



# Technical Standards Program

## ESTA Standards Watch

Late April 2021 Volume 25, Number 8

### Table of Contents

Four ESTA standards in public review.....	1
Comments solicited on TIAs for the NEC about dimmer and relay racks.....	2
New Fog & Smoke project.....	2
ANSI seeks comments on proposed ISO online game terminology standard.....	3
WTO Technical Barrier to Trade notifications.....	3
Thailand Notification THA/611.....	3
Thailand Notification THA/608.....	4
United States of America Notification USA/1722.....	4
United States of America Notification USA/1723.....	4
Ecuador Notification ECU/503.....	5
ANSI public review announcements.....	5
Due 24 May 2021.....	5
Due 31 May 2021.....	6
Due 7 June 2021.....	6
Due 8 June 2021.....	7
Due 22 June 2021.....	7
CSA public review announcements.....	8
Due 29 May 2021.....	8
Due 31 May 2021.....	8
New ANS projects.....	8
Final actions on American National Standards.....	11
Draft IEC & ISO documents.....	12
Recently published IEC & ISO documents.....	12
TSP meeting schedule.....	14
TSP donors who have made long-term, multi-year pledges.....	15
Investors in Innovation, supporters of ESTA's Technical Standards Program.....	16

### Four ESTA standards in public review

Four standards are posted for public review on the ESTA website at [https://tsp.esta.org/tsp/documents/public\\_review\\_docs.php](https://tsp.esta.org/tsp/documents/public_review_docs.php). Comments are due before the end of the day noted for each. A day later . . . “Aw, you missed it.”

**BSR E1.40, Recommendations for the Planning of Theatrical Dust Effects**, gives guidance on planning theatrical dust effects to avoid injury from dust inhalation and from fire and deflagration. The working group proposes to reaffirm [the existing standard](#). Comment before the end of the day, June 21. The review is closed, over, finished, and done on June 22.

**BSR ES1.6, Event Safety -- Communications**, applies to communications in the live event industry, and describes requirements for both internal communication and public information for live events and related

activities. It provides guidelines and good practices for effective communication within the production and operation of a live event. It describes communication messaging and technology for internal operations and external groups, such as the audience or general public, with guidelines for assessment with all involved entities. The goal is to determine logistics of and provide channels for general, operational, management, security, health and safety information to the affected parties in a timely manner. While this document will address communicating with law enforcement, medical support, or other AHJs, this standard specifically does not address any communications within AHJs or military operations, as these systems are determined by those organizations and are beyond the scope of this document. Comment before the end of the day, June 21. If you wait until June 22, you've missed the deadline.

**BSR ES1.4, Event Safety - Fire Safety Requirements**, applies to fire safety in the live event industry, including concerts, festivals, sporting events, motorsports, community celebrations, theater and film production, corporate events, trade shows, and similar events, both indoors and outdoors. Fire safety is the identification and assessment of event specific fire risks, and the effects that fire and smoke will have to the life safety of all persons who may be affected. It includes those measures required to minimize the likelihood of a fire starting, means of egress, fire safety monitoring, and the methods used to limit the development, spread, and effects of fire. Comments are due no later than June 27.

**BSR E1.4-1, Entertainment Technology -- Manual Counterweight Rigging Systems**, is a revision of ANSI E1.4-1 - 2016. It applies to permanently installed, manually operated counterweight systems of stage rigging hardware for the raising, lowering, and suspension of scenery, lighting, and similar loads. The revision includes changes made to enhance clarity, and to update the requirements for consistency with current recommended practices and technology. Comment before July 26 starts.

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## Comments solicited on TIAs for the NEC about dimmer and relay racks

Two Tentative Interim Amendments to the 2020 National Electrical Code have been proposed. They affect the listing of theatrical dimmer and relay racks for use in accordance with NFPA 70, the National Electrical Code. The proposed TIAs are No. 1573, referencing clause 520.21, and No. 1574, referencing clause 520.53. The TIAs are necessary to prevent the de-listing of most, if not all, modern high-density dimmer and relay racks as currently manufactured.

The problem is that new requirements for switchboards in Chapter 4, Equipment for General Use, were added with the 2020 edition of the NEC. Connections on switchboards now must be located so it is not necessary for an electrician to reach across uninsulated, energized buses to make load connections. The assumption is that sometimes an electrician will make these connections on a switchboard while the power is on. However, changing the load wiring on an energized switchboard is prohibited by the warnings and instructions for the switchboard. Furthermore, from a practical point of view, the construction of high-density theatrical dimmer and relay racks does not allow for wiring changes while energized due to their closely packed busbars and load connections. That density also makes these new requirements, written for general use switchboards, be just about impossible to meet with a specialized high-density dimmer rack.

TIAs 1573 and 1574 are accessible at <https://www.nfpa.org/70>. The documents are PDF files that give the proposed amendments and the justifications, and a "SUBMIT A COMMENT" button. Clicking on that button will launch an email client (if you have one set up as a default) to send an email to [TIAs\\_Errata\\_FIs@nfpa.org](mailto:TIAs_Errata_FIs@nfpa.org), with the subject line "Comment on Proposed TIA 1573 on NFPA 70" or "Comment on Proposed TIA 1574 on NFPA 70"—but there you have what you need (address and subject lines) if you want to address an email manually.

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## New Fog & Smoke project

ESTA's Fog & Smoke Working Group has filed a new project with ANSI: **BSR E1.74, Guidance on ventilation for indoor stages and motion picture studios**. If you want to be involved in this project, you can do so by commenting during future public reviews of the document, or by joining the working group to help write it. Information about joining ESTA working groups is available at [https://tsp.esta.org/tsp/working\\_groups/index.html](https://tsp.esta.org/tsp/working_groups/index.html).

