System (M-CMTS™) architecture for head-end components that comply with DOCSIS®. This specification was developed for the benefit of the cable industry, and includes contributions by operators and vendors from North America, Europe, and other regions.

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#### ***Reaffirmation***

BSR/SCTE 137-3-2017 (R202x), Modular Head End Architecture - Part 3: Operations Support System Interface (reaffirmation of ANSI/SCTE 137-3-2017)

This specification defines the Network Management requirements to support a Modular Cable Modem Termination System (M-CMTS™) for headend components compliant to DOCSIS®. The purpose of this document is to define the management requirements for the M-CMTS™ architecture that enables an effective operation of the M-CMTS™ components.

Single copy price: \$50.00

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## Comment Deadline: December 13, 2021

### **SCTE (Society of Cable Telecommunications Engineers)**

140 Philips Rd, Exton, PA 19341 | [kcooney@scte.org](mailto:kcooney@scte.org), [www.scte.org](http://www.scte.org)

#### ***Reaffirmation***

BSR/SCTE 137-4-2017 (R202x), Modular Head End Architecture - Part 4: Edge Resource Manager Interface (reaffirmation of ANSI/SCTE 137-4-2017)

This document specifies interfaces that are used by Edge QAM devices (EQAMs), Edge Resource Managers (ERMs) and M-CMTS™ Cores within the context of a Modular Cable Modem Termination System (M-CMTS™). This is one of several specifications that together define and specify a complete M-CMTS™ system (see Section 1.3). The basic architecture of a complete M-CMTS system is shown in Figure 1–1.

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#### ***Reaffirmation***

BSR/SCTE 137-5-2017 (R202x), Modular Head End Architecture - Part 5: Edge QAM Provisioning and Management Interface (reaffirmation of ANSI/SCTE 137-5-2017)

This specification is a component of the Modular Headend Architecture; in particular it defines the Provisioning and Management requirements for the EQAM device.

Single copy price: \$50.00

Obtain an electronic copy from: [admin@standards.scte.org](mailto:admin@standards.scte.org)

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#### ***Reaffirmation***

BSR/SCTE 137-6-2017 (R202x), Modular Head End Architecture - Part 6: Edge QAM Video Stream Interface (reaffirmation of ANSI/SCTE 137-6-2017)

This specification is a component of the Modular Headend Architecture. In particular, it defines the data plane requirements for receiving, processing, and transmitting MPEG transport streams in EQAMs, compliant with the Video EQAM or Universal EQAM profiles described in the Architectural Overview of the Modular Headend Architecture [SCTE 137-7].

Single copy price: \$50.00

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#### ***Reaffirmation***

BSR/SCTE 137-7-2017 (R202x), Modular Head End Architecture - Part 7: EQAM Architectural Overview Technical Report (reaffirmation of ANSI/SCTE 137-7-2017)

This Architectural Overview Technical Report is intended to provide an introduction to the Modular Headend Architecture, with particular emphasis on the EQAM as a key component. This document describes the various architectural entities and the interfaces that connect them, provides an overview of the various profiles of EQAM devices and their operations, and discusses the various specifications that contain normative requirements pertaining to the Modular Headend Architecture.

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140 Philips Rd, Exton, PA 19341 | [kcooney@scte.org](mailto:kcooney@scte.org), [www.scte.org](http://www.scte.org)

#### ***Revision***

BSR/SCTE 48-1-202x, Test Method for Measuring Shielding Effectiveness of Passive and Active Devices Using a GTEM Cell (revision of ANSI/SCTE 48-1-2015)

The purpose of this test is to determine the shielding effectiveness against Electromagnetic Interference (EMI) of components. This method subjects the component to an electric field of known strength. There are two individual test methods contained in this standard.

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140 Philips Rd, Exton, PA 19341 | [kcooney@scte.org](mailto:kcooney@scte.org), [www.scte.org](http://www.scte.org)

#### ***Revision***

BSR/SCTE 151-202x, Mechanical, Electrical, and Environmental Requirements for RF Traps and Filters (revision of ANSI/SCTE 151-2015)

The purpose of this specification is to provide the mechanical, electrical, and environmental requirements for broadband radio frequency (RF) trap and filter devices whose primary purpose is to provide a fixed attenuation of RF signal(s) at user-defined frequencies while preserving adjacent topology.

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## Comment Deadline: December 13, 2021

### TAPPI (Technical Association of the Pulp and Paper Industry)

15 Technology Parkway, Suite 115, Peachtree Corners, GA 30092 | standards@tappi.org, www.tappi.org

#### **Reaffirmation**

BSR/TAPPI T 259 om-2015 (R202x), Species identification of nonwood plant fibers (reaffirmation of ANSI/TAPPI T 259 om-2015)

The fibrous elements of the nonwood plant species, which are commonly encountered in papermaking or that are expected to have the potential of being used for this purpose, may be identified on the basis of their morphology as revealed by the microscope. The purpose of this method is to provide some of the details, which are useful in making an identification of an unknown nonwood plant specimen. This method can be used whether a coarse undefibered specimen is present or samples of pulp, paper, or other paper products are provided.

Single copy price: Free

Obtain an electronic copy from: standards@tappi.org

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Send comments (copy psa@ansi.org) to: Natasha Bush-Postell, standards@tappi.org

### TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | standards-process@tiaonline.org, www.tiaonline.org

#### **Addenda**

BSR/TIA 942-B-1-202x, Telecommunications - Infrastructure Standard for Data Centers - Addendum 1: Edge Data Centers (addenda to ANSI/TIA 942-B-2017)

This addendum specifies requirements for the telecommunications infrastructure of data centers referred to as Edge Data Centers (EDCs), utilizing structures, enclosures, or spaces to contain facilities for networking, computing, storage, and access.

Single copy price: \$99.00

Obtain an electronic copy from: TIA; standards-process@tiaonline.org

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### TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | standards-process@tiaonline.org, www.tiaonline.org

#### **New Standard**

BSR/TIA 568.5-202x, Single balanced twisted-pair cabling and components standard (new standard)

A single balanced twisted-pair cabling and components standard to provide specifications for cables, connectors, cords, links and channels using 1-pair connectivity in non-industrial premises telecommunications networks. The standard will focus on MICE1 environments and will include cabling and component performance requirements and test procedures, reliability requirements, and test procedures, as well as guidelines for adaptations to four-pair cabling.

Single copy price: \$61.00

Obtain an electronic copy from: TIA; standards-process@tiaonline.org

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## Comment Deadline: December 13, 2021

### UL (Underwriters Laboratories)

12 Laboratory Drive, P.O. Box 13995, Research Triangle Park, NC 27709-3995 | Doreen.Stocker@ul.org, <https://ul.org/>

#### **Reaffirmation**

BSR/UL 1097-2012 (R202x), Standard for Safety for Double Insulation Systems for Use in Electrical Equipment, (October 29, 2021) (reaffirmation of ANSI/UL 1097-2012 (R2016))

This proposal covers: (1) Reaffirmation and continuance of the 6th Edition of the Standard for Safety for Double Insulation Systems for Use in Electrical Equipment, UL 1097, as a standard.

Single copy price: Free

Obtain an electronic copy from: <https://csds.ul.com/Home/ProposalsDefault.aspx>

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### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [annemarie.jacobs@ul.org](mailto:annemarie.jacobs@ul.org), <https://ul.org/>

#### **Revision**

BSR/UL 1776-202x, Standard for Safety for High-Pressure Cleaning Machines (revision of ANSI/UL 1776-2019)

The following changes in requirements are being proposed: (1) Machines provided without an attachment plug; (2) Type-4 cleaning machines; (3) UL 969A cord tag requirements; and (4) Aligning GFCI requirements with the U.S. National Electric Code.

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### UL (Underwriters Laboratories)

333 Pfingsten Road, Northbrook, IL 60062-2096 | [Heather.Sakellariou@ul.org](mailto:Heather.Sakellariou@ul.org), <https://ul.org/>

#### **Revision**

BSR/UL 4600-202x, Standard for Safety for Evaluation of Autonomous Products (revision of ANSI/UL 4600-2020)

The following changes in requirements are being proposed for your review: (1) Revise requirements regarding safety case (Section 5); (2) Revise requirements for faults, hazards, and risks (Section 6); (3) Revise requirements in assessment (Section 3); (4) Revise sensor requirements in Section 8; (5) Revise requirements for object tracking in Section 8; (6) Add requirement to 7.3.1.2 to allow unconditional on-demand and safe egress by authorized operator or occupant; and (7) Terminology (including change in terminology of “self-audit” to “self-assessment”).

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## Comment Deadline: December 28, 2021

### ANS (American Nuclear Society)

555 North Kensington Avenue, La Grange Park, IL 60526 | [kmurdoch@ans.org](mailto:kmurdoch@ans.org), [www.ans.org](http://www.ans.org)

#### ***New Standard***

BSR/ANS 8.28-202x, Administrative Practices for the Use of Non-Destructive Assay Measurements for Nuclear Criticality Safety (new standard)

This standard provides administrative practices covering the interface between the criticality safety community and the NDA community including in-situ measurements and measurements of containerized materials.

Single copy price: \$25.00

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### ITI (INCITS) (InterNational Committee for Information Technology Standards)

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

#### ***National Adoption***

INCITS/ISO/IEC 21836:2020 [202x], Information technology - Data centres - Server energy effectiveness metric (identical national adoption of ISO/IEC 21836:2020)

Specifies a measurement method to assess and report the energy effectiveness of a computer server. This document does not set any pass/fail criteria for servers.

Single copy price: \$225.00

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Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [comments@standards.incits.org](mailto:comments@standards.incits.org)

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [Nicolette.A.Weeks@ul.org](mailto:Nicolette.A.Weeks@ul.org), <https://ul.org/>

#### ***New Standard***

BSR/UL 1285-202X, Standard for Pipe and Couplings, Polyvinyl Chloride (PVC), and Oriented Polyvinyl Chloride (PVCO) for Underground Fire Service (new standard)

UL proposes a new standard for pipe and couplings, polyvinyl chloride (PVC), and oriented polyvinyl chloride (PVCO) for underground fire service.

Single copy price: Free

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# Final Actions on American National Standards

The standards actions listed below have been approved by the ANSI Board of Standards Review (BSR) or by an ANSI-Audited Designator, as applicable.

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## **AGA (ASC B109) (American Gas Association)**

400 N. Capitol St., NW, Suite 450, Washington, DC 20001 | [lescobar@aga.org](mailto:lescobar@aga.org), [www.aga.org](http://www.aga.org)

### *Revision*

ANSI B109.4-2021, Self-Operated Diaphragm-Type Natural Gas Service Regulators for Nominal Pipe Size 1 inch (32 mm) and Smaller with Outlet Pressures of 2 psi (13.8 kPa) and Less (revision of ANSI B109.4-2017) Final Action Date: 10/22/2021

## **ASME (American Society of Mechanical Engineers)**

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 | [ansibox@asme.org](mailto:ansibox@asme.org), [www.asme.org](http://www.asme.org)

### *New Standard*

ANSI/ASME B30.32-2021, Unmanned Aircraft Systems (UAS) Used in Inspection, Testing, Maintenance, and Load-Handling Operations (new standard) Final Action Date: 10/21/2021

### *Revision*

ANSI/ASME STS-1-2021, Steel Stacks (revision of ANSI/ASME STS-1-2017) Final Action Date: 10/19/2021

## **ASTM (ASTM International)**

100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959 | [kchalfin@astm.org](mailto:kchalfin@astm.org), [www.astm.org](http://www.astm.org)

### *Reaffirmation*

ANSI/ASTM F1122-2010 (R2021), Specification for Quick Disconnect Couplings (6 in. NPS and Smaller) (reaffirmation of ANSI/ASTM F1122-2010 (R2015)) Final Action Date: 6/22/2021

### *Revision*

ANSI/ASTM E105-2021, Practice for Probability Sampling of Materials (revision of ANSI/ASTM E105-2016) Final Action Date: 6/22/2021

### *Revision*

ANSI/ASTM E178-2021, Practice for Dealing with Outlying Observations (revision of ANSI/ASTM E178-2016) Final Action Date: 6/22/2021

### *Revision*

ANSI/ASTM E1169-2021, Practice for Conducting Ruggedness Tests (revision of ANSI/ASTM E1169-2020) Final Action Date: 6/22/2021

### *Revision*

ANSI/ASTM E1325-2021, Terminology Relating to Design of Experiments (revision of ANSI/ASTM E1325-2016) Final Action Date: 6/22/2021

### *Revision*

ANSI/ASTM E2935-2021, Practice for Conducting Equivalence Tests for Comparing Testing Processes (revision of ANSI/ASTM E2935-2020) Final Action Date: 6/22/2021

### *Revision*

ANSI/ASTM F1000-2021, Practice for Piping System Drawing Symbols (revision of ANSI/ASTM F1000-2013 (R2019)) Final Action Date: 6/22/2021

**ASTM (ASTM International)**

100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959 | kchalfin@astm.org, www.astm.org

*Revision*

ANSI/ASTM F1166-2021, Practice for Human Engineering Design for Marine Systems, Equipment, and Facilities (revision of ANSI/ASTM F1166-2007 (R2013)) Final Action Date: 6/22/2021

*Revision*

ANSI/ASTM F2030-2021, Specification for Paintball Cylinder Burst Disk Assemblies (revision of ANSI/ASTM F2030-2011 (R2020)) Final Action Date: 6/22/2021

*Revision*

ANSI/ASTM F3101-2021a, Specification for Unsupervised Public Use Outdoor Fitness Equipment (revision of ANSI/ASTM F3101-2021) Final Action Date: 7/1/2021

**CSA (CSA America Standards Inc.)**

8501 E. Pleasant Valley Road, Cleveland, OH 44131 | ansi.contact@csagroup.org, www.csagroup.org

*Revision*

ANSI Z21.15-2021, Manually Operated Gas Valves for Appliances, Appliance Connector Valves, and Hose End Valves (same as CSA 9.1) (revision of ANSI Z21.15-2009 (R2019)) Final Action Date: 10/19/2021

**IEEE (Institute of Electrical and Electronics Engineers)**

445 Hoes Lane, Piscataway, NJ 08854 | k.evangelista@ieee.org, www.ieee.org

*New Standard*

ANSI/IEEE C37.06.1-2021, Recommended Practice for Preferred Ratings for High-Voltage (1000 Volts) AC Circuit Breakers Designated Definite Purpose for Fast Transient Recovery Voltage Rise Times (new standard) Final Action Date: 10/21/2021