Standards already exist for the ventilation of indoor spaces, but sometimes the people responsible for effective ventilation on stage and in motion picture studios (1) fail to consider the needs of a particular live performance or motion picture production being done in the space, and (2) have difficulty navigating the many existing ventilation standards. Ventilation systems in live performance and motion picture studios may need to be adjusted to adequately control a production's atmospheric effects, such as artificial fog and haze, to keep the aerosols where needed and out of where not needed. System maintenance procedures and service frequency also may need to be adjusted to account for the particular activities in a space, which could be significantly different from what was done in that space previously. This proposed standard would reference as much as possible existing ventilation standards, but would provide guidance to help people in the live entertainment and motion picture industries effectively apply those standards to the needs of particular productions.

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## **ANSI seeks comments on proposed ISO online game terminology standard**

The American National Standards Institute is seeking comments from its constituents [on a proposal](#) for a new ISO standard on online game technology submitted by SAC, the national standards body for China. The proposal is to define terms used in game research and development, operation, management, copyright, eSports, derivative production and sales.

ANSI's constituents are asked to review [the proposal](#) and to submit comments to Steven Cornish, ANSI senior director of international policy and strategy, at [scornish@ansi.org](mailto:scornish@ansi.org), by close of business on 28 May 2021. Citizens of other countries with comments should offer them through their ISO representatives.

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## **WTO Technical Barrier to Trade notifications**

Notify US, the U.S. Department of Commerce's service to announce Technical Barrier to Trade filings, has announced TBTs that may be of interest to *Standards Watch* readers. If you have a problem with any TBT, you can protest through your representative to the World Trade Organization.

### **Thailand Notification THA/611**

**Date issued:** 27 April 2021

**Agency responsible:** Department of Industrial Works, Ministry of Industry

**National inquiry point:** Thai Industrial Standards Institute (TISI)

**Products covered:** Hazardous Substance

**Title:** Notification of Ministry of Industry: Declaration of the hazardous substances under the authorization of Department of Industrial Works by producer, importer, exporter or possessor (No.2) B.E. 2563 (2019) ("13 pages in English" says the notice, but the full text provided is in Thai.)

**Description of content:** To amend the regulation and update the hazardous substances list for Declaration of the hazardous substances under the authorization of Department of Industrial Works by producer, importer, exporter or possessor B.E. 2547 (2004). This notification published in the Royal Gazette and in effect on 3 March 2021. Remark. The new updating hazardous substances in this notification are the controlled chemical under Rotterdam Convention or Minamata Convention or Stockholm Convention or Montreal Protocol or United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 1988.

**Objective and rationale:** Protection of human health or safety; Protection of the environment

**Relevant documents:** Notification of Ministry of Industry: Declaration of the hazardous substances under the authorization of Department of Industrial Works by producer, importer, exporter or possessor B.E. 2547 (2004)

**Proposed date of adoption:** 18 December 2020

**Proposed date of entry into force:** 3 March 2021

**Final date for comments:** Not given by country

**Full text:** [https://tsapps.nist.gov/notifyus/docs/wto\\_country/THA/full\\_text/pdf/THA611\(thai\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/THA/full_text/pdf/THA611(thai).pdf)

[The document is in Thai, but the list of chemicals also includes their common names in the Latin alphabet. Some common chemicals are listed, including acetic acid, acetone, borax, cuprous oxide, methanol, and toluene. One isomer of butylene glycol is listed, but it's not one of the two isomers used in theatrical fog per ANSI E1.5.]

### Thailand Notification THA/608

**Date issued:** 20 April 2021

**Agency responsible:** National Broadcasting and Telecommunications Commission (NBTC)

**National inquiry point:** Thai Industrial Standards Institute (TISI)

**Products covered:** Radio communication equipment for non-piloted aircraft used in general

**Title:** NBTC TS 1038-2564: Radio communication equipment for non-piloted aircraft used in general (5 pages in Thai)

**Description of content:** NBTC TS 1038-2564 This standard specifies the operating frequency between 24.05 and 24.25 GHz and the output power must not exceed 100 milliwatts e.i.r.p. and be approved by NBTC.

**Objective and rationale:** Technical performance; Other

**Relevant documents:** - <http://standard.nbtc.go.th/>

- ESTI EN 300 440 V2.2.1 (2018-07): Short Range Devices (SRD); Radio equipment to be used in the 1 GHz to 40 GHz frequency range; Harmonised Standard for access to radio spectrum

**Proposed date of adoption:** 8 February 2021

**Proposed date of entry into force:** 12 March 2021

**Final date for comments:** Not given by country

**Full text:** [https://tsapps.nist.gov/notifyus/docs/wto\\_country/THA/full\\_text/pdf/THA608\(thai\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/THA/full_text/pdf/THA608(thai).pdf)

### United States of America Notification USA/1722

**Date issued:** 20 April 2021

**Agency responsible:** California Air Resources Board

**National inquiry point:** USA WTO TBT Enquiry Point

**Products covered:** Clean miles standard; green house gas emissions

**Title:** Clean Miles Standard Regulation (8 pages in English)

**Description of content:** Proposes new rules to decrease GHG emissions, criteria pollutant emissions, such as NOx and PM2.5, which in turn, will help California meet its climate and air quality goals.

**Objective and rationale:** Protection of the environment

**Relevant documents:** No. 14-Z, California Regulatory Notice Register 2 April 2021 (pages 390-397):

<https://oal.ca.gov/wp-content/uploads/sites/166/2021/04/2021-Notice-Register-Number-14-Z-April-2-2021-1.pdf>

California Air Resources Board (CARB) 5 April 2021:

<https://ww3.arb.ca.gov/regact/2021/cleanmilesstandard/notice.pdf#anchor>

California Air Resources Board (CARB), Clean Miles Standard Regulation:

<https://ww2.arb.ca.gov/rulemaking/2021/cleanmilesstandard>

**Proposed date of adoption:** Not given by country

**Proposed date of entry into force:** Not given by country

**Final date for comments:** 17 May 2021

**Full text:** [https://tsapps.nist.gov/notifyus/docs/wto\\_country/USA/full\\_text/pdf/USA1722\[1\]\(english\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/USA/full_text/pdf/USA1722[1](english).pdf) and [https://tsapps.nist.gov/notifyus/docs/wto\\_country/USA/full\\_text/pdf/USA1722\[2\]\(english\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/USA/full_text/pdf/USA1722[2](english).pdf)

### United States of America Notification USA/1723

**Date issued:** 20 April 2021

**Agency responsible:** Oregon Department of Education

**National inquiry point:** USA WTO TBT Enquiry Point

**Products covered:** Polystyrene

**Title:** Use of Polystyrene (5 pages in English)

**Description of content:** Prohibits school district use of polystyrene foam in the service of any meal. The proposed new rules administer this policy and includes defined terms used throughout, statement of the prohibited use of polystyrene, what is an allowable exemption and waiver, and what the Department can do if it finds a school district in violation of the rules.

**Objective and rationale:** Protection of the environment

**Relevant documents:** Oregon Administrative Register Daily Filings 30 March 2021:

<https://secure.sos.state.or.us/oard/viewRedlinePDF.action?filingRsn=47202>

State Board Proposed Oregon Administrative Rules (OARS): <https://www.oregon.gov/ode/rules-and-policies/StateRules/Pages/StateBoardProposedOARs.aspx>; see Use of Polystyrene under 2021 April

**Proposed date of adoption:** Not given by country

**Proposed date of entry into force:** Not given by country

**Final date for comments:** 20 May 2021

Full text: [https://tsapps.nist.gov/notifyus/docs/wto\\_country/USA/full\\_text/pdf/USA1723\(english\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/USA/full_text/pdf/USA1723(english).pdf)

### Ecuador Notification ECU/503

**Date issued:** 21 April 2021

**Agency responsible:** Ministry of Production, Foreign Trade, Investment and Fisheries (MPCEIP)

**National inquiry point:** Ministry of Production, Foreign Trade, Investment and Fisheries (MPCEIP)

**Products covered:** The notified text seeks to regulate the issuance, amendment, renewal, suspension and cancellation of sanitary certificates for domestic and foreign pesticides for household, industrial and public health use, and the conditions under which the control and surveillance of these products are carried out. The notified text is binding for all natural and legal persons responsible for the manufacture, importation, exportation, storage, distribution and marketing of chemical and biological pesticides for domestic, industrial and public health use, which are marketed throughout the national territory.

**Title:** Proyecto Normativa Técnica Sanitaria Sustitutiva para la obtención de la notificación sanitaria, control y vigilancia de plaguicidas de uso doméstico, industrial y en salud pública (Draft Substitute Sanitary Technical Regulation for the issuance of sanitary certificates for, and the control and surveillance of pesticides for domestic, industrial and public health use) (47 pages, in Spanish)

**Description of content:** The notified text seeks to regulate the issuance, amendment, renewal, suspension and cancellation of sanitary certificates for domestic and foreign pesticides for household, industrial and public health use, and the conditions under which the control and surveillance of these products are carried out. The notified text is binding for all natural and legal persons responsible for the manufacture, importation, exportation, storage, distribution and marketing of chemical and biological pesticides for domestic, industrial and public health use, which are marketed throughout the national territory. (This Ecuadorian notice about pesticides is listed in *Standards Watch* because TEG, a constituent in some theatrical hazes, is now accepted in parts of the USA as an effective air-sanitizing aerosol to be used against SARS-CoV-2. "Plaguicidas" is a broad term that includes virucides.)

**Objective and rationale:** Consumer information, labeling; Prevention of deceptive practices and consumer protection; Protection of human health or safety; Protection of the environment.

**Proposed date of adoption:** Not given by country

**Proposed date of entry into force:** Not given by country

**Final date for comments:** 21 June 2021

Full text: [https://tsapps.nist.gov/notifyus/docs/wto\\_country/ECU/full\\_text/pdf/ECU503\(spanish\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/ECU/full_text/pdf/ECU503(spanish).pdf)

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## ANSI public review announcements

The following documents have been announced for public review by ANSI and may be of material interest to *Standards Watch* readers. If you have comments on them, please send your comments before the deadline to the person indicated and to ANSI's Board of Standards Review at [psa@ansi.org](mailto:psa@ansi.org).

### Due 24 May 2021

#### **BSR/ASABE EP653 MONYEAR-202x, Heating, Ventilating, and Air Conditioning (HVAC) for Indoor Plant Environments without Sunlight** (new standard)

This Engineering Practice provides growers with the foundational information that will (a) facilitate the understanding of HVAC equipment options that can be used to manage the indoor plant environment (IPE) and (b) allow the grower to communicate with engineers, contractors, manufacturers, investors, and other growers.