**ITI (INCITS) (InterNational Committee for Information Technology Standards)**

700 K Street NW, Suite 600, Washington, DC 20001 | comments@standards.incits.org, www.incits.org

*National Adoption*

INCITS/ISO/IEC 2382-37:2017 [2021], Information technology - Vocabulary - Part 37: Biometrics (identical national adoption of ISO/IEC 2382-37:2017) Final Action Date: 10/19/2021

*National Adoption*

INCITS/ISO/IEC 19785-1:2020 [2021], Information technology - Common Biometric Exchange Formats Framework - Part 1: Data element specification (identical national adoption of ISO/IEC 19785-1:2020 and revision of INCITS/ISO/IEC 19785-1:2015 [2018]) Final Action Date: 10/19/2021

*National Adoption*

INCITS/ISO/IEC 19785-3:2020 [2021], Information technology - Common Biometric Exchange Formats Framework - Part 3: Patron format specifications (identical national adoption of ISO/IEC 19785-3:2020) Final Action Date: 10/19/2021

*National Adoption*

INCITS/ISO/IEC 19794-13:2018 [2021], Information Technology - Biometric Data Interchange Formats - Part 13: Voice Data (identical national adoption of ISO/IEC 19794-13:2018) Final Action Date: 10/19/2021

*National Adoption*

INCITS/ISO/IEC 24779-4:2017 [2021], Information technology - Cross-jurisdictional and societal aspects of implementation of biometric technologies - Pictograms, icons and symbols for use with biometric systems - Part 4: Fingerprint applications (identical national adoption of ISO/IEC 24779-4:2017) Final Action Date: 10/19/2021

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700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

*National Adoption*

INCITS/ISO/IEC 24779-5:2020 [2021], Information technology - Cross-jurisdictional and societal aspects of implementation of biometric technologies - Pictograms, icons and symbols for use with biometric systems - Part 5: Face applications (identical national adoption of ISO/IEC 24779-5:2020) Final Action Date: 10/19/2021

*National Adoption*

INCITS/ISO/IEC 30106-1:2016 [2021], Information technology - Object oriented BioAPI - Part 1: Architecture (identical national adoption of ISO/IEC 30106-1:2016) Final Action Date: 10/19/2021

*National Adoption*

INCITS/ISO/IEC 30106-2:2020 [2021], Information technology - Object oriented BioAPI - Part 2: Java implementation (identical national adoption of ISO/IEC 30106-2:2020) Final Action Date: 10/19/2021

*National Adoption*

INCITS/ISO/IEC 30106-3:2020 [2021], Information technology - Object oriented BioAPI - Part 3: C implementation (identical national adoption of ISO/IEC 30106-3:2020) Final Action Date: 10/19/2021

*National Adoption*

INCITS/ISO/IEC 30106-4:2019 [2021], Information technology - Object oriented BioAPI - Part 4: C++ implementation (identical national adoption of ISO/IEC 30106-4:2019) Final Action Date: 10/19/2021

*National Adoption*

INCITS/ISO/IEC 30106-1:2016/AM1:2019 [2021], Information technology - Object oriented BioAPI - Part 1: Architecture - Amendment 1: Additional specifications and conformance statements (identical national adoption of ISO/IEC 30106-1:2016/AM1:2019) Final Action Date: 10/19/2021

*National Adoption*

INCITS/ISO/IEC 30107-1:2016 [2021], Information technology - Biometric presentation attack detection - Part 1: Framework (identical national adoption of ISO/IEC 30107-1:2016) Final Action Date: 10/19/2021

*National Adoption*

INCITS/ISO/IEC 30107-2:2017 [2021], Information technology - Biometric presentation attack detection - Part 2: Data formats (identical national adoption of ISO/IEC 30107-2:2017) Final Action Date: 10/19/2021

*National Adoption*

INCITS/ISO/IEC 30107-3:2017 [2021], Information technology - Biometric presentation attack detection - Part 3: Testing and reporting (identical national adoption of ISO/IEC 30107-3:2017) Final Action Date: 10/19/2021

*National Adoption*

INCITS/ISO/IEC 30107-4:2020 [2021], Information technology - Biometric presentation attack detection - Part 4: Profile for testing of mobile devices (identical national adoption of ISO/IEC 30107-4:2020) Final Action Date: 10/19/2021

*National Adoption*

INCITS/ISO/IEC 30137-1:2019 [2021], Information technology - Use of biometrics in video surveillance systems - Part 1: System design and specification (identical national adoption of ISO/IEC 30137-1:2019) Final Action Date: 10/19/2021

*National Adoption*

INCITS/ISO/IEC 39794-1:2019 [2021], Information technology - Extensible biometric data interchange formats - Part 1: Framework (identical national adoption of ISO/IEC 39794-1:2019) Final Action Date: 10/19/2021

*National Adoption*

INCITS/ISO/IEC 39794-4:2019 [2021], Information technology - Extensible biometric data interchange formats - Part 4: Finger image data (identical national adoption of ISO/IEC 39794-4:2019) Final Action Date: 10/19/2021

**ITI (INCITS) (InterNational Committee for Information Technology Standards)**

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

*National Adoption*

INCITS/ISO/IEC 39794-5:2019 [2021], Information technology - Extensible biometric data interchange formats - Part 5: Face image data (identical national adoption of ISO/IEC 39794-5:2019) Final Action Date: 10/19/2021

*National Adoption*

INCITS/ISO/IEC 39794-6:2021 [2021], Information technology - Extensible biometric data interchange formats - Part 6: Iris image data (identical national adoption of ISO/IEC 39794-6:2021) Final Action Date: 10/19/2021

*National Adoption*

INCITS/ISO/IEC 20027:2018 [2021], Information technology - Guidelines for slap tenprint fingerprinttture (identical national adoption of ISO/IEC 20027:2018) Final Action Date: 10/19/2021

*National Adoption*

INCITS/ISO/IEC 30136:2018 [2021], Information technology - Performance testing of biometric template protection schemes (identical national adoption of ISO/IEC 30136:2018) Final Action Date: 10/19/2021

**NEMA (ASC C136) (National Electrical Manufacturers Association)**

1300 North 17th Street, Suite 900, Rosslyn, VA 22209 | [David.Richmond@nema.org](mailto:David.Richmond@nema.org), [www.nema.org](http://www.nema.org)

*Reaffirmation*

ANSI C136.20-2021, Standard For Roadway and Area Lighting Equipment Fiber-Reinforced Composite (FRC) Lighting Poles (reaffirmation of ANSI C136.20-2012) Final Action Date: 10/19/2021

**NENA (National Emergency Number Association)**

1700 Diagonal Road, Suite 500, Alexandria, VA 22314 | [darnold@nena.org](mailto:darnold@nena.org), [www.nena.org](http://www.nena.org)

*New Standard*

ANSI/NENA STA.021.1-2021, NENA Standard for Emergency Incident Data Object (EIDO) (new standard) Final Action Date: 10/19/2021

**NSF (NSF International)**

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | [arose@nsf.org](mailto:arose@nsf.org), [www.nsf.org](http://www.nsf.org)

*Revision*

ANSI/NSF 3-2021 (i17r1), Commercial Warewashing Equipment (revision of ANSI/NSF 3-2019) Final Action Date: 10/12/2021

*Revision*

ANSI/NSF 3-2021 (i18r1), Commercial Warewashing Equipment (revision of ANSI/NSF 3-2019) Final Action Date: 10/15/2021

*Revision*

ANSI/NSF 14-2021 (i115r1), Plastics Piping System Components and Related Materials (revision of ANSI/NSF 14-2020) Final Action Date: 10/12/2021

*Revision*

ANSI/NSF 14-2021 (i116r1), Plastics Piping System Components and Related Materials (revision of ANSI/NSF 14-2020) Final Action Date: 10/19/2021

*Revision*

ANSI/NSF 42-2021 (i114r2), Drinking Water Treatment Units - Aesthetic Effects (revision of ANSI/NSF 42-2020) Final Action Date: 10/20/2021

**NSF (NSF International)**

789 N. Dixboro Rd., Ann Arbor, MI 48105 | mmilla@nsf.org, www.nsf.org

*Revision*

ANSI/NSF 42-2021 (i119r2), Drinking Water Treatment Units - Aesthetic Effects (revision of ANSI/NSF 42-2020) Final Action Date: 10/14/2021

*Revision*

ANSI/NSF 53-2021 (i136r1), Drinking Water Treatment Units - Health Effects (revision of ANSI/NSF 53-2020) Final Action Date: 10/18/2021

*Revision*

ANSI/NSF 55-2021 (i58r1), Ultraviolet Microbiological Water Treatment Systems (revision of ANSI/NSF 55-2020) Final Action Date: 10/15/2021

*Revision*

ANSI/NSF 58-2021 (i91r1), Reverse Osmosis Drinking Water Treatment Systems (revision of ANSI/NSF 58-2020) Final Action Date: 10/11/2021

*Revision*

ANSI/NSF 62-2021 (i43r1), Drinking Water Distillation Systems (revision of ANSI/NSF 62-2020) Final Action Date: 10/11/2021

*Revision*

ANSI/NSF 401-2021 (i26r1), Drinking Water Treatment Units - Emerging Compounds / Incidental Contaminants (revision of ANSI/NSF 401-2020) Final Action Date: 10/11/2021

**RIC (Remanufacturing Industries Council)**

1335 Jefferson Rd. #20157, Rochester, NY 14602 | mhayes@remancouncil.org, www.remancouncil.org

*Revision*

ANSI/RIC 001.2-2021, Specifications for the Process of Remanufacturing (revision of ANSI/RIC 001.1-2016) Final Action Date: 10/22/2021

**SCTE (Society of Cable Telecommunications Engineers)**

140 Philips Rd, Exton, PA 19341 | kcooney@scte.org, www.scte.org

*New Standard*

ANSI/SCTE 271-2021, Requirements for Power Sensing in Cable and Utility Networks (new standard) Final Action Date: 10/25/2021

*Reaffirmation*

ANSI/SCTE 27-2016 (R2021), Subtitling Methods for Broadcast Cable (reaffirmation of ANSI/SCTE 27-2016) Final Action Date: 10/22/2021

*Reaffirmation*

ANSI/SCTE 40-2016 (R2021), Digital Cable Network Interface Standard (reaffirmation of ANSI/SCTE 40-2016) Final Action Date: 10/22/2021

*Reaffirmation*

ANSI/SCTE 41-2016 (R2021), POD Copy Protection System (reaffirmation of ANSI/SCTE 41-2016) Final Action Date: 10/25/2021

*Reaffirmation*

ANSI/SCTE 43-2015 (R2021), Digital Video Systems Characteristics Standard for Cable Television (reaffirmation of ANSI/SCTE 43-2015) Final Action Date: 10/25/2021



**SCTE (Society of Cable Telecommunications Engineers)**

140 Philips Rd, Exton, PA 19341 | kcooney@scte.org, www.scte.org

*Reaffirmation*

ANSI/SCTE 57-2016 (R2021), System Information for Satellite Distribution of Digital Television for Cable and MMDS (reaffirmation of ANSI/SCTE 57-2016) Final Action Date: 10/25/2021

*Reaffirmation*

ANSI/SCTE 142-2017 (R2021), Recommended Practice for Transport Stream Verification (reaffirmation of ANSI/SCTE 142-2017) Final Action Date: 10/22/2021

*Reaffirmation*

ANSI/SCTE 168-6-2017 (R2021), Recommended Practice for Monitoring Multimedia Distribution Quality (reaffirmation of ANSI/SCTE 168-6-2017) Final Action Date: 10/22/2021

*Reaffirmation*

ANSI/SCTE 168-7-2017 (R2021), Recommended Practice for Transport Stream Verification in an IP Transport Network (reaffirmation of ANSI/SCTE 168-7-2017) Final Action Date: 10/22/2021

*Reaffirmation*

ANSI/SCTE 175-2017 (R2021), Recommended Practice for Qualifying Network Devices for High-Availability Streaming Video (reaffirmation of ANSI/SCTE 175-2017) Final Action Date: 10/22/2021

*Reaffirmation*

ANSI/SCTE 233-2016 (R2021), Wavelength-Division Multiplex Small Form Factor Pluggable (PXFP-WDM) Optical Transmitter Module Interface Specification (reaffirmation of ANSI/SCTE 233-2016) Final Action Date: 10/22/2021

**UL (Underwriters Laboratories)**

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | kelly.smoke@ul.org, <https://ul.org/>

*Revision*

ANSI/UL 499-2021a, Standard for Safety for Electric Heating Appliances (revision of ANSI/UL 499-2017) Final Action Date: 10/22/2021

*Revision*

ANSI/UL 558-2021, Standard for Safety for Industrial Trucks, Internal Combustion Engine- (revision of ANSI/UL 558-2020) Final Action Date: 10/22/2021

# Call for Members (ANS Consensus Bodies)

Directly and materially interested parties who wish to participate as a member of an ANS consensus body for the standards listed are requested to contact the sponsoring developer directly in a timely manner.

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## **ABYC (American Boat and Yacht Council)**

613 Third Street, Suite 10, Annapolis, MD 21403 | [smoulton@abycinc.org](mailto:smoulton@abycinc.org), [www.abycinc.org](http://www.abycinc.org)  
Sara Moulton; [smoulton@abycinc.org](mailto:smoulton@abycinc.org)

BSR/ABYC H-24-202x, Gasoline Fuel Systems (revision of ANSI/ABYC H-24-2017)

Seeking consensus body members who identify as boat manufacturers, trade associations, insurance/survey, specialist service, government, consumer/general interest.