Single copy price: \$72.00

Order from and send comments to: Jean Walsh, [walsh@asabe.org](mailto:walsh@asabe.org)

#### **BSR/ASQ/ISO/TS 54001-202x, Quality management systems - Particular requirements for the application of ISO 9001:2015 for electoral organizations at all levels of government** (identical national adoption of ISO/TS 54001:2019)

This document specifies requirements for a quality management system where an electoral organization:

— needs to demonstrate its ability to manage elections by secret ballot, to provide reliable, transparent, free and fair results that comply with electoral requirements;

— within the established legal framework, aims to enhance the trust and confidence of citizens, candidates, political organizations and other electoral interested parties through the effective implementation of the electoral quality management system, including processes for continual improvement.

Single copy price: \$209.00

Obtain an electronic copy from: <https://asq.org/quality-press/display-item?item=T1564E>

Send comments to: [standards@asq.org](mailto:standards@asq.org)

**BSR/AWS A5.31M/A5.31-202x, Specification for Fluxes for Brazing and Braze Welding** (revision of ANSI/AWS A5.31M/A5.31-2012)

This specification prescribes the requirements for classification of eighteen fluxes for brazing and braze welding. They are classified according to the filler metal, form, and activity temperature range. Classification is in accordance with a classification system that employs the designator “FB” to indicate fluxes for brazing and braze welding applications. In addition to selected tests for each classification, major topics include general requirements, testing procedures, and packaging requirements. A guide is appended to the specification as a source of information concerning the classification system employed and the intended use of the brazing fluxes. This specification makes use of both U.S. Customary Units and the International System of Units (SI). Since these are not equivalent, each system must be used independently of the other.

Single copy price: \$36.00 (non-members)/\$26.00 (AWS members)

Order from and send comments to: Kevin Bulger, [kbulger@aws.org](mailto:kbulger@aws.org)

**BSR/IES LP-12-202x, Lighting Practice: IoT Connected Lighting** (new standard)

Provide basic planning information for Connected Lighting Systems. The following topics and sections will be expanded upon to provide a common vocabulary for team members when developing their applications: Description of IoT and Connected Lighting, new construction considerations, retrofit considerations, commercial and residential application considerations, wired and wireless systems, security, sequence of operations and commissioning, coordination considerations for specification and installation, explanation of applicable codes and standards.

Single copy price: \$25.00

Obtain an electronic copy from and send comments to: Patricia McGillicuddy, [pmcgillicuddy@ies.org](mailto:pmcgillicuddy@ies.org)

**Due 31 May 2021**

**BSR/LES Version 1.1-202x, Management System for the Protection of Intellectual Property in the Supply Chain – Requirements** (new standard)

Developed by the LES Standards Development Organization, the Management System for the Protection of Intellectual Property in the Supply Chain – Requirements draft standard defines a common set of expectations for what organizations can and should do to protect all types of their own IP and the IP of customers, suppliers, and partners. The committee’s vision is to achieve standardization around how organizations develop and implement an intellectual property protection management system. This standard seeks to supplement legal and contractual IP protection methods through performance standards and business processes and practices that define the management systems required to protect all types of intellectual property (IP) in the global supply chain. The LES Standards Development Organization encourages IP thought leaders around the globe to participate in the public review and comment of LES draft standards as part of the standardization development process.

Single copy price: Free

Access and offer comments at: <https://members.lesusacanada.org/page/Standards-Review>

**Due 7 June 2021**

**BSR/ICC 400-202x, Standard on the Design and Construction of Log Structures** (revision of ANSI/ICC 400-2017)

As an ANSI-accredited SDO, ICC is developing the standard to provide technical design and performance criteria that will facilitate and promote the design, construction, and installation of safe and reliable structures constructed of log timbers.

Single copy price: Free

Obtain an electronic copy from: <https://www.iccsafe.org/products-and-services/standards-development/is-log/>

Send comments to: [kaittaniemi@iccsafe.org](mailto:kaittaniemi@iccsafe.org)

### **BSR/OIX 3-202x, Edge Technical Standard** (new standard)

The Open-IX Edge Standard ("OIX-3" or "Edge Standard") establishes the technical criteria for Edge locations to be certified. The Edge Standard consists of both physical and operational requirements. Among the physical requirements, the Edge Standard sets forth, notably, the minimum level of resiliency and redundancy with respect to utility feeds, transformers, UPS, electrical distribution infrastructure, back-up generators, and cooling capacity; and criteria for fire protection, water sources, building security, and remote site management. The standard is divided into 5 sub-categories (XS, S, M, L, XL) relating to rack capacity. Edge compute enclosures can meet or fail the specific requirements for each sub-category.

Single copy price: Free

Order from and send comments to: Shawna Bong, [finance@open-ix.org](mailto:finance@open-ix.org)

**Due 8 June 2021**

### **BSR/ANS 30.3-202x, Advanced Light-Water Reactor Risk-Informed Performance-Based Design Criteria and Methods** (new standard)

This standard establishes requirements for using risk-informed, performance-based (RIPB) methods for advanced light water reactor (LWR) designs. RIPB methods are provided to ensure nuclear safety design practices are consistently applied to all new advanced LWR reactor technologies, specifically; high-level safety criteria selection, nuclear safety functions and margin, licensing-basis-event selection and acceptance criteria, equipment classification and categorization, defense-in-depth adequacy, and evaluating conformance with regulatory positions. The application of this standard to existing reactors is beyond the scope of this standard.

Single copy price: \$25.00

Obtain an electronic copy from: [orders@ans.org](mailto:orders@ans.org)

Send comments to: [pschroeder@ans.org](mailto:pschroeder@ans.org)

**Due 22 June 2021**

### **BSR/ASME HST-4-202x, Performance Standard for Overhead Electric Wire Rope Hoists** (revision of ANSI/ASME HST-4 -2016)

This standard establishes performance requirements for electric wire-rope hoists for vertical lifting service involving material handling of freely suspended (unguided) loads using wire rope with one of the following types of suspension: (1) lug; (2) hook; (3) trolley; (4) base- or deck-mounted; and (5) wall- or ceiling-mounted.