## **AMCA (Air Movement and Control Association)**

30 West University Drive, Arlington Heights, IL 60004-1893 | [shrutik@amca.org](mailto:shrutik@amca.org), [www.amca.org](http://www.amca.org)  
Shruti Kohli-Bhargava; [shrutik@amca.org](mailto:shrutik@amca.org)

BSR/AMCA 230-202x, Laboratory Methods of Testing Air Circulating Fans for Rating and Certification Air (revision of ANSI/AMCA 230-2015)

## **EOS/ESD (ESD Association, Inc.)**

7900 Turin Road, Building 3, Rome, NY 13440 | [jkirk@esda.org](mailto:jkirk@esda.org), [www.esda.org](http://www.esda.org)  
Jennifer Kirk; [jkirk@esda.org](mailto:jkirk@esda.org)

BSR/ESD STM9.1-202x, ESD Association Standard Test Method for the Protection of Electrostatic Discharge Susceptible Items - Footwear and Foot Grounders - Resistive Characterization (revision, redesignation and consolidation of ANSI/ESD STM9.1-2014, ANSI/ESD SP9.2-2020)

## **ISA (International Society of Automation)**

67 Alexander Drive, Research Triangle Park, NC 27709 | [crobinson@isa.org](mailto:crobinson@isa.org), [www.isa.org](http://www.isa.org)  
Charley Robinson; [crobinson@isa.org](mailto:crobinson@isa.org)

BSR/ISA 96.02.01-202x, Guidelines for the Specification of Electric Valve Actuators (revision of ANSI/ISA 96.02.01-2016)

## **ITI (INCITS) (InterNational Committee for Information Technology Standards)**

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)  
Deborah Spittle; [comments@standards.incits.org](mailto:comments@standards.incits.org)

INCITS/ISO/IEC 9797-3:2011/AM1:2020 [202x], Information technology - Security techniques - Message Authentication Codes (MACs) - Part 3: Mechanisms using a universal hash-function - Amendment 1 (identical national adoption of ISO/IEC 9797-3:2011/AM1:2020)

INCITS/ISO/IEC 9798-4:1999/COR1:2009 [202x], Information technology - Security techniques - Entity authentication - Part 4: Mechanisms using a cryptographic check function - Technical Corrigendum 1 (identical national adoption of ISO/IEC 9798-4:1999/COR1:2009)

INCITS/ISO/IEC 9798-4:1999/COR2:2012 [202x], Information technology - Security techniques - Entity authentication - Part 4: Mechanisms using a cryptographic check function - Technical Corrigendum 2 (identical national adoption of ISO/IEC 9798-4:1999/COR2:2012)

INCITS/ISO/IEC 10118-1:2016/AM1:2021 [202x], Information technology - Security techniques - Hash-functions - Part 1: General - Amendment 1: Padding methods for sponge functions (identical national adoption of ISO/IEC 10118-1:2016/AM1:2021 [])

**ITI (INCITS) (InterNational Committee for Information Technology Standards)**

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

INCITS/ISO/IEC 10118-2:2010/COR1:2011 [202x], Information technology - Security techniques - Hash-functions - Part 2: Hash-functions using an n-bit block cipher - Technical Corrigendum 1 (identical national adoption of ISO/IEC 10118-2:2010/COR1:2011)

INCITS/ISO/IEC 11770-3:2015/AM1:2017 [202x], Information technology - Security techniques - Key management - Part 3: Mechanisms using asymmetric techniques - Amendment 1: Blinded Diffie-Hellman key agreement (identical national adoption of ISO/IEC 11770-3:2015/AM1:2017)

INCITS/ISO/IEC 13888-2:2010/COR1:2012 [202x], Information technology - Security techniques - Non-repudiation - Part 2: Mechanisms using symmetric techniques - Technical Corrigendum 1 (identical national adoption of ISO/IEC 13888-2:2010/COR1:2012)

INCITS/ISO/IEC 18033-2:2006/AM1:2017 [202x], Information technology - Security techniques - Encryption algorithms - Part 2: Asymmetric ciphers - Amendment 1: FACE (identical national adoption of ISO/IEC 18033-2:2006/AM1:2017)

INCITS/ISO/IEC 18033-3:2010/AM1:2021 [202x], Information Technology - Security Techniques - Encryption Algorithms - Part 3: Block Ciphers - Amendment 1: SM4 (identical national adoption of ISO/IEC 18033-3:2010/AM1:2021)

INCITS/ISO/IEC 20009-2:2013 [202x], Information Technology - Security Techniques - Anonymous Entity Authentication - Part 2: Mechanisms Based On Signatures Using a Group Public Key (identical national adoption of ISO/IEC 20009-2:2013)

INCITS/ISO/IEC 20009-4:2017 [202x], Information technology - Security techniques - Anonymous entity authentication - Part 4: Mechanisms based on weak secrets (identical national adoption of ISO/IEC 20009-4:2017)

INCITS/ISO/IEC 20085-1:2019 [202x], IT Security techniques - Test tool requirements and test tool calibration methods for use in testing non-invasive attack mitigation techniques in cryptographic modules - Part 1: Test tools and techniques (identical national adoption of ISO/IEC 20085-1:2019)

INCITS/ISO/IEC 27034-1:2011 [202x], Information technology - Security techniques - Application security - Part 1: Overview and concepts (identical national adoption of ISO/IEC 27034-1:2011)

INCITS/ISO/IEC 27034-1:2011/COR1:2014 [202x], Information technology - Security techniques - Application security - Part 1: Overview and concepts - Technical Corrigendum 1 (identical national adoption of ISO/IEC 27034-1:2011/COR1:2014)

INCITS/ISO/IEC 29192-1:2012 [202x], Information technology - Security techniques - Lightweight cryptography - Part 1: General (identical national adoption of ISO/IEC 29192-1:2012)

INCITS/ISO/IEC 18367:2016 [202x], Information technology - Security techniques - Cryptographic algorithms and security mechanisms conformance testing (identical national adoption of ISO/IEC 18367:2016)

INCITS/ISO/IEC 20543:2019 [202x], Information technology - Security techniques - Test and analysis methods for random bit generators within ISO/IEC 19790 and ISO/IEC 15408 (identical national adoption of ISO/IEC 20543:2019)

**ITI (INCITS) (InterNational Committee for Information Technology Standards)**

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

INCITS/ISO/IEC 21827:2008 [202x], Information technology - Security techniques - Systems Security Engineering - Capability Maturity Model® (SSE-CMM®) (identical national adoption of ISO/IEC 21827:2008)

INCITS/ISO/IEC 21836:2020 [202x], Information technology - Data centres - Server energy effectiveness metric (identical national adoption of ISO/IEC 21836:2020)

INCITS/ISO/IEC 21878:2018 [202x], Information technology - Security techniques - Security guidelines for design and implementation of virtualized servers (identical national adoption of ISO/IEC 21878:2018)

INCITS/ISO/IEC 27021:2017 [202x], Information technology - Security techniques - Competence requirements for information security management systems professionals (identical national adoption of ISO/IEC 27021:2017)

INCITS/ISO/IEC 27031:2011 [202x], Information technology - Security techniques - Guidelines for information and communication technology readiness for business continuity (identical national adoption of ISO/IEC 27031:2011)

INCITS/ISO/IEC 29150:2011/COR1:2014 [202x], Information technology - Security techniques - Signcryption - Technical Corrigendum 1 (identical national adoption of ISO/IEC 29150:2011/COR1:2014)

**NENA (National Emergency Number Association)**

1700 Diagonal Road, Suite 500, Alexandria, VA 22314 | [darnold@nena.org](mailto:darnold@nena.org), [www.nena.org](http://www.nena.org)  
Delaine Arnold; [darnold@nena.org](mailto:darnold@nena.org)

BSR/NENA STA-010.4-202x, NENA i3 Standard for Next Generation 9-1-1 (revision and redesignation of ANSI/NENA STA-010.3-2021)

**SCTE (Society of Cable Telecommunications Engineers)**

140 Philips Rd, Exton, PA 19341 | [kcooney@scte.org](mailto:kcooney@scte.org), [www.scte.org](http://www.scte.org)  
Kim Cooney; [kcooney@scte.org](mailto:kcooney@scte.org)

BSR/SCTE 48-1-202x, Test Method for Measuring Shielding Effectiveness of Passive and Active Devices Using a GTEM Cell (revision of ANSI/SCTE 48-1-2015)

BSR/SCTE 151-202x, Mechanical, Electrical, and Environmental Requirements for RF Traps and Filters (revision of ANSI/SCTE 151-2015)

BSR/SCTE 265-202x, Broadband Radio Frequency Hardline Passives for Cable Systems (new standard)

**TAPPI (Technical Association of the Pulp and Paper Industry)**

15 Technology Parkway, Suite 115, Peachtree Corners, GA 30092 | [standards@tappi.org](mailto:standards@tappi.org), [www.tappi.org](http://www.tappi.org)  
Natasha Bush-Postell; [standards@tappi.org](mailto:standards@tappi.org)

BSR/TAPPI T 259 om-2015 (R202x), Species identification of nonwood plant fibers (reaffirmation of ANSI/TAPPI T 259 om-2015)

**TIA (Telecommunications Industry Association)**

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | [standards-process@tiaonline.org](mailto:standards-process@tiaonline.org), [www.tiaonline.org](http://www.tiaonline.org)

Teesha Jenkins; [standards-process@tiaonline.org](mailto:standards-process@tiaonline.org)

BSR/TIA 568.5-202x, Single balanced twisted-pair cabling and components standard (new standard)

BSR/TIA 942-B-1-202x, Telecommunications - Infrastructure Standard for Data Centers - Addendum 1: Edge Data Centers (addenda to ANSI/TIA 942-B-2017)

# Call for Members (ANS Consensus Bodies)

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## ANSI Accredited Standards Developer

**DirectTrust - DirectTrust.org, Inc.**

Reply to [Standards@DirectTrust.org](mailto:Standards@DirectTrust.org)

### **DS2019\_01 – The Direct Standard™**

Are you interested in contributing to the development and maintenance of the Direct Standard™ to enable exchange of authenticated, encrypted health information to known trusted recipients?

DirectTrust is currently seeking members in the following categories:

- Healthcare Sector
- Government Sector
- Healthcare Payer Sector
- Consumer Sector and General Interest
- Information Technology Sector

If you are interested in joining the DS2019\_01- The Direct Standard™ Consensus Body, contact [Standards@DirectTrust.org](mailto:Standards@DirectTrust.org).

### **DS2020\_03 - Event Notifications via the Direct Standard™**

Are you interested in contributing to the development and maintenance of an implementation guide for actors in the healthcare ecosystem who will use the Direct Standard™ for the communication of various transactions in support of Encounter and Event Notifications?

DirectTrust is currently seeking members in the following categories:

- Healthcare Sector
- Government Sector
- Healthcare Payer Sector
- Consumer Sector and General Interest
- Information Technology Sector

If you are interested in joining the DS2020\_03- Event Notifications via the Direct Standard™ Consensus Body, contact [Standards@DirectTrust.org](mailto:Standards@DirectTrust.org).

# Call for Members (ANS Consensus Bodies)

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- Information Technology Sector

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- Consumer Sector and General Interest
- Information Technology Sector

If you are interested in joining the DS2020\_03- Event Notifications via the Direct Standard™ Consensus Body, contact [Standards@DirectTrust.org](mailto:Standards@DirectTrust.org).

## ANSI Accredited Standards Developer

### INCITS Executive Board – ANSI Accredited SDO and US TAG to ISO/IEC JTC 1, Information Technology

The InterNational Committee for Information Technology Standards (INCITS), an ANSI accredited SDO, is the forum of choice for information technology developers, producers and users for the creation and maintenance of formal de jure IT standards. INCITS' mission is to promote the effective use of Information and Communication Technology through standardization in a way that balances the interests of all stakeholders and increases the global competitiveness of the member organizations.

The INCITS Executive Board serves as the consensus body with oversight of its 40+ Technical Committees. Additionally, the INCITS Executive Board has the international leadership role as the US Technical Advisory Group (TAG) to ISO/IEC JTC 1, Information Technology.

Membership in the INCITS Executive Board is open to all directly and materially affected parties in accordance with INCITS membership rules. To find out more about participating on the INCITS Executive Board, contact Jennifer Garner at [jgarner@itic.org](mailto:jgarner@itic.org) or visit <http://www.incits.org/participation/membership-info> for more information.

Membership in all interest categories is always welcome; however, the INCITS Executive Board seeks to broaden its membership base in the following categories:

- Service Providers
- Users
- Standards Development Organizations and Consortia
- Academic Institutions

# Call for Members (ANS Consensus Bodies)

## ANSI Accredited Standards Developer

### INCITS Executive Board – ANSI Accredited SDO and US TAG to ISO/IEC JTC 1, Information Technology

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## ANSI Accredited Standards Developer

### SCTE (Society of Cable Telecommunications Engineers)

SCTE, an ANSI-accredited SDO, is the primary organization for the creation and maintenance of standards for the cable telecommunications industry. SCTE's standards mission is to develop standards that meet the needs of cable system operators, content providers, network and customer premises equipment manufacturers, and all others who have an interest in the industry through a fair, balanced and transparent process.

SCTE is currently seeking to broaden the membership base of its ANS consensus bodies and is interested in new members in all membership categories to participate in new work in fiber-optic networks, advanced advertising, 3D television, and other important topics. Of particular interest is membership from the content (program and advertising) provider and user communities. Membership in the SCTE Standards Program is open to all directly and materially affected parties as defined in SCTE's membership rules and operating procedures. More information is available at [www.scte.org](http://www.scte.org) or by e-mail from [standards@scte.org](mailto:standards@scte.org).

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# Call for Members (ANS Consensus Bodies)

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# American National Standards (ANS) Announcements

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## Corrections

### DirectTrust - DirectTrust.org, Inc.

#### BSR/DS 2020-03-100-202x, Title change to proposed ANS

The DirectTrust, Inc. has changed the designation and title of their PINS proposal for listed in Standards Action **July 31, 2020**.

Changed from:

*“BSR/DS202003V01-202x, Implementation Guide for Encounter and Event Notifications via Direct Secure Messaging”*

Changed to the following:

*“BSR/DS 2020-03-100-202x, Event Notifications via the Direct Standard™”*

Please direct inquiries to: Stacy Clements; standards@directtrust.org

## Corrections

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Changed to the following:

*“BSR/DS 2020-03-100-202x, Event Notifications via the Direct Standard™”*

Please direct inquiries to: Stacy Clements; standards@directtrust.org

## Corrections

### National Fire Protection Association (NFPA)

#### PINS Notice Republished in Error

A PINS notice for the following NFPA proposals were mistakenly published for a second time in the October 22, 2021 ANSI Standards Action. The initial PINS notification dated July 30, 2021 in Standards Action still stands for each of the designated proposals. Inquiries may be directed to Dawn Michele Bellis, p: (617) 984-7246, e: dbellis@nfpa.org.

BSR/NFPA 12A-202x, Standard on Halon 1301 Fire Extinguishing Systems

BSR/NFPA 13D-202x, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes

BSR/NFPA 13R-202x, Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies

BSR/NFPA 24-202x, Standard for the Installation of Private Fire Service Mains and Their Appurtenances

BSR/NFPA 40-202x, Standard for the Storage and Handling of Cellulose Nitrate Film

BSR/NFPA 110-202x, Standard for Emergency and Standby Power Systems

# American National Standards (ANS) Announcements

## Corrections

### National Fire Protection Association (NFPA)

#### PINS Notice Republished in Error

A PINS notice for the following NFPA proposals were mistakenly published for a second time in the October 22, 2021 ANSI Standards Action. The initial PINS notification dated July 30, 2021 in Standards Action still stands for each of the designated proposals. Inquiries may be directed to Dawn Michele Bellis, p: (617) 984-7246, e: dbellis@nfpa.org.

BSR/NFPA 12A-202x, Standard on Halon 1301 Fire Extinguishing Systems

BSR/NFPA 13D-202x, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes

BSR/NFPA 13R-202x, Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies

BSR/NFPA 24-202x, Standard for the Installation of Private Fire Service Mains and Their Appurtenances

BSR/NFPA 40-202x, Standard for the Storage and Handling of Cellulose Nitrate Film

BSR/NFPA 110-202x, Standard for Emergency and Standby Power Systems

# American National Standards (ANS) Process

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Please visit ANSI's website ([www.ansi.org](http://www.ansi.org)) for resources that will help you to understand, administer and participate in the American National Standards (ANS) process. Documents posted at these links are updated periodically as new documents and guidance are developed, whenever ANS-related procedures are revised, and routinely with respect to lists of proposed and approved ANS. The main ANS-related link is [www.ansi.org/asd](http://www.ansi.org/asd) and here are some direct links as well as highlights of information that is available:

## Where to find Procedures, Guidance, Interpretations and More...

**Please visit ANSI's website ([www.ansi.org](http://www.ansi.org))**

- ANSI Essential Requirements: Due process requirements for American National Standards (always current edition): [www.ansi.org/essentialrequirements](http://www.ansi.org/essentialrequirements)
- ANSI Standards Action (weekly public review announcements of proposed ANS and standards developer accreditation applications, listing of recently approved ANS, and proposed revisions to ANS-related procedures): [www.ansi.org/standardsaction](http://www.ansi.org/standardsaction)
- Accreditation information – for potential developers of American National Standards (ANS): [www.ansi.org/sdoaccreditation](http://www.ansi.org/sdoaccreditation)
- ANS Procedures, ExSC Interpretations and Guidance (including a slide deck on how to participate in the ANS process and the BSR-9 form): [www.ansi.org/asd](http://www.ansi.org/asd)
- Lists of ANSI-Accredited Standards Developers (ASDs), Proposed ANS and Approved ANS: [www.ansi.org/asd](http://www.ansi.org/asd)
- American National Standards Key Steps: [www.ansi.org/anskeysteps](http://www.ansi.org/anskeysteps)
- American National Standards Value: [www.ansi.org/ansvalue](http://www.ansi.org/ansvalue)
- ANS Web Forms for ANSI-Accredited Standards Developers - PINS, BSR8|108, BSR11, Technical Report: <https://www.ansi.org/portal/psawebforms/>
- Information about standards Incorporated by Reference (IBR): <https://ibr.ansi.org/>
- ANSI - Education and Training: [www.standardstolearn.org](http://www.standardstolearn.org)

## Where to find Procedures, Guidance, Interpretations and More...

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- ANSI Essential Requirements: Due process requirements for American National Standards (always current edition): [www.ansi.org/essentialrequirements](http://www.ansi.org/essentialrequirements)
- ANSI Standards Action (weekly public review announcements of proposed ANS and standards developer accreditation applications, listing of recently approved ANS, and proposed revisions to ANS-related procedures): [www.ansi.org/standardsaction](http://www.ansi.org/standardsaction)
- Accreditation information – for potential developers of American National Standards (ANS): [www.ansi.org/sdoaccreditation](http://www.ansi.org/sdoaccreditation)
- ANS Procedures, ExSC Interpretations and Guidance (including a slide deck on how to participate in the ANS process and the BSR-9 form): [www.ansi.org/asd](http://www.ansi.org/asd)
- Lists of ANSI-Accredited Standards Developers (ASDs), Proposed ANS and Approved ANS: [www.ansi.org/asd](http://www.ansi.org/asd)
- American National Standards Key Steps: [www.ansi.org/anskeysteps](http://www.ansi.org/anskeysteps)
- American National Standards Value: [www.ansi.org/ansvalue](http://www.ansi.org/ansvalue)
- ANS Web Forms for ANSI-Accredited Standards Developers - PINS, BSR8|108, BSR11, Technical Report: <https://www.ansi.org/portal/psawebforms/>
- Information about standards Incorporated by Reference (IBR): <https://ibr.ansi.org/>
- ANSI - Education and Training: [www.standardstolearn.org](http://www.standardstolearn.org)

## American National Standards Under Continuous Maintenance

The ANSI Essential Requirements: Due Process Requirements for American National Standards provides two options for the maintenance of American National Standards (ANS): periodic maintenance (see clause 4.7.1) and continuous maintenance (see clause 4.7.2). Continuous maintenance is defined as follows:

The standard shall be maintained by an accredited standards developer. A documented program for periodic publication of revisions shall be established by the standards developer. Processing of these revisions shall be in accordance with these procedures. The published standard shall include a clear statement of the intent to consider requests for change and information on the submittal of such requests. Procedures shall be established for timely, documented consensus action on each request for change and no portion of the standard shall be excluded from the revision process. In the event that no revisions are issued for a period of four years, action to reaffirm or withdraw the standard shall be taken in accordance with the procedures contained in the ANSI Essential Requirements.

The Executive Standards Council (ExSC) has determined that for standards maintained under the Continuous Maintenance option, separate PINS announcements are not required. The following ANSI Accredited Standards Developers have formally registered standards under the Continuous Maintenance option.

- 
- AAMI (Association for the Advancement of Medical Instrumentation)
  - AARST (American Association of Radon Scientists and Technologists)
  - AGA (American Gas Association)
  - AGSC (Auto Glass Safety Council)
  - ASC X9 (Accredited Standards Committee X9, Incorporated)
  - ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.)
  - ASME (American Society of Mechanical Engineers)
  - ASTM (ASTM International)
  - GBI (Green Building Initiative)
  - HL7 (Health Level Seven)
  - Home Innovation (Home Innovation Research Labs)
  - IES (Illuminating Engineering Society)
  - ITI (InterNational Committee for Information Technology Standards)
  - MHI (Material Handling Industry)
  - NBBPVI (National Board of Boiler and Pressure Vessel Inspectors)
  - NCPDP (National Council for Prescription Drug Programs)
  - NEMA (National Electrical Manufacturers Association)
  - NISO (National Information Standards Organization)
  - NSF (NSF International)
  - PRCA (Professional Ropes Course Association)
  - RESNET (Residential Energy Services Network, Inc.)
  - SAE (SAE International)
  - TCNA (Tile Council of North America)
  - TIA (Telecommunications Industry Association)
  - UL (Underwriters Laboratories)

To obtain additional information with regard to these standards, including contact information at the ANSI Accredited Standards Developer, please visit ANSI Online at [www.ansi.org/asd](http://www.ansi.org/asd), select “American National Standards Maintained Under Continuous Maintenance.” Questions? [psa@ansi.org](mailto:psa@ansi.org).

# ANSI-Accredited Standards Developers (ASD) Contacts

The addresses listed in this section are to be used in conjunction with standards listed in PINS, Call for Comment, Call for Members and Final Actions. This section is a list of developers who have submitted standards for this issue of *Standards Action* – it is not intended to be a list of all ANSI-Accredited Standards Developers. Please send all address corrections to the PSA Department at [psa@ansi.org](mailto:psa@ansi.org).

## AAFS

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## ESTA

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## IAPMO (Z)

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## ISA (Organization)

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**SCTE**

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**TAPPI**

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15 Technology Parkway, Suite 115  
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**TIA**

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# ISO Draft International Standards

This section lists proposed standards that the International Organization for Standardization (ISO) is considering for approval. The proposals have received substantial support within the technical committees or subcommittees that developed them and are now being circulated to ISO members for comment and vote. Standards Action readers interested in reviewing and commenting on these documents should order copies from ANSI.

## COMMENTS

Comments regarding ISO documents should be sent to ANSI's ISO Team (isot@ansi.org); comments on ISO documents must be submitted electronically in the approved ISO template and as a Word document as other formats will not be accepted. The final date for offering comments is listed after each draft.

## ORDERING INSTRUCTIONS

ISO Drafts can be made available by contacting ANSI's Customer Service department. Please e-mail your request for an ISO Draft to Customer Service at sales@ansi.org. When making your request, please provide the date of the Standards Action issue in which the draft document you are requesting appears.

### Acoustics (TC 43)

ISO/FDIS 8253-3, Acoustics - Audiometric test methods - Part 3: Speech audiometry - 1/7/2022, \$112.00

ISO/DIS 11819-1, Acoustics - Measurement of the influence of road surfaces on traffic noise - Part 1: Statistical Pass-By method - 1/7/2022, \$119.00

### Additive manufacturing (TC 261)

ISO/ASTM DIS 52902, Additive manufacturing - Test artifacts - Geometric capability assessment of additive manufacturing systems - 1/6/2022, \$107.00

### Air quality (TC 146)

ISO/DIS 16000-42, Indoor air - Part 42: Measurement of the particle number concentration by Condensation Particle Counters - 1/7/2022, \$102.00

### Anaesthetic and respiratory equipment (TC 121)

ISO/DIS 11712, Anaesthetic and respiratory equipment - Supralaryngeal airways and connectors - 1/7/2022, \$98.00

### Banking and related financial services (TC 68)

ISO/DIS 18245, Retail financial services - Merchant category codes - 1/9/2022, \$29.00

### Clinical laboratory testing and in vitro diagnostic test systems (TC 212)

ISO/DIS 15189, Medical laboratories - Requirements for quality and competence - 1/7/2022, \$125.00

### Coalbed methane (CBM) (TC 263)

ISO/DIS 23604, Method of determining specific surface area of coal - 1/6/2022, \$53.00

### Control and safety devices for non industrial gas-fired appliances and systems (TC 161)

ISO/FDIS 23553-1, Safety and control devices for oil burners and oil-burning appliances - Particular requirements - Part 1: Automatic and semi-automatic valves - 1/7/2022, \$112.00

### Corrosion of metals and alloys (TC 156)

ISO/FDIS 24020, Corrosion of metals and alloys - Standard test method for particle-free erosion corrosion of metallic materials by jet-in-slit - 1/7/2022, \$58.00

### Cranes (TC 96)

ISO/DIS 23778, Proof of competence of hydraulic cylinders in crane applications - 1/7/2022, \$119.00

### Dentistry (TC 106)

ISO/DIS 3630-6, Dentistry - Endodontic instruments - Part 6: Numeric coding system - 1/9/2022, \$58.00

### Dimensional and Geometrical Product Specifications and Verification (TC 213)

ISO/DIS 16610-62, Geometrical product specifications (GPS) - Filtration - Part 62: Linear areal filters: Spline filters - 1/7/2022, \$53.00

### Feed machinery (TC 293)

ISO/FDIS 24378, Feed machinery - Vocabulary - 1/7/2022, \$46.00

### Fluid power systems (TC 131)

ISO/FDIS 16889, Hydraulic fluid power - Filters - Multi-pass method for evaluating filtration performance of a filter element - 1/7/2022, \$112.00



ISO/DIS 12151-2, Connections for hydraulic fluid power and general use - Hose fittings - Part 2: Hose fittings with ISO 8434-1 24° cone connector ends with O-rings - 1/7/2022, \$62.00

#### **Footwear (TC 216)**

ISO/FDIS 19574, Footwear and footwear components - Qualitative test method to assess antifungal activity (growth test) - 1/7/2022, \$53.00

#### **Furniture (TC 136)**

ISO/DIS 4769, Hardware for furniture - Strength and durability of hinges and their components - Hinges pivoting on a vertical axis - 1/7/2022, \$67.00

#### **Geographic information/Geomatics (TC 211)**

ISO/DIS 19123-3, Geographic information - Schema for coverage geometry and functions - Part 3: Processing fundamentals - 1/9/2022, \$146.00

#### **Implants for surgery (TC 150)**

ISO/DIS 12417-1, Cardiovascular implants and extracorporeal systems - Vascular device-drug combination products - Part 1: General requirements - 1/7/2022, \$119.00

#### **Industrial trucks (TC 110)**

ISO/DIS 3691-2, Industrial trucks - Safety requirements and verification - Part 2: Self-propelled variable-reach trucks - 1/7/2022, \$119.00

#### **Iron ores (TC 102)**

ISO/DIS 4698, Iron ore pellets for blast furnace feedstocks - Determination of the free-swelling index - 1/7/2022, \$88.00

#### **Machine tools (TC 39)**

ISO/DIS 10791-2, Test conditions for machining centres - Part 2: Geometric tests for machines with vertical spindle (vertical Z-axis) - 1/7/2022, \$165.00

#### **Materials, equipment and offshore structures for petroleum and natural gas industries (TC 67)**

ISO/DIS 13704, Petroleum, petrochemical and natural gas industries - Calculation of heater-tube thickness in petroleum refineries - 1/6/2022, \$33.00

ISO/DIS 12736-1, Petroleum and natural gas industries - Wet thermal insulation systems for pipelines and subsea equipment - Part 1: Validation of materials and insulation systems - 1/10/2022, \$125.00

ISO/DIS 19901-8, Petroleum and natural gas industries - Specific requirements for offshore structures - Part 8: Marine soil investigations - 1/9/2022, \$185.00

#### **Measurement of fluid flow in closed conduits (TC 30)**

ISO/DIS 5167-5, Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full - Part 5: Cone meters - 1/6/2022, \$62.00

ISO/DIS 5167-6, Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full - Part 6: Wedge meters - 1/6/2022, \$62.00

#### **Nuclear energy (TC 85)**

ISO/FDIS 16796, Nuclear energy - Determination of Gd<sub>2</sub>O<sub>3</sub> content in gadolinium fuel blends and gadolinium fuel pellets by atomic emission spectrometry using an inductively coupled plasma source (ICP-AES) - 1/7/2022, \$53.00

ISO/ASTM DIS 51539, Guidance for use of radiation-sensitive indicators - 1/7/2022, \$33.00

#### **Optics and optical instruments (TC 172)**

ISO/FDIS 10942, Ophthalmic instruments - Direct ophthalmoscopes - 1/7/2022, \$40.00

ISO/FDIS 15798, Ophthalmic implants - Ophthalmic viscosurgical devices - 1/7/2022, \$77.00

ISO/FDIS 19056-3, Microscopes - Definition and measurement of illumination properties - Part 3: Incident light fluorescence microscopy with incoherent light sources - 1/7/2022, \$46.00

#### **Paints and varnishes (TC 35)**

ISO/FDIS 17463, Paints and varnishes - Guidelines for the determination of anticorrosive properties of organic coatings by accelerated cyclic electrochemical technique - 1/7/2022, \$67.00