Single copy price: Free

Order from: <https://cstools.asme.org/csconnect/PublicReviewPage.cfm>

Send comments to: Justin Cassamassino, [cassamassinoj@asme.org](mailto:cassamassinoj@asme.org)

### **INCITS/ISO/IEC 23093-4:2020 [202x], Information technology - Internet of media things - Part 4: Reference software and conformance** (identical national adoption of ISO/IEC 23093-4:2020)

Specifies the conformance and reference software implementing ISO/IEC 23093-3. The information provided is applicable for determining the reference software modules available for ISO/IEC 23093-3, understanding the functionality of the available reference software modules, and utilizing the available reference software modules.

Single copy price: \$73.00

Obtain an electronic copy from: <http://webstore.ansi.org/>

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

### **INCITS/ISO/IEC 14882:2020 [202x], Programming Languages - C++** (identical national adoption of ISO/IEC 14882:2020 and revision of INCITS/ISO/IEC 14882:2017 [2018])

Specifies requirements for implementations of the C++ programming language. The first such requirement is that they implement the language, so this document also defines C++. Other requirements and relaxations of the first requirement appear at various places within this document. C++ is a general purpose programming language based on the C programming language as described in ISO/IEC 9899:2018 Programming languages — C (referred to as the C standard in this standard). C++ provides many facilities beyond those provided by C, including additional data types, classes, templates, exceptions, namespaces, operator overloading, function name overloading, references, free store management operators, and additional library facilities.

Single copy price: \$232.00

Obtain an electronic copy from: <http://webstore.ansi.org/>

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

## CSA public review announcements

The CSA Group has announced draft documents for public review that might be of interest to Standards Watch readers. To participate in CSA public reviews, please visit: <http://publicreview.csa.ca/>.

### Due 29 May 2021

#### **C22.2 NO. 62368-1, Audio/video, information and communication technology equipment - Part 1: Safety requirements** (amendment)

This part of IEC 62368 is applicable to the safety of electrical and electronic equipment within the field of audio, video, information and communication technology, and business and office machines with a rated voltage not exceeding 600 V. This document does not include requirements for performance or functional characteristics of equipment.

### Due 31 May 2021

#### **T200 - Evaluation of software development and cybersecurity programs** (new standard)

This document describes a methodology for assessing the product software and cybersecurity maturity of an organization. It provides the evaluators and vendors a method to determine the maturity of the organization and products/solutions being developed regardless of solution vertical. It covers the entire product system life cycle from conception to full commissioning and until end of life. It supports effective executive business decisions that establish a comprehensive maturity model approach to cybersecurity. It applies to all IoT and related products/solutions.

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## New ANS projects

ANSI has announced the following new projects that might materially affect *Standards Watch* readers—or at least be interesting to them. Contact the developer if you (a) want to be involved in the project, (b) object to the project and wish it to be abandoned, or (c) if you would like to point out that its scope is covered by an existing standard, thereby possibly making the project redundant or conflicting.

#### **BSR/AWC NDS-2024-202x, National Design Specification for Wood Construction** (revision and redesignation of ANSI/AWC NDS-2018)

This specification provides standardized requirements for structural and fire design of wood products, and their connectors. The project is to revise the current version of ANS/NDS-2018, primarily to update provisions to latest state-of-the-art wood engineering.

Contact: Bradford Douglas, [bdouglas@awc.org](mailto:bdouglas@awc.org)

#### **BSR/AWC WFCM-2024-202x, Wood Frame Construction Manual for One- and Two-Family Dwellings** (revision and redesignation of ANSI/AWC WFCM-2018)

The WFCM provides engineered and prescriptive design requirements for wood frame construction used in one- and two-family dwellings constructed in high-wind, seismic, and snow regions. ANSI/AWC WFCM-2018 is being revised primarily to address anticipated changes to wind load provisions in ASCE 7-22.

Contact: Bradford Douglas, [bdouglas@awc.org](mailto:bdouglas@awc.org)

#### **BSR/FM 4431-202x, Skylights** (new standard)

This standard sets the performance requirements for skylights under simulated laboratory conditions. They shall be examined for their ability to limit fire propagation over and/or through the assembly when exposed to an ignition source simulating an exterior building fire. This standard also sets the performance requirements for skylights when exposed to various natural hazards such as high wind events, the impact of simulated hail or windborne debris, and the possible degradation effects of sunlight. The standard also examines the ability of the skylights to withstand the effects of temporary live loads such as those imposed by foot traffic. This standard is intended to evaluate only those hazards investigated and is not intended to determine suitability for the end use of the product.

Contact: Josephine Mahnken, [josephine.mahnken@fmapprovals.com](mailto:josephine.mahnken@fmapprovals.com)

#### **BSR/FM 6930-202x, Fire Performance of Industrial Fluids** (new standard)

This standard sets the fire performance requirements for industrial fluids. The standard applies to finished

industrial fluids used as, but not limited to, lubricants, hydraulic power transmission, turbine governor control, heat transfer, and cooling fluid in industrial equipment systems. The tests conducted are intended to simulate conditions that may occur while the fluid is in use. The performance requirements are based on the fire performance specific to the industrial fluid type. This standard is intended to evaluate only those hazards investigated and is not intended to determine suitability for the end use of the product.

Contact: Josephine Mahnken, [josephine.mahnken@fmapprovals.com](mailto:josephine.mahnken@fmapprovals.com)

**BSR/FM2500-202x, Examination Standard for Early Warning Flood Sensor Systems** (new standard)

This standard applies to systems that measure water elevations (i.e., static and rate-of-change types), rainfall, water flow, presence of water, soil moisture, etc. This standard applies to telemetry systems that automatically sense and transmit data on programmed intervals. The equipment in this standard may include multiple sensors. Communication between the individual node or gateway to the Internet of Things (IoT) may be accomplished using industry protocols (i.e., ALERT, ALERT2, etc.) or proprietary software. Telemetry systems used in this standard support the bidirectional transmission of sensor data via network topographies such as direct communication, node to node, mesh, star, etc.

Contact: Patrick Byrne, [patrick.byrne@fmapprovals.com](mailto:patrick.byrne@fmapprovals.com)

**BSR/IEEE 1937.1-202X, Standard Interface Requirements and Performance Characteristics for Payload Devices in Drones** (new standard)

This standard establishes a framework for Drone interface to payload. It defines the interfaces, performance metrics, provisioning, operation control, and management for Drone payload devices.

Contact: Lisa Weisser, [l.weisser@ieee.org](mailto:l.weisser@ieee.org)

**BSR/IEEE 1937.3-202X, Protocol for the Flight Data Transmission of Civil Unmanned Aerial Vehicle Based on BeiDou Short Message** (new standard)

This standard specifies the general requirements for the content of flight data and transmission protocol of civil unmanned aerial vehicle systems based on the BeiDou short message protocol.

Contact: Lisa Weisser, [l.weisser@ieee.org](mailto:l.weisser@ieee.org)

**BSR/IES TM-202x- (Resilient Lighting), Technical Memorandum: Introduction to Resilient Lighting Systems** (new standard)

The scope of this LP does not include emergency lighting for the purpose of evacuation and marking of egress paths, since building codes already dictate these needs. In addition, this document is not intended for the development of emergency plans or courses of action during extreme events. For example, determining when to evacuate a building or whether to shelter in place is determined by local authorities. Resilient design is defined as the ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events. The purpose of this Lighting Practice document (LP) is to introduce the concept of resilient design and explain how lighting systems can support the goals of enhancing the resilience of buildings. The intent is to provide guidance on lighting performance, controls, and the characteristics of lighting equipment for resilient buildings.

Contact: Patricia McGillicuddy, [pmcgillicuddy@ies.org](mailto:pmcgillicuddy@ies.org)

**BSR/IES TM-3x-202x, Technical Memorandum: Discomfort Glare under Low Light Conditions** (new standard)

The TM will provide users the definition, evaluation metrics, methods for predicting and measuring discomfort glare in outdoor nighttime environments. This document is limited to evaluation and measurement of discomfort glare from small sources in outdoor nighttime environments (luminance levels from applications) including, but not limited to, parking lots, garages, pedestrian areas, and sporting facilities.

Contact: Patricia McGillicuddy, [pmcgillicuddy@ies.org](mailto:pmcgillicuddy@ies.org)

**BSR/NEMA WD6-202x, Wiring Devices - Dimensional Specifications** (revision of ANSI/NEMA WD6-2016)

This standard covers dimensional requirements for plugs and receptacles rated up to 60 A and 600 V. The revision is needed to add new wiring devices.

Contact: Andrei Moldoveanu, [and\\_moldoveanu@nema.org](mailto:and_moldoveanu@nema.org)

**BSR/NFPA 102-202x, Standard for Grandstands, Folding and Telescopic Seating, Tents, and Membrane Structures** (revision of ANSI/NFPA 102-2021)

This standard addresses: (1) The construction, location, protection, and maintenance of grandstands and bleachers, folding and telescopic seating, tents, and membrane structures; and (2) Seating facilities located in the open air or within enclosed or semi-enclosed structures such as tents, membrane structures, and stadium complexes.

Contact: Dawn Michele Bellis, [dbellis@nfpa.org](mailto:dbellis@nfpa.org)

**BSR/ICC 300-202x, ICC Standard on Bleachers, Folding and Telescopic Seating, and Grandstands** (revision of ANSI/ICC 300-2017)

The purpose of the effort is the development of appropriate, reasonable, and enforceable model health and safety provisions for new and existing installations of all types of bleachers and bleacher-type seating, including fixed and folding bleachers for indoor, outdoor, temporary, and permanent installations. Such provisions would serve as a model for adoption and use by enforcement agencies at all levels of government in the interest of national uniformity.

Contact: Karl Aittaniemi, [kaittaniemi@iccsafe.org](mailto:kaittaniemi@iccsafe.org)

**BSR/NFPA 204-202x, Standard for Smoke and Heat Venting** (revision of ANSI/NFPA 204-2021)

This standard shall apply to the design of venting systems for the emergency venting of products of combustion from fires in buildings. The provisions of Chapters 4 through 10 shall apply to the design of ventingsystems for the emergency venting of products of combustion from fires in nonsprinklered, single-story buildings using both hand calculations and computer-based solution methods as provided in Chapter 9. Chapter 11 shall apply to venting in sprinklered buildings. This standard incorporates engineering equations (hand calculations) and references models to provide a designer with the tools to develop vent system designs. The designs are based on selected design objectives, stated in 4.4.1, related to specific building and occupancy conditions. Engineering equations are included for calculating vent flows, smoke layer depths, and smoke layer temperatures, based on a prescribed burning rate. Examples using the hand calculations and the LAVENT (Link-Actuated VENTs) computer mode are presented in Annex D. Previous editions of this document have included tables listing vent areas based on preselected design objectives. These tables were based on the hot upper layer at 20 percent of the ceiling height. Different layer depths were accommodated by using a multiplication... [sic]