ISO/DIS 11127-6, Preparation of steel substrates before application of paints and related products - Test methods for non-metallic blast-cleaning abrasives - Part 6: Determination of water-soluble contaminants by conductivity measurement - 1/7/2022, \$33.00

**Pigments, dyestuffs and extenders (TC 256)**

ISO/DIS 18314-5, Analytical colorimetry - Part 5: Procedure for colorimetric determination of colour differences of object colours according to equidistant colour spaces - 1/7/2022, \$58.00

**Plastics (TC 61)**

ISO/FDIS 10365, Adhesives - Designation of main failure patterns - 1/7/2022, \$33.00

**Plastics pipes, fittings and valves for the transport of fluids (TC 138)**

ISO/FDIS 16486-4, Plastics piping systems for the supply of gaseous fuels - Unplasticized polyamide (PA-U) piping systems with fusion jointing and mechanical jointing - Part 4: Valves - 1/7/2022, \$77.00

**Road vehicles (TC 22)**

ISO/DIS 20653, Road vehicles - Degrees of protection (IP code) - Protection of electrical equipment against foreign objects, water and access - 1/7/2022, \$88.00

ISO/DIS 6621-4, Internal combustion engines - Piston rings - Part 4: General specifications - 1/7/2022, \$93.00

**Rolling bearings (TC 4)**

ISO/FDIS 3030, Rolling bearings - Radial needle roller and cage assemblies - Boundary dimensions, geometrical product specifications (GPS) and tolerance values - 1/7/2022, \$53.00

**Rubber and rubber products (TC 45)**

ISO/DIS 34-2, Rubber, vulcanized or thermoplastic - Determination of tear strength - Part 2: Small (Delft) test pieces - 1/7/2022, \$62.00

**Security (TC 292)**

ISO/DIS 22328-3, Security and resilience - Emergency management - Part 3: Guidelines for the implementation of a community-based tsunami early warning system - 1/7/2022, \$62.00

**Ships and marine technology (TC 8)**

ISO/DIS 23120, Ships and marine technology - Graphical symbols for computer-based incident response systems - 1/7/2022, \$53.00

**Soil quality (TC 190)**

ISO/DIS 23265, Soil quality - Test for estimating organic matter decomposition in contaminated soil - 1/10/2022, \$71.00

ISO/DIS 21268-5, Soil quality - Leaching procedures for subsequent chemical and ecotoxicological testing of soil and soil-like materials - Part 5: Batch test with forced aerobic or anaerobic conditions - 1/7/2022, \$82.00

**Steel (TC 17)**

ISO/FDIS 683-3, Heat-treatable steels, alloy steels and free-cutting steels - Part 3: Case-hardening steels - 1/7/2022, \$107.00

**Sterilization of health care products (TC 198)**

ISO/DIS 13004, Sterilization of health care products - Radiation - Substantiation of selected sterilization dose: Method VDmaxSD - 1/7/2022, \$125.00

**Technical systems and aids for disabled or handicapped persons (TC 173)**

ISO/DIS 21801-2, Cognitive accessibility - Part 2: Reporting - 1/7/2022, \$107.00

**Thermal insulation (TC 163)**

ISO/DIS 24260, Thermal insulation products - Hemp fiber mat and board - Specification - 1/7/2022, \$62.00

ISO/DIS 24285, Thermal insulation for building equipment and industrial installations - Cellular glass products - Specification - 1/7/2022, \$46.00

**Timber (TC 218)**

ISO/FDIS 13061-18, Physical and mechanical properties of wood - Test methods for small clear wood specimens - Part 18: Vocabulary - 1/7/2022, \$53.00

**Tractors and machinery for agriculture and forestry (TC 23)**

ISO/DIS 5676, Tractors and machinery for agriculture and forestry - Hydraulic coupling - Braking circuit - 1/7/2022, \$33.00

ISO/FDIS 11681-1.2, Machinery for forestry - Portable chain-saw safety requirements and testing - Part 1: Chain-saws for forest service - 1/7/2022, \$88.00

ISO/FDIS 11681-2.2, Machinery for forestry - Portable chain-saw safety requirements and testing - Part 2: Chain-saws for tree service - 1/7/2022, \$98.00

ISO/FDIS 4254-17.2, Agricultural machinery - Safety - Part 17:  
Root crop harvesters - 1/7/2022, \$125.00

**Welding and allied processes (TC 44)**

ISO/DIS 10447, Resistance welding - Testing of welds - Peel  
and chisel testing of resistance spot and projection welds -  
1/7/2022, \$46.00

**ISO/IEC JTC 1, Information Technology**

ISO/IEC FDIS 27002, Information security, cybersecurity and  
privacy protection - Information security controls -  
1/7/2022, \$185.00

ISO/IEC FDIS 20009-3, Information security - Anonymous  
entity authentication - Part 3: Mechanisms based on blind  
signatures - 1/7/2022, \$67.00

ISO/IEC DIS 23008-3, Information technology - High efficiency  
coding and media delivery in heterogeneous environments  
- Part 3: 3D audio - 1/7/2022, \$311.00



# Newly Published ISO & IEC Standards

Listed here are new and revised standards recently approved and promulgated by ISO - the International Organization for Standardization – and IEC – the International Electrotechnical Commission. Most are available at the ANSI Electronic Standards Store (ESS) at [www.ansi.org](http://www.ansi.org). All paper copies are available from Standards resellers (<http://webstore.ansi.org/faq.aspx#resellers>).

## ISO Standards

### Agricultural food products (TC 34)

[ISO 22949-1:2021](#), Molecular biomarker analysis - Methods of analysis for the detection and identification of animal species in food and feed products (nucleotide sequencing-based methods) - Part 1: General requirements, \$149.00

### Clinical laboratory testing and in vitro diagnostic test systems (TC 212)

[ISO 4307:2021](#), Molecular in vitro diagnostic examinations - Specifications for pre-examination processes for saliva - Isolated human DNA, \$73.00

### Furniture (TC 136)

[ISO 4211-5:2021](#), Furniture - Tests for surface finishes - Part 5: Assessment of resistance to abrasion, \$73.00

### Gas cylinders (TC 58)

[ISO 10298:2018/Amd 1:2021](#), Gas cylinders - Gases and gas mixtures - Determination of toxicity for the selection of cylinder valve outlets - Amendment 1, \$20.00

[ISO 11114-2:2021](#), Gas cylinders - Compatibility of cylinder and valve materials with gas contents - Part 2: Non-metallic materials, \$149.00

### Industrial automation systems and integration (TC 184)

[ISO 23247-1:2021](#), Automation systems and integration - Digital twin framework for manufacturing - Part 1: Overview and general principles, \$73.00

### Metallic and other inorganic coatings (TC 107)

[ISO 4524-3:2021](#), Metallic coatings - Test methods for electrodeposited gold and gold alloy coatings - Part 3: Electrographic tests for porosity, \$48.00

### Plain bearings (TC 123)

[ISO 19259:2021](#), Plain bearings - Bearings with embedded solid lubricants, \$73.00

### Road vehicles (TC 22)

[ISO 11452-9:2021](#), Road vehicles - Component test methods for electrical disturbances from narrowband radiated electromagnetic energy - Part 9: Portable transmitters, \$250.00

[ISO/PAS 5101:2021](#), Road vehicles - Field load specification for brake actuation and modulation systems, \$225.00

### Rubber and rubber products (TC 45)

[ISO 3934:2021](#), Rubber, vulcanized and thermoplastic - Preformed gaskets used in buildings - Classification, specifications and test methods, \$149.00

### Ships and marine technology (TC 8)

[ISO 24059:2021](#), Ships and marine technology - Anchor chain releasers, \$111.00

[ISO 24061:2021](#), Ships and marine technology - High holding power balance anchors, \$111.00

### Technical systems and aids for disabled or handicapped persons (TC 173)

[ISO 10535:2021](#), Assistive products - Hoists for the transfer of persons - Requirements and test methods, \$225.00

### Tractors and machinery for agriculture and forestry (TC 23)

[ISO 7293:2021](#), Forestry machinery - Portable chain-saws - Engine performance and fuel consumption, \$48.00

[ISO 8893:2021](#), Forestry machinery - Portable brush-cutters and grass-trimmers - Engine performance and fuel consumption, \$48.00

[ISO 11680-1:2021](#), Machinery for forestry - Safety requirements and testing for pole-mounted powered pruners - Part 1: Machines fitted with an integral combustion engine, \$175.00

[ISO 11680-2:2021](#), Machinery for forestry - Safety requirements and testing for pole-mounted powered pruners - Part 2: Machines for use with backpack power source, \$48.00

**Traditional Chinese medicine (TC 249)**

[ISO 23972:2021](#), Traditional Chinese medicine - Zingiber officinale rhizome, \$111.00

**Tyres, rims and valves (TC 31)**

[ISO 3739-3:2021](#), Industrial tyres and rims - Part 3: Rims, \$73.00

[ISO 4000-2:2021](#), Passenger car tyres and rims - Part 2: Rims, \$73.00

**ISO Technical Reports****Geosynthetics (TC 221)**

[ISO/TR 18228-2:2021](#), Design using geosynthetics - Part 2: Separation, \$73.00

**ISO Technical Specifications****Health Informatics (TC 215)**

[ISO/TS 22690:2021](#), Genomics informatics - Reliability assessment criteria for high-throughput gene-expression data, \$73.00

**Nanotechnologies (TC 229)**

[ISO/TS 19807-2:2021](#), Nanotechnologies - Magnetic nanomaterials - Part 2: Specification of characteristics and measurement methods for nanostructured magnetic beads for nucleic acid extraction, \$111.00

**Photography (TC 42)**

[ISO/TS 20791-2:2021](#), Photography - Photographic reflection prints - Part 2: Evaluation of colour variation in printing, \$111.00

**ISO/IEC JTC 1 Technical Reports**

[ISO/IEC TR 24587:2021](#), Software and systems engineering - Agile development - Agile adoption considerations, \$149.00

**ISO/IEC JTC 1, Information Technology**

[ISO/IEC 11770-3:2021](#), Information security - Key management - Part 3: Mechanisms using asymmetric techniques, \$250.00

[ISO/IEC 23091-2:2021](#), Information technology - Coding-independent code points - Part 2: Video, \$175.00

[ISO/IEC 23090-17:2021](#), Information technology - Coded representation of immersive media - Part 17: Reference software and conformance for omnidirectional media format (OMAF), \$73.00

[ISO/IEC TS 30105-6:2021](#), Information technology - IT Enabled Services-Business Process Outsourcing (ITES-BPO) lifecycle processes - Part 6: Guidelines on risk management, \$111.00

**IEC Standards****Electrical installations of ships and of mobile and fixed offshore units (TC 18)**

[IEC 60092-503 Ed. 3.0 en:2021](#), Electrical installations in ships - Part 503: Special features - AC supply systems with voltages in the range of above 1 kV up to and including 36 kV, \$183.00

**Lamps and related equipment (TC 34)**

[IEC 63013 Amd.1 Ed. 1.0 b:2021](#), Amendment 1 - LED packages - Long-term luminous and radiant flux maintenance projection, \$25.00

[IEC 63013 Ed. 1.1 b:2021](#), LED packages - Long-term luminous and radiant flux maintenance projection, \$133.00

**Magnetic components and ferrite materials (TC 51)**

[IEC 62044-3 Ed. 1.0 b Cor.1:2021](#), Corrigendum 1 - Cores made of soft magnetic materials - Measuring methods - Part 3: Magnetic properties at high excitation level, \$0.00

**Power system control and associated communications (TC 57)**

[IEC 61970-452 Ed. 4.0 b:2021](#), Energy management system application program interface (EMS-API) - Part 452: CIM static transmission network model profiles, \$443.00

**Solar photovoltaic energy systems (TC 82)**

[IEC 60891 Ed. 3.0 b:2021](#), Photovoltaic devices - Procedures for temperature and irradiance corrections to measured I-V characteristics, \$259.00

**IEC Technical Reports****Power electronics (TC 22)**

[IEC/TR 60919-3 Amd.2 Ed. 2.0 en:2021](#), Amendment 2 - Performance of high-voltage direct current (HVDC) systems with line-commutated converters - Part 3: Dynamic conditions, \$13.00

[IEC/TR 60919-3 Ed. 2.2 en:2021](#), Amendment 2 - Performance of high-voltage direct current (HVDC) systems with line-commutated converters - Part 3: Dynamic conditions, \$443.00

## Accreditation Announcements (U.S. TAGs to ISO)

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### Transfer of TAG Administrator – U.S. TAG to ISO

#### U.S. Technical Advisory Group (TAG) to ISO TC 82, Mining

**Comment Deadline: November 22, 2021**

The **U.S. Technical Advisory Group (TAG) to ISO TC 82, Mining**, has voted to approve the transfer of TAG Administrator responsibilities from CSA Group to the Association of Equipment Manufacturers (AEM). The TAG will operate under the *Model Operating Procedures for U.S. TAGs to ANSI for ISO Activities*, as contained in Annex A of the *ANSI International Procedures*. Please submit any comments on this action by **November 22, 2021** to: Ms. Valerie Lynch, Publication Manager, Association of Equipment Manufacturers, 6737 W. Washington Street, Suite 2400, Milwaukee, WI 53214; phone: 414.298.4747; email: [vlynch@AEM.org](mailto:vlynch@AEM.org) (please copy [jthomps@ansi.org](mailto:jthomps@ansi.org)). If no comments are received, this action will be formally approved on November 23, 2021.

# International Organization for Standardization (ISO)

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## Call for U.S. TAG Administrator

### ISO/TC 113 - Hydrometry

ANSI has been informed that the U.S. Department of the Interior/U.S. Geological Survey (USGS), the ANSI-accredited U.S. TAG Administrator for ISO/TC 113 – *Hydrometry*, wishes to relinquish their role as U.S. TAG Administrator.

ISO/TC 113 operates under the following scope:

*Standardization of methods, procedures, instruments, and equipments relating to techniques for hydrometric determination of water level, velocity, discharge and sediment transport in open channels, precipitation and evapotranspiration, availability and movement of ground water, including:*

- *terminology and symbols;*
- *collection, evaluation, analysis, interpretation and presentation of data;*
- *evaluation of uncertainties.*

ISO/TC 113 has also established the following active subcommittees:

- ISO/TC 113/SC 1 – *Velocity area methods*
- ISO/TC 113/SC 2 – *Flow measurement structures*
- ISO/TC 113/SC 5 – *Instruments, equipment and data management*
- ISO/TC 113/SC 6 – *Sediment transport*
- ISO/TC 113/SC 8 – *Ground water*

Organizations interested in serving as the U.S. TAG Administrator or participating on a U.S. TAG for any of these ISO committees should contact ANSI's ISO Team ([isot@ansi.org](mailto:isot@ansi.org)).