Contact: Dawn Michele Bellis, [dbellis@nfpa.org](mailto:dbellis@nfpa.org)

**BSR/NFPA 225-202x, Model Manufactured Home Installation Standard** (revision of ANSI/NFPA 225-2021)

This model standard shall cover the installation of manufactured homes wherever sited in the United States and its territories. The manufacturer's installation instructions shall apply under either of the following conditions: (1) To items not covered by this standard; (2) Where the manufacturer's approved installation instructions provide a specific method of performing a specific operation or assembly. Utilization of this standard by the homeowner and installation crew and use of a registered professional engineer in those unusual circumstances as required by this standard will help ensure the homeowner of a well-built, safe, and affordable home. This standard contains instructions, including specifications and procedures, for installation of utility connections of a manufactured home. It has been written in an objective manner so that it can be understood by those who are trained in the installation of manufactured homes and who are properly licensed. It discusses the installation of the home from preparation of the site through final inspection. It includes many tables and figures giving important data for proper installation.

Contact: Dawn Michele Bellis, [dbellis@nfpa.org](mailto:dbellis@nfpa.org)

**BSR/NFPA 501A-202x, Standard for Fire Safety Criteria for Manufactured Home Installations, Sites, and Communities** (revision of ANSI/NFPA 501A-2021)

This standard shall cover fire safety requirements for the installation of manufactured homes and manufactured home sites, including accessory buildings, structures, and communities.

Contact: Dawn Michele Bellis, [dbellis@nfpa.org](mailto:dbellis@nfpa.org)

**BSR/NFPA 909-202x, Code for the Protection of Cultural Resource Properties - Museums, Libraries, and Places of Worship** (revision of ANSI/NFPA 909-2021)

This code describes principles and practices of protection for cultural resource properties (including, but not limited to, museums, libraries, and places of worship), their contents, and collections, against conditions or

physical situations with the potential to cause damage or loss. This code covers ongoing operations and rehabilitation and acknowledges the need to preserve culturally significant and character-defining building features and sensitive, often irreplaceable, collections and to provide continuity of operations. Principles and practices for life safety in cultural resource properties are outside the scope of this code. Where this code includes provisions for maintaining means of egress and controlling occupant load, it is to facilitate the evacuation of items of cultural significance, allow access for damage limitation teams in an emergency, and prevent damage to collections through overcrowding or as an unintended consequence of an emergency evacuation. Library and museum collections that are privately owned and not open to the public shall not be required to meet the requirements of this code.

Contact: Dawn Michele Bellis, [dbellis@nfpa.org](mailto:dbellis@nfpa.org)

### **BSR/NFPA 92-202x, Standard for Smoke Control Systems** (revision of ANSI/NFPA 92-2021)

This standard shall apply to the design, installation, acceptance testing, operation, and ongoing periodic testing of smoke control systems. This standard incorporates methods for applying engineering calculations and reference models to provide a designer with the tools to develop smoke control system designs. The designs are based on select design objectives presented in Section 4.1. This standard addresses: (1) Basic physics of smoke movement in indoor spaces; (2) Methods of smoke control; (3) Supporting data and technology; (4) Building equipment and controls applicable to smoke control systems; (5) Approaches to testing and maintenance methods. This standard does not address the interaction of sprinklers and smoke control systems. The cooling effect of sprinklers can result in some of the smoke losing buoyancy and migrating downward below the design smoke layer interface. This standard also does not provide methodologies to assess the effects of smoke exposure on people, property, or mission continuity.

Contact: Dawn Michele Bellis, [dbellis@nfpa.org](mailto:dbellis@nfpa.org)

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## **Final actions on American National Standards**

The documents listed below may be of interest to *Standards Watch* readers and have been approved by the ANSI Board of Standards Review or by an ANSI-Audited Designator on the date noted.

**ANSI/ASTM F3453-2020**, Test Methods for Dry-cleaning robots for household or similar use - Methods of measuring performance (new standard), 15 October 2020

**ANSI/NFPA 80A-2022**, Recommended Practice for Protection of Buildings from Exterior Fire Exposures (revision of ANSI/NFPA 80A-2017), 8 April 2021

**ANSI/NFPA 101A-2022**, Guide on Alternative Approaches to Life Safety (revision of ANSI/NFPA 101A-2019), 8 April 2021

**ANSI/NFPA 110-2022**, Standard for Emergency and Standby Power Systems (revision of ANSI/NFPA 110-2019), 8 April 2021

**ANSI/NFPA 150-2022**, Fire and Life Safety in Animal Housing Facilities Code (revision of ANSI/NFPA 150-2019), 8 April 2021

**ANSI/NFPA 232-2022**, Standard for the Protection of Records (revision of ANSI/NFPA 232-2017), 8 April 2021

**ANSI/NFPA 241-2022**, Standard for Safeguarding Construction, Alteration, and Demolition Operations (revision of ANSI/NFPA 241-2019), 8 April 2021

**ANSI/NFPA 400-2022**, Hazardous Materials Code (revision of ANSI/NFPA 400-2019), 8 April 2021

**ANSI/NFPA 951-2022**, Guide to Building and Utilizing Digital Information (revision of ANSI/NFPA 951-2016), 8 April 2021

**ANSI/NFPA 1124-2022**, Code for the Manufacture, Transportation, and Storage of Fireworks and Pyrotechnic Articles (revision of ANSI/NFPA 1124-2017), 8 April 2021

**ANSI/NFPA 1125-2022**, Code for the Manufacture of Model Rocket and High-Power Rocket Motors (revision of ANSI/NFPA 1125-2017), 8 April 2021

**ANSI/UL 1286-2021**, Standard for Safety for Office Furnishings (revision of ANSI/UL 1286-2018), 15 April 2021

**ANSI/UL 2367-2021**, Standard for Safety for Solid State Overcurrent Protectors (revision of ANSI/UL 2367-2009 (R2018)), 19 April 2021

**ANSI/UL 2580-2021**, Standard for Safety for Batteries for Use in Electric Vehicles (revision of ANSI/UL 2580-2020), 31 March 2021

**ANSI/UL 3100-2021**, Standard for Safety for Automated Mobile Platforms (AMPs) (new standard), 5 April 2021

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### **Draft IEC & ISO documents**

This section lists proposed documents that the IEC or ISO or both, are considering for approval and that may be of interest to *Standards Watch* readers. Anyone interested in reviewing and commenting on a document should order a copy from their national representative and submit their comments through them. Comments from US citizens on IEC documents should be sent to Charles T. Zegers at [czegers@ansi.org](mailto:czegers@ansi.org). Comments from US citizens on ISO documents should be sent to Karen Hughes at [isot@ansi.org](mailto:isot@ansi.org). Any prices, if shown, are for purchases through ANSI. The sort order is first by due date then by the project identifier alphanumeric.

**3/1488/DTR, IEC TR 63358-1 ED1**: Graphical symbols for diagrams - Part 1: General, qualifying and generic symbols, 4 June 2021

**ISO/IEC DIS 23751**, Information technology - Cloud computing and distributed platforms - Data sharing agreement (DSA) framework, 20 June 2021, \$93.00

**65E/781/CDV, IEC 62714-5 ED1**: Engineering data exchange format for use in industrial automation systems engineering - Automation Markup Language - Part 5: Communication, 2 July 2021

**ISO 30401/DAMd1**, Knowledge management systems - Requirements - Amendment 1, 3 July 2021, \$33.00

**ISO/DIS 5258**, Pandemic response (respiratory) – Drive through screening station, 4 July 2021, \$58.00

**ISO/IEC DIS 17060**, Conformity assessment - Code of good practice, 4 July 2021, \$40.00

**ISO/DIS 3163**, Adventure tourism - Terminology, 5 July 2021, \$82.00

**ISO/IEC DIS 22989**, Information technology – Artificial intelligence - Artificial intelligence concepts and terminology, 5 July 2021, \$125.00

**ISO/IEC DIS 23053**, Framework for Artificial Intelligence (AI) Systems Using Machine Learning (ML), 5 July 2021, \$102.00

**ISO/DIS 22340**, Security and resilience - Protective security - Guidelines for an enterprise protective security architecture and framework, 5 July 2021, \$88.00

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### **Recently published IEC & ISO documents**

Listed here are documents recently approved by the IEC or ISO that may be of use or interest to *Standards Watch* readers. Prices shown are for purchases from the [ANSI Webstore](#).

**IEC 61076-3-122 Ed. 2.0 b:2021**, Connectors for electrical and electronic equipment - Product requirements - Part 3-122: Detail specification for 8-way, shielded, free and fixed connectors for I/O and data transmission with frequencies up to 500 MHz and current-carrying capacity in industrial environments, \$259.00

**IEC 61386-21 Ed. 2.0 en:2021**, Conduit systems for cable management - Part 21: Particular requirements - Rigid conduit systems, \$89.00

**IEC 61386-22 Ed. 2.0 en:2021**, Conduit systems for cable management - Part 22: Particular requirements - Pliable conduit systems, \$89.00

**IEC 61386-23 Ed. 2.0 en:2021**, Conduit systems for cable management - Part 23: Particular requirements - Flexible conduit systems, \$89.00

**IEC 62087-2 Ed. 1.0 b:2015**, Audio, video, and related equipment - Determination of power consumption - Part 2: Signals and media, \$183.00

**ISO 37301:2021**, Compliance management systems – Requirements with guidance for use, \$200.00

**ISO/IEC 11801-3/Amd1:2021**, Information technology – Generic cabling for customer premises - Part 3: Industrial premises - Amendment 1, \$73.00

**ISO/IEC 24775-1:2021**, Information technology – Storage management - Part 1: Overview, \$149.00

**ISO/IEC 24775-2:2021**, Information technology – Storage management - Part 2: Common Architecture, \$250.00

**ISO/IEC 24775-3:2021**, Information technology – Storage management - Part 3: Common profiles, \$250.00

**ISO/IEC 24775-4:2021**, Information technology – Storage management - Part 4: Block devices, \$250.00

**ISO/IEC 24775-5:2021**, Information technology – Storage management - Part 5: File systems, \$250.00

**ISO/IEC 24775-6:2021**, Information technology – Storage management - Part 6: Fabric, \$250.00

**ISO/IEC 24775-7:2021**, Information technology – Storage management - Part 7: Host elements, \$250.00

**ISO/IEC 24775-8:2021**, Information technology – Storage management - Part 8: Media libraries, \$225.00

**ISO/TS 23625:2021**, Small craft - Lithium-ion batteries, \$73.00

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## **ESTA Standards Watch**

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The archive of *Standards Watch* issues back to the beginning of 2011 is available at <http://estalink.us/nn7a1>.

## TSP meeting schedule

The meeting schedule is posted at <https://www.esta.org/ESTA/meetings.php>. All the meetings will be by WebEx.

Control Protocols Working Group