# International Organization for Standardization (ISO)

## Establishment of ISO Project Committee

### ISO/PC 337 - Guidelines for the Promotion and Implementation of Gender Equality

A new ISO Project Committee, ISO/PC 337 – *Guidelines for the promotion and implementation of gender equality*, has been formed. The Secretariat has been assigned to France (AFNOR).

ISO/PC 337 operates under the following scope:

*Standardization in the field of gender equality with the aim of developing a technical guidance on how to promote and implement gender equality in all types of organizations, public or private, regardless of their size, location and field of activity.*

*The objective is to develop guidelines on:*

- *Concepts, terms and definitions;*
- *Identification of existing good practices;*
- *Definition of actions, strategies, policies for the promotion and implementation of gender equality*

*Excluded: Related standardization work on diversity in human resources management as covered by ISO/TC 260 “Human resources management”*

Organizations interested in serving as the U.S. TAG Administrator or participating on the U.S. TAG should contact ANSI’s ISO Team ([isot@ansi.org](mailto:isot@ansi.org)).

## Establishment of ISO Subcommittee

### ISO/TC 268/SC 2 - Sustainable Cities and Communities - Sustainable Mobility and Transportation

A new ISO Subcommittee, ISO/TC 268/SC 2 – *Sustainable cities and communities - Sustainable mobility and transportation*, has been formed. The Secretariat has been assigned to Japan (JISC).

ISO/TC 268/SC 2 operates in the area of *Sustainable mobility and transportation*, under the scope of ISO/TC 268 *Sustainable cities and communities*:

*Standardization in the field of Sustainable Cities and Communities will include the development of requirements, frameworks, guidance and supporting techniques and tools related to the achievement of sustainable development considering smartness and resilience, to help all Cities and Communities and their interested parties in both rural and urban areas become more sustainable.*

Note that ANSI is not currently a member of ISO/TC 268, *Sustainable cities and communities*, or ISO/TC 268/SC 1, *Smart community infrastructures*.

Organizations interested in serving as the U.S. TAG Administrator or participating on the U.S. TAG should contact ANSI’s ISO Team ([isot@ansi.org](mailto:isot@ansi.org)).



# International Organization for Standardization (ISO)

## ISO Proposal for a New Field of ISO Technical Activity

### Menstrual Products

**Comment Deadline: November 19, 2021**

COPOLCO, ISO consumer policy committee, has submitted to ISO a proposal for a new field of ISO technical activity on Menstrual Products, with the following scope statement:

*Standardization in the field of menstrual products, covering all products intended for both single and multiple use, regardless of material.*

Anyone wishing to review the proposal can request a copy by contacting ANSI's ISO Team ([isot@ansi.org](mailto:isot@ansi.org)), with a submission of comments to Steve Cornish ([scornish@ansi.org](mailto:scornish@ansi.org)) by close of business on **Friday, November 19, 2021**.

## Meeting Notices (International)

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### **ANSI Accredited U.S TAG to ISO**

#### **TC 283, Occupational health and safety management**

**Virtual Meeting Time: November 12, 2021**

The **American Society of Safety Professionals (ASSP)** serves as the administrator for the U.S. Technical Advisory Group [TAG] to ANSI for the ISO TC 283 Committee. The **ISO TC 283** committee addresses **Occupational health and safety management**. The next meeting of the TAG will be held virtually on **November 12, 2021**. The meeting will start at approximately 11:30 a.m. Central Time and go for the conclusion. If you are interested in this virtual meeting, please contact Timothy Fisher, ASSP TAG Administrator at e: [tfisher@assp.org](mailto:tfisher@assp.org).

### **ANSI Accredited U.S TAG to ISO**

#### **TC 283, Occupational health and safety management**

**Virtual Meeting Time: November 12, 2021**

The **American Society of Safety Professionals (ASSP)** serves as the administrator for the U.S. Technical Advisory Group [TAG] to ANSI for the ISO TC 283 Committee. The **ISO TC 283** committee addresses **Occupational health and safety management**. The next meeting of the TAG will be held virtually on **November 12, 2021**. The meeting will start at approximately 11:30 a.m. Central Time and go for the conclusion. If you are interested in this virtual meeting, please contact Timothy Fisher, ASSP TAG Administrator at e: [tfisher@assp.org](mailto:tfisher@assp.org).

# Registration of Organization Names in the United States

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The Procedures for Registration of Organization Names in the United States of America (document ISSB 989) require that alphanumeric organization names be subject to a 90-day Public Review period prior to registration. For further information, please contact the Registration Coordinator at (212) 642-4975.

When organization names are submitted to ANSI for registration, they will be listed here alphanumerically.

Alphanumeric names appearing for the first time are printed in bold type. Names with confidential contact information, as requested by the organization, list only public review dates.

## Public Review

NOTE: Challenged alphanumeric names are underlined. The Procedures for Registration provide for a challenge process, which follows in brief. For complete details, see Section 6.4 of the Procedures.

A challenge is initiated when a letter from an interested entity is received by the Registration Coordinator. The letter shall identify the alphanumeric organization name being challenged and state the rationale supporting the challenge. A challenge fee shall accompany the letter. After receipt of the challenge, the alphanumeric organization name shall be marked as challenged in the Public Review list. The Registration Coordinator shall take no further action to register the challenged name until the challenge is resolved among the disputing parties.

# Proposed Foreign Government Regulations

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## Call for Comment

U.S. manufacturers, exporters, regulatory agencies and standards developing organizations may be interested in proposed foreign technical regulations notified by Member countries of the World Trade Organization (WTO). In accordance with the WTO Agreement on Technical Barriers to Trade (TBT Agreement), Members are required to notify proposed technical regulations that may significantly affect trade to the WTO Secretariat in Geneva, Switzerland. In turn, the Secretariat issues and makes available these notifications. The purpose of the notification requirement is to provide global trading partners with an opportunity to review and comment on the regulations before they become final.

The USA Inquiry Point for the WTO TBT Agreement is located at the National Institute of Standards and Technology (NIST) in the Standards Coordination Office (SCO). The Inquiry Point distributes the notified proposed foreign technical regulations (notifications) and makes the associated full-texts available to U.S. stakeholders via its online service, Notify U.S. Interested U.S. parties can register with Notify U.S. to receive e-mail alerts when notifications are added from countries and industry sectors of interest to them. To register for Notify U.S., please visit: <http://www.nist.gov/notifyus/>.

The USA WTO TBT Inquiry Point is the official channel for distributing U.S. comments to the network of WTO TBT Enquiry Points around the world. U.S. business contacts interested in commenting on the notifications are asked to review the comment guidance available on Notify U.S. at: <https://tsapps.nist.gov/notifyus/data/guidance/guidance.cfm> prior to submitting comments.

For further information about the USA TBT Inquiry Point, please visit: <https://www.nist.gov/standardsgov/what-we-do/trade-regulatory-programs/usa-wto-tbt-inquiry-point> Contact the USA TBT Inquiry Point at (301) 975-2918; F: (301) 926-1559; E: [usatbtep@nist.gov](mailto:usatbtep@nist.gov) or [notifyus@nist.gov](mailto:notifyus@nist.gov).

## Substantive Change Summary BSR MH16.1-202X, Second Ballot Draft

During comment resolution on the second ballot, several substantive changes were made to resolve comments. These changes are summarized as follows:

Sections 7.4.4 and 7.4.6 were swapped to align with the way in which the guidance is presented in ASCE/SEI 7, and substantive changes were made to the text in both sections, as noted below:

### 7.4.4 (formerly 7.4.6) Site coefficients and adjusted maximum considered earthquake spectral response acceleration parameters

Site coefficients and adjusted maximum considered earthquake spectral response acceleration parameters shall be determined in accordance with ASCE/SEI 7 Section 11.4.4 as modified [below in this section](#).

The maximum considered earthquake spectral response acceleration for short periods,  $S_{MS}$ , and at 1-second periods,  $S_{M1}$ , adjusted for site class effects, shall be determined from the following equations:

$$S_{MS} = F_a S_s \quad (7.4-4)$$

$$S_{M1} = F_v S_1 \quad (7.4-5)$$

where:

$F_a$  is the site coefficient defined in Table 7.4-1;

$F_v$  is the site coefficient defined in Table 7.4-2;

$S_s$  is the mapped spectral accelerations for 0.2 second (short) period, as described in 7.4.8;

$S_1$  is the mapped spectral accelerations for a 1-second period, as described in 7.4.8.

**Table 7.4-1 – Values of Site Coefficient  $F_a$  as a Function of Site Class and Mapped Spectral Response Acceleration at Short Periods ( $S_s$ )**

SITE CLASS	MAPPED SPECTRAL RESPONSE ACCELERATION AT SHORT PERIODS					
	$S_s \leq 0.25$	$S_s = 0.50$	$S_s = 0.75$	$S_s = 1.00$	$S_s = 1.25$	$S_s \geq 1.5$
A	0.8	0.8	0.8	0.8	0.8	0.8
B	0.9	0.9	0.9	0.9	0.9	0.9
C	1.3	1.3	1.2	1.2	1.2	1.2
D	1.6	1.4	1.2	1.1	1.0	1.0
D-default	1.6	1.4	1.2	1.2	1.2	1.2
E	2.4	1.7	1.3	NOTE 4	NOTE 4	NOTE 4
F	NOTE 3	NOTE 3	NOTE 3	NOTE 3	NOTE 3	NOTE 3

NOTE 1 – Refer to Table 7.4-3 for site class definitions.

NOTE 2 – Use straight-line interpolation for intermediate values of mapped spectral response acceleration at short period,  $S_s$ .

NOTE 3 – a site response analysis shall be conducted as specified by ASCE/SEI 7, Section 21.1, unless exempted in accordance with ASCE/SEI 7, Section 20.3.1.

NOTE 4 – A ground motion hazard analysis (GMHA) including site effects shall be conducted as specified by ASCE/SEI 7, Section 21.2, except when the site coefficient  $F_a$  is taken as equal to that of Site Class C.

**Table 7.4-2 – Values of Site Coefficient  $F_v$  as a Function of Site Class and Mapped Spectral Response Acceleration at Short Periods ( $S_1$ )**

SITE CLASS	MAPPED SPECTRAL RESPONSE ACCELERATION AT SHORT PERIODS					
	$S_1 < 0.1$	$S_1 = 0.2$	$S_1 = 0.3$	$S_1 = 0.4$	$S_1 = 0.5$	$S_1 \geq 0.6$
A	0.8	0.8	0.8	0.8	0.8	0.8
B	0.8	0.8	0.8	0.8	0.8	0.8
C	1.5	1.5	1.5	1.5	1.5	1.4
D	2.4	NOTE 4	NOTE 4	NOTE 4	NOTE 4	NOTE 4
D-default	2.4	<del>3.33.3</del> (NOTE 5)	3.0	2.85	2.7	2.55
E	4.2	NOTE 4	NOTE 4	NOTE 4	NOTE 4	NOTE 4
F	NOTE 3	NOTE 3	NOTE 3	NOTE 3	NOTE 3	NOTE 3

NOTE 1 – Refer to Table 7.4-3 for site class definitions.

NOTE 2 – Use straight-line interpolation for intermediate values of mapped spectral response acceleration at 1-second period,  $S_1$ .

NOTE 3 – A site response analysis shall be conducted as specified by ASCE/SEI 7, Section 21.1, unless exempted in accordance with ASCE/SEI 7, Section 20.3.1.

NOTE 4 – A GMHA including site effects shall be conducted as specified by ASCE/SEI 7, Section 21.2.

NOTE 5 – For  $S_1$  values greater than 0.1 and less than 0.2, interpolate between 2.4 and 2.2.

#### 7.4.6 (formerly 7.4.4) Determination of the seismic response coefficient

The seismic response coefficient in each horizontal direction shall be determined in accordance with ASCE/SEI 7, Section 12.8.1.1, as modified in this section:

The seismic response coefficient,  $C_s$ , shall be determined in accordance with the following equation:

$$C_s = \frac{S_{DS}}{R} \quad (7.4-8)$$

where:

$C_s$  is the seismic response coefficient;

$S_{DS}$  is the design earthquake spectral response acceleration at a short period as described in 7.4.4;

$R$  is the response modification factor:  $R = 4.0$  in the braced direction and  $R = 6.0$  in the moment frame direction. Higher values are permitted, if substantiated by tests.

When the fundamental period of the rack structure is computed, the value of  $C_s$  determined in accordance with the equation above need not exceed the following:

$$C_s = \frac{S_{D1}}{TR} \quad (7.4-9)$$

$C_s$  shall not be less than:

$$C_s = 0.044S_{DS} \geq 0.01 \quad (7.4-10)$$

In addition, for structures located where  $S_1 \geq 0.6g$ ,  $C_s$  shall not be less than:

$$C_s = \frac{0.5S_1}{R} \quad (7.4-11)$$

where:

$S_{D1}$  is the design earthquake spectral response acceleration at a 1-second period, as described in 7.4.4;

$T$  is the fundamental period of the rack structure in each direction under consideration established using the structural properties and deformation characteristics of the resisting elements in a properly substantiated analysis. For the moment frame direction, the period shall be determined using a connection stiffness,  $F$ , not less than the value from 13.5;

$S_1$  is the mapped spectral acceleration for a 1-second period, as described in 7.4.8.

$$S_{M_s} = F_a S_s \quad (7.4-12)$$

$$S_{M_1} = F_v S_1 \quad (7.4-13)$$

## 7.8 Mapped ~~spectral~~ acceleration parameters $S_s$ and $S_1$

The mapped acceleration parameters shall be determined in accordance with ASCE/SEI 7, Section 11.4.2. The parameters  $S_s$  and  $S_1$  ~~are available~~ shall be as specified from Figures 1 through 6 in Appendix A or in ASCE/SEI 7, Chapter 22.

NOTE 1 – A software program providing mapped values in accordance with ASCE/SEI 7, Chapter 22, and maps are also accessible at <https://asce7hazardtool.online/> or <https://seismicmaps.org> to determine the values based on the street address or latitude and longitude of the site.

NOTE 2 – For jurisdictions that require that structural design meet the ~~2018-2021~~ International Building Code (IBC), seismic design ground motion values for a specific site location and site soil conditions determined in accordance with Chapter 16 of the ~~2018-2021~~ IBC are provided at <https://asce7hazardtool.online/> or <https://seismicmaps.org>. To be an acceptable source of design values associated with the ~~2018-2021~~ IBC, seismic design value websites are required to utilize the electronic values of mapped acceleration parameters provided by the U.S. Geological Survey (USGS) website <https://doi.org/10.5066/F7NK3C76>. The user is cautioned to verify that the website being used utilizes this USGS website to obtain its ~~2018-2021~~ IBC seismic design ground motion values.

## 9.3 Deflections

At the unfactored load (excluding impact), the maximum deflection at any point of a beam shall not exceed 1/180 of the span measured with respect to the ends of the beam. The deflection of the beam shall be measured when loaded and when unloaded, and the difference between these two measurements shall be taken as the net deflection that shall be limited to L/180.

~~At working load (excluding impact), the deflections shall not exceed 1/180 of the span measured with respect to the ends of the beam.~~

### 10.2.3 Column length for torsional buckling

The column length for torsional buckling shall be taken as 0.8 times the distance between connection points ( $K_t = 0.8$ ) provided that the connection details between the columns and the braces are such that the twisting of the column is prevented at the brace points. If the connections do not prevent twist, the torsional buckling length can be larger and shall be determined by rational analysis or testing. The column length,  $L_{t,1}$  for torsional buckling shall be taken as the length of the member unbraced against twisting. The effective length shall be taken as  $0.8K_t L_{t,1}$  where  $K_t$  is the effective length factor for torsional buckling, provided that the connection details between the columns and the braces prevent twisting of the column at the brace points. If the connections do not prevent twist, then the torsional buckling column length can be larger and shall be determined by rational analysis or testing.

### 11.3.2 Overstrength design for anchor bolts

Anchor bolts in racks assigned to Seismic Design Category C or higher shall be designed in accordance with this section. The required strength of the anchorage, including overstrength ( $T_{anch}$ ), shall be calculated as:

$$T_{anch} = \phi U_{en} \Omega_0 \quad (11.3-1)$$

where:

$\phi U_{ne}$  is the net uplift resulting from LRFD load combination #7 in ~~are the forces generated resulting from the Earthquake Load  $E$  in 7.1.2 and 7.1.3 or 1.5 times the net uplift resulting from ASD load combination #10 in 7.1.2;~~

$\Omega_0$  is the overstrength factor.

The following changes were made to the Commentary document. Although ANSI would not consider changes to a commentary document to be “substantive,” the drafting committee believed these changes were sufficiently noteworthy to identify to the consensus body for consideration.

#### C4.6 Load application and rack configuration drawings

Complete engineering data should be available on the design and capacity of the racks as originally ordered, delivered, and installed, so ~~that~~ this information could be used for future reference, safety inspections, repairs, or proposed modifications.

This section ~~provides~~ ~~requires that~~ LARC drawings ~~with load magnitude and application indications~~ be furnished by the rack dealer or manufacturer’s ~~local~~ representative involved in procuring and erecting the rack installation. The LARC drawings are required to include the load magnitude and applications.

LARC drawings should be maintained by the owner and the dealer. The provision that both these parties retain such information on file is important because both the owner of the rack installation and the local dealer because either party could change over the lifetime of the installation. The safekeeping maintenance of such information LARC drawings by both parties will greatly increase the probability that such information the drawings will be available when needed for future reference.

#### C7.4.4 Site coefficients and adjusted maximum considered earthquake spectral response acceleration parameters

Mapped spectral acceleration parameters  $S_S$  and  $S_1$  apply to sites that have  $\bar{v}_s=2,500$  ft/s (soils between Site Class B and C). For all other soils, the values for  $S_S$  and  $S_1$  need to be adjusted. This is done by means of site coefficients  $F_a$  and  $F_v$  listed in Tables 7.4-1 and 7.4-2, respectively. Special attention needs to be given to Site Class D.

Notes to Table 7.4.-1 for Site Coefficient  $F_a$ :

There is a choice of Site Class D and D-default in Table 7.4-1. Section 7.4.7 includes additional information on Site Class D-default. ASCE/SEI 7, Section 11.4.4 requires that value of the site coefficient  $F_a$  shall not be less than 1.2 for Soil Class D-default to ensure that this value is not less than  $F_a$  for Site Class C. ANSI MH16.1, Table 7.4.-1 expands ASCE/SEI 7, Table 11.4-1 to include Soil Class D-default for clarity.

Notes to Table 7.4-2 for Site Coefficient  $F_v$ :

ASCE/SEI 7, Section 21.2, Site Class D requires that for  $S_1 \geq 0.2$ , a Ground Motion Hazard Analysis (GMHA) is needed, unless Site Class D-Default values are used. The value of 2.4 for  $S_1 < 0.1$  is taken directly from ASCE/SEI 7, Table 11.4.2. The value of 2.2 for  $S_1 = 0.2$  in Table 7.4.2 is also taken directly from ASCE/SEI 7, Table 11.4.2. Table 7.4-2 Note 5 allows for interpolation between 2.4 and 2.2 for  $S_1 > 0.1$  and  $S_1 \leq 0.2$ . For Site Class D-default, the other values for  $S_1 \geq 0.2$  have been amplified so that a site-specific GHMA is not required. The GHMA needs to include site effects. There is also a possibility to use values without the ground motion hazard analysis. For that case, the values listed in Table 11.4-2 shall be amplified (the response spectrum shall be modified). ANSI MH16.1, Table 7.4-2 amplifies these values directly, allowing for a choice between Site Class D with GMHA or Site Class D without GMHA. For Site Class D with GMHA, Table 7.4-2 includes a note with a reference to ASCE/SEI 7, Section 21.2 which gives details on GMHA. For Site Class D without GMHA, Table 7.4-2 includes the applicable values of Site Coefficient  $F_v$ .



## C7.8 Seismic overturning

The overturning checks are intended for only anchor uplift and floor reactions. ANSI MH16.1-202X requires two separate overturning checks. One is for the case of all storage positions loaded to 67% of the full rated capacity and the other for 100% in the top load position only.

Due to added conservatisms in the anchorage design and to simplify the analysis, this edition of the specification allows the overturning forces to be applied to the rack at the beam levels rather than at the load center of gravity as required by previous editions of the specification.~~Overturning checks need to be done considering the lateral forces acting at the elevation of the center of mass of the loads.~~

## BSR/UL 1973, Standard for Safety for Batteries for Use in Stationary, Vehicle Auxiliary Power and Light Electric Rail (LER) Applications

### 1. Testing of Modules during the short circuit test.

16.2A The direct short circuit test shall also be conducted on the battery module if it is intended to be installed or replaced in the field. The output of the battery module sample shall be short-circuited with a shorting device having resistance as low as practicable with a maximum total resistance of 20 mΩ.

16.10 As a result of the short circuit test, the following in (a) - (h) are considered non-compliant results. For additional information on non-complying results refer to Table 12.1.

- a) E - Explosion;
- b) F - Fire;
- c) C - Combustible vapor concentrations;
- d) V - Toxic vapor release;
- e) S - Electric shock hazard (dielectric breakdown);
- f) L - Leakage (external to enclosure of DUT);
- g) R - Rupture (of DUT enclosure exposing hazardous parts as determined by 7.3.3);
- h) P - Loss of protection controls.

Exception: For modules that do not have integral short circuit protection controls, the compliance criteria is (a) and (b) above only.

### 3. Addition of an exception to the General Performance Section for the test time for lithium ion cells or batteries.

8.1 Unless indicated otherwise the device under test (DUT) shall be at the maximum operational state of charge (MOSOC), in accordance with the manufacturer's specifications, for conducting the tests in this standard. After charging and prior to testing, the samples shall be allowed to rest for a maximum period of 8 h at room ambient.

Exception: For secondary lithium ion cells or batteries in which temperature is not a dependency on the test, the rest time may be extended from 3 h to 36 h, but shall not be less than 90% MOSOC, and the manufacturer's BMS data may be used to determine the MOSOC.

### 4. Revision to Table 12.1, Note (d) for loss of primary control.

**Table 12.1 - Non-compliant test results**  
(NOTE FROM STP PROJECT MANAGER: ONLY PART OF TABLE 12.1 IS SHOWN FOR EASE OF REVIEW)

Tests <sup>a</sup>	Non-compliant results
	<sup>d</sup> Loss of protection controls - Failure of software and/or electronic controls, discrete control devices or other built-in electrical protection components relied upon for safety and that remain in the circuit during the test, to operate as intended. Failure of electrical components such as circuit breakers, that fail in a safe condition that does not allow the system to reconnect into an unsafe condition are acceptable.

## 5. Addition of an Exception for the Drop Impact Test SOC.

30.2 After being equilibrated at room temperature per 8.3, a fully charged module/component pack shall be dropped from a minimum height of 100 cm (39.4 in) for products weighing 7 kg (15.4 lbs) or less, 10 cm (3.9 in) for products weighing >7 kg (15.4 lbs), but less than 100 kg (220.5 lbs), and 2.5 cm (0.98 in) for products weighing > 100 kg (220.5 lbs), to strike a concrete or metal surface in the position most likely to produce adverse results and in a manner most representative of what would occur during maintenance and handling/removal of the battery system during installation and servicing. The orientation of the drop shall be determined by the testing personnel from an analysis of the installation and servicing instructions. If using a metal test surface, it should be provided with some manner of insulation such as insulating film that will prevent inadvertent short circuiting to the surface but will not affect test results.

*Exception No. 1: If the System's User Manual clearly states a lower maximum SOC below 100% allowed for removal and installation of modules, the module may be tested at both 100% SOC and the SOC listed in the system's user manual for removal.*

*Exception No. 2: For flow battery systems, if the system's user manual specifies that the system is to be installed and removed with no electrolyte in the system, then the test shall be conducted without electrolyte.*

## 7. Moving all lithium cell requirements into UL 1973.

6.28A LITHIUM METAL CELL— A rechargeable battery technology that employs lithium metal as the anode material, various compounds for the cathode (e.g. vanadium oxide) with a solid polymeric or ceramic electrolyte. Some types of lithium metal solid state batteries may require heating in order to be activated.

NOTE: These cells may be referred to as solid state batteries if they employ a solid polymeric or ceramic electrolyte.

E10.10.1 Each test sample cell shall be placed on a flat screen that covers a 102-mm (4-in) diameter hole in the center of a platform table. The flat screen cover shall be constructed of steel wire mesh having 20 openings per square 25.4 mm (1 in) area and a wire diameter of 0.43 mm (0.017 in).

E10.10.3 An eight-sided covered wire cage, 610-mm (12-in) across and 305-mm (12-in) high, made from metal screening shall be placed over the test sample. See Figure E.2. The metal screening shall be constructed from 0.25-mm (0.010-in) diameter aluminum wire with 16 - 18 wires per square 25.4 mm (1 in) in each direction.

*Exception No. 1: The overall dimensions of the projectile test aluminum test screen may be increased from those outlined above to accommodate large cells intended for EV applications but the flat panels of the test screen shall not exceed a distance of 305 mm (12 in) from the cell in any direction.*

*Exception No. 2: The projectile test cage may be replaced by a visible circular perimeter marking on the supporting surface located 0.5 m (19.7 in) from the longest side of the cell. The marking shall be no greater than 5-mm (0.2-in) thick. The test set-up shall be located within a protective enclosure/room with noncombustible surfaces located a distance from the test perimeter marking where any projectiles that fall beyond the test perimeter marking can be safely contained.*

## 8. Addition of requirements for repurposing batteries.

8.2 Unless otherwise indicated, fresh samples (i.e. not more than 6 months old) representative of production shall be used for the system level tests described in Sections 15 - 39. The test program and number of samples to be used in each test is shown in Table 8.1.

*Exception No. 1: At the agreement of the manufacturer, DUT samples may be re-used for more than one test if not damaged in a manner that would affect test results. Minor repairs can be made to samples such as replacement of fuses, etc. in order to reuse samples for multiple tests.*

*Exception No. 2: For repurposed batteries and battery systems, the "repurposing manufacturing date" is the date of manufacture used to determine the 6 month threshold.*

### 9. Clarification of lead acid battery requirements.

H3.5.1.2 During the test, the samples shall be installed in an alcove painted black and separated from the wall by the minimum separation distances recommended by the manufacturer for the end use application. The DUT under test shall be surrounded by target cells or batteries spaced to represent the minimum clearance distances between cells or batteries specified by the manufacturer. Target cells or batteries may be either discharged samples or just the external casing of the cells or batteries.

### 11. Revisions to the External Fire Test.

**Table 8.1 - Tests and sample requirements for battery systems and packs**  
(NOTE FROM STP PROJECT MANAGER: ONLY PART OF TABLE 8.1 IS SHOWN FOR EASE OF REVIEW)

Test	Section	Number of samples <sup>a</sup>
<del>External Fire Exposure for Projectile Hazards Test<sup>c</sup> Thermal Exposure for Explosion Hazards Test<sup>e</sup></del>	38	1

**Table 12.1 - Non-compliant test results**  
(NOTE FROM STP PROJECT MANAGER: ONLY PART OF TABLE 12.1 IS SHOWN FOR EASE OF REVIEW)

Tests <sup>a</sup>	Non-compliant results
<del>External Fire Exposure for Projectile Hazards Test Thermal Exposure for Explosion Hazards Test</del>	E

### 38 External Fire Exposure for Projectile Hazards Test Thermal Exposure for Explosion Hazards Test

### 14. Addition of measurement of cell voltages during overcharge and overdischarge tests.

15.7 As a result of the overcharge test, the maximum charging voltage measured on the cells or modules shall not exceed their normal operating region, range. Also, the following in (a) – (h) are considered non-compliant results. For additional information on non-complying results refer to Table 12.1.

- a) E – Explosion;
- b) F – Fire;
- c) C – Combustible vapor concentrations ;
- d) V – Toxic vapor release;
- e) S – Electric shock hazard (dielectric breakdown);
- f) L – Leakage (external to enclosure of DUT);
- g) R – Rupture (of DUT enclosure exposing hazardous parts as determined by 7.3.3);
- h) P – Loss of protection controls.

### 15. Clarification of the single cell failure design tolerance test.

39.2.5 Temperatures on the failed cell and surrounding cells, external enclosure surfaces of the DUT and the supporting surface are to be monitored and reported for information purposes. ~~The number of cells that fail due to propagation from the triggering cell shall be documented.~~

## 16. Proposals for flowing electrolyte batteries.

7.11.4A With reference to 7.11.4, flowing electrolyte battery systems shall be designed to mitigate shunt currents. Imbalance conditions and the potential for corrosion of the electrolyte containment parts may occur as a result of excessive shunt currents in a flowing electrolyte battery system. The flowing electrolyte battery manufacturer shall demonstrate through analysis and data that shunt currents have been mitigated as a result of the system design.

~~C4.4.1 A cell stack, cycled (i.e. charged and discharged) to 25% of anticipated cycle life or cycled continuously for 90 days whichever is shorter, shall be subjected to a short circuit test to a total external resistance of less than or equal to 20 mΩ until the cell stack is completely discharged, or the operation of an integral protective device or other results. See Table C1.1.~~

~~C5.3.2.2 The overdischarge test of Section 17 shall be modified for flowing electrolyte type battery systems to consider an overdischarge condition A test shall be conducted to evaluate any hazards resulting from an electrolyte pump failure or electrolyte blockage during a maximum constant current discharge. During the test the temperature of the electrolyte(s) shall be measured and recorded.~~

C5.3.2.3 As a result of the pump failure/blockage during discharging test, the following in (a) – (h) are considered non-compliant results. For additional information on non-complying results refer to Table 12.1.

- a) E – Explosion;
- b) F – Fire;
- c) C – Combustible vapor concentrations;
- d) V – Toxic vapor release;
- e) S – Electric shock hazard (dielectric breakdown);
- f) L – Leakage (external to enclosure of DUT);
- g) R – Rupture (of DUT enclosure exposing hazardous parts as determined by 7.3.3);
- h) P – Loss of protection controls.

## 19. Inclusion of EMC testing for electronic safety controls.

24A.1.3 During specific tests as indicated in 24A.2 - 24A.7, the DUT shall be subjected to a charge/discharge cycle in accordance with the manufacturer's specification. No non-compliant results as outlined in Table 12.1 shall occur during the charge/discharge cycle. It is acceptable if the charge/discharge cycle is not completed at the conclusion of the test.

Exception: It is acceptable if the charge/discharge cycle is not completed at the conclusion of the test.

## 22. Revisions to Section 7.1 to address all non-metallic materials.

7.1.5 Polymeric materials used as direct support for live parts other than those circuits determined non-hazardous (i.e. limited power circuits) shall comply with the insulation requirements of UL 746C.

Exception: Polymeric materials used as direct support for live parts that meet the requirements for "Safeguards Against Fire Under Normal Operating Conditions and Abnormal Operating Conditions," Clause 6.3, of UL 62368-1/CSA C22.2 No. 62368-1, or the requirements for "Safeguards Against Fire Under Single Fault Conditions," Clause 6.4, of UL 62368-1/CSA C22.2 No. 62368-1 are considered acceptable. Where specified in the reference document that components must meet the relevant IEC component standards, those components shall meet the applicable CSA or UL Standards.

7.1.5A Polymeric materials other than enclosures and materials for use for electrical insulation or other applications shall comply with requirements for “Safeguards Against Fire Under Normal Operating Conditions and Abnormal Operating Conditions,” Clause 6.3, of UL 62368-1/CSA C22.2 No. 62368-1, or the requirements for “Safeguards Against Fire Under Single Fault Conditions,” Clause 6.4, of UL 62368-1/CSA C22.2 No. 62368-1.

7.1.5A Polymeric tanks, piping and housings containing only electrolyte and sensors in flow batteries shall have a flammability rating of HB or better in accordance with UL 94.

7.1.5B Printed wiring boards shall have a flammability rating of V-0 or V-1 in accordance with UL 94.

Exception: This requirement does not apply to printed wiring boards connected only in low-voltage, limited-energy circuits (LVLE) where the deterioration or breakage of the bond between a conductor and the base material does not result in a risk of fire or electric shock.

## 26. Inclusion of sodium ion technology batteries.

6.45A SODIUM ION CELLS – Cells that are similar in construction to lithium ion cells except they utilize sodium as the ion of transport with a positive electrode consisting of a sodium compound, and carbon or similar type anode with an aqueous or non-aqueous electrolyte and with a sodium compound salt dissolved in the electrolyte. An example of a sodium ion cell technology is a Prussian Blue cell.

NOTE: Examples of sodium ion cells are Prussian Blue cells or transition metal layered oxide cells.

7.11.7 Sodium ion cells (e.g. Prussian Blue cells or transition metal layered oxide cells) shall comply with Appendix E, and be marked as required in 41.14 and 41.15. Cells shall be provided with specifications as outlined in 42.7.

## 31. Addition of criteria for transformers.

7.6A.2 Transformers in low voltage dc-circuits can alternatively be evaluated in accordance with 24.6.

7.6A.3 Transformers shall be provided with overcurrent protection on the primary side of the transformer and sized in accordance with Article 450 of NFPA 70 or Section 26 of C22.1.

**Table 8.1 - Tests and sample requirements for battery systems and packs**  
(NOTE FROM STP PROJECT MANAGER: ONLY PART OF TABLE 8.1 IS SHOWN FOR EASE OF REVIEW)

Test	Section	Number of samples <sup>a</sup>
Low Voltage DC Transformer Evaluation	24.6	b

### 24.6 Low voltage DC transformer evaluation

24.6.1 The purpose of this test is to determine that transformers located in low voltage dc-circuits (i.e.  $\leq 60$  Vdc) do not present a fire hazard under overload conditions. Transformers complying with UL 1310 or equivalent standard and evaluated under overload conditions are considered to comply with these requirements without further testing.

## 32. Overload under discharge.

16A.6 Condition 2 is the overload above the BMS overcurrent protection (secondary protection), but below the primary overcurrent protection in accordance with 16A.7 – 16A.9.

## **BSR/UL 120002, Recommended Practice for Certificates for Equipment for Hazardous (Classified) Locations**

### **1. Proposed Second Edition to Redesignate the Standard for Safety for the Certificate Standard for AEx Equipment for Hazardous (Classified) Locations to the Recommended Practice for Certificates for Equipment for Hazardous (Classified) Locations.**

#### **PROPOSAL**

##### **1 Scope**

1.1 This recommended practice identifies elements of certificates for equipment for hazardous (classified) locations.

NOTE 1: The recommended practice may be used for equipment under either the Division or Zone area classification systems.

NOTE 2: This recommended practice relates to equipment intended for use in a Hazardous (Classified) Location or for equipment intended to be connected to a system that contains a Hazardous (Classified) Location.

NOTE 3: Certificates may be requested by, and used by, end users or installers of equipment in order to document the suitability of equipment to the Authority Having Jurisdiction (AHJ).

##### **2 Units of Measurement**

2.1 Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information.

##### **3 Reference Publications**

3.1 Products covered by this guidance document should comply with the referenced installation codes and standards noted in this clause as applicable.

3.2 Where reference is made to any Standards, such reference shall be considered to refer to the latest editions and revisions thereto available at the time of printing unless otherwise specified.

ISO/IEC 80079-34, Explosive Atmospheres – Part 34: Application of Quality Systems for Equipment Manufacture

UL 60079-0, Explosive Atmospheres – Part 0: Equipment – General Requirements

UL 80079-36, Explosive Atmospheres – Part 36: Non-electrical equipment for explosive atmospheres – Basic method and requirements

UL 120101, Definitions and Information Pertaining to Electrical Equipment in Hazardous (Classified) Locations

NFPA 70, National Electrical Code (NEC)

## 4 Glossary

4.1 For the purpose of this recommended practice, the following definitions apply.

4.2 CERTIFICATE - Document that conveys the assurance of the conformity of a product, process, system, person, or organization with specified requirements. [SOURCE: UL 60079-0]

NOTE: "Certification" is a conformity assessment by a third party which results in listing or labelling, whereas a "certificate" may be prepared by a first, second, or third party.

4.3 CERTIFICATE HOLDER - The entity whose name is used on, or in conjunction with, a product and appears on the certificate.

4.4 EQUIPMENT – General term including apparatus, fittings, devices, components and the like used as a part of, or in connection with an installation. [SOURCE: UL 60079-0]

4.5 HAZARDOUS (CLASSIFIED) LOCATIONS – Locations where fire or explosion hazards may exist due to flammable gases, flammable liquid-produced vapors, combustible-liquid-produced vapors, combustible dusts, or ignitable fibers/flyings. Commonly abbreviated "HazLoc". [SOURCE: UL 120101]

4.6 MANUFACTURER - An organization, situated at a stated location or locations, that carries out or controls such stages in the manufacture, assessment, handling and storage of a product that enables it to accept responsibility for continued compliance of the product with relevant requirements and undertakes all obligations in that connection. [SOURCE: ISO/IEC 80079-34]

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4.7 MARKING – Identification showing the equipment has been evaluated for use in a Hazardous (Classified) Location environment. [SOURCE: NFPA 70 (NEC)]

NOTE: As applicable per NFPA 70 500.8, 505.9, 506.9, UL 60079-0 or UL 80079-36, this may include the Type of Protection or Protection Technique and other markings.

4.8 TEST REPORT - A documented record of the obtained test and assessment results for endorsement, demonstrating that the examined product type is in conformity with specified Standards

4.9 TYPE OF PROTECTION - Specific measures applied to electrical or non-electrical equipment to minimize the risk of ignition of a surrounding explosive atmosphere. [SOURCE: UL 60079-0 and UL 80079-36]

4.10 PROTECTION TECHNIQUE - See 4.9 Type of Protection.

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## 5 Certificates

5.1 The certificate should incorporate the following elements, as applicable:

No.	Element	Comment, example or clarification
(1)	Certificate number	A unique identification (some Certificate schemes have a required format).
(2)	Certificate Revision	A unique identification of revision level of the Certificate.
(3)	Equipment Identification	Model code structure with any permitted variations or serial number.
(4)	Certificate Holder	Entity responsible for the equipment to which the Certificate applies.
(5)	Test Report Identifier	A unique identification for the assessment report on which the Certificate is based.
(6)	Applicable Standards	Standards, including edition or year of issue, to which the equipment was assessed.
(7)	Equipment Marking	<p>Identification of hazardous (classified) location in which the equipment may be used:</p> <p>NOTE 1: While <math>T_{code}</math> and ambient temperatures are optional on the Certificate, they are required equipment marking except when permitted otherwise by the NEC, and Class I is optional for Zones per the NEC and UL 60079-0 Ed. 7.</p> <p>NOTE 2: Equipment HazLoc Marking field can also include the Protection technique(s) or Type(s) of Protection.</p>
(8)	Signature	Title, printed name and signature of person authorizing the Certificate.
(9)	Date of issuance	<p>YYY-MM-DD</p> <p>NOTE: ISO 8601 format is shown above this is the preferred format but there is no required format.</p>
(10)	Issuer	Name of organization issuing the Certificate.
(11)	Page numbers	Page x of y
(12)	<p>[Optional] Specific Conditions of Use</p> <p>NOTE – For component certificates, a “Schedule of Limitations” or “Conditions of Acceptability” section may replace “Specific Conditions of Use”</p>	<p>Critical information relating to the use of the equipment or component; this may include any of the following:</p> <ul style="list-style-type: none"> <li>- Installation requirements.</li> <li>- Maintenance requirements.</li> <li>- Operation requirements.</li> <li>- Entity parameters.</li> <li>- Reference to Control Drawings.</li> </ul>
(13)	[Optional] Description of the product	Free format that may include functions of the product, enclosure (IP) ratings, electrical ratings, options, etc.
(14)	[Optional] Test and Assessment Documentation	Reference to test and assessment documentation supporting the Test Report (5).

NOTE 1: A certificate is a statement of fact at a point in time relating to the compliance of a product against a specific set of requirements.

NOTE 2: Components are not suitable for installation on their own, but only for integration into Equipment that would be subjected to additional review by a 3<sup>rd</sup> party. Components have “Schedule of Limitations” or “Conditions of Acceptability” and can be identified with a “U” suffix on the certification number.

NOTE 3: Items 3, 6 and 12 to 14 may appear as a note, "see the Annex to the certificate," or equivalent.

NOTE 4: Equipment with "Specific Conditions of Use" can be identified with "X" suffix on the certificate number.

## APPENDIX A (Informative)

### Certificate Example

Certificate	
(1)	Certificate number: ICU 06.9375
(2)	Revision: 00
(3)	Personal Gas Detectors Models GGAS 3000, SGAS 3020, GOGAS 3040
(4)	Detector Systems, Inc. 8088 West 57th Ave Charleston, WV 25303, USA
(5)	Test Report: 123AB/00
(6)	UL 60079-0 UL 60079-11 UL 60079-29-1
(7)	Class I, Division 1, Groups A, B, C and D, T4 - $50^{\circ}\text{C} \leq T_a \leq 60^{\circ}\text{C}$ Zone 1, AEx db ib IIC T4 Gb - $50^{\circ}\text{C} \leq T_a \leq 60^{\circ}\text{C}$
(8)	<i>Jane Doe</i>  Ms. Jane Doe, P.E. Senior Certification Engineer
(8)	Date of issuance: 2020-03-26
(10)	ICU Certification and Testing Laboratory 1313 Mockingbird Lane Lexington, KY USA  © This Certificate may only be reproduced in its entirety and without any change.
(11)	Page 1 of 2
	ANNEX
(12)	Specific Conditions of Use Electrical Data: The unit shall only be powered by two "AA" batteries of one of the following types: Nitrocell MN1500 or BreadyE91
(13)	Description of the product The unit is a handheld Personal Gas Detector for detection of flammable gases, flammable vapors, and combustible liquid vapors, and oxygen. Personal Gas Detectors Model GGAS 3000 is designed to handle flammable gases, flammable vapors, and combustible liquid vapors, Model SGAS 3020 is designed for specific gas signatures.
(14)	Test Report: Technical File 4215, Revision A Drawings: 047-0300-001 Rev A1, 047-1004001 Rev A (10 sheets)
(15)	Page 2 of 2

## APPENDIX B (Informative)

### Examples of specific conditions of use

Specific conditions of use should be descriptive of the hazard and mitigation required for safe installation.

[SOURCE: IEC Equipment for Explosive Atmospheres Good Working Practices (GWP)]

The following are examples of “acceptable” entries for specific conditions of use:

- The product was subjected to the impact tests corresponding to low risk of mechanical danger in accordance with UL 60079-0. Therefore, the product shall be mounted to minimize the risk of impact.

NOTE: Acceptable specific condition related to the strength of enclosure.

- To maintain the rated ingress protection, the product shall be mounted with the sensor downward within 5° of vertical.

NOTE: Acceptable specific condition related to ingress protection assessment.

The following are examples of “unacceptable” entries for specific conditions of use:

- The fault current must be limited.

NOTE: Unacceptable specific condition does not specify the current limit.

- The user shall test the non-metallic enclosure annually for conductivity.

NOTE: Unacceptable specific condition does not state the conductivity required.

- The user is provided without cable glands. The cable glands must be certified.

NOTE: Unacceptable specific condition is an installation issue.

- The user must conform to the instructions of the manufacturer.

NOTE: Unacceptable specific condition does not specify specific document for user instructions.

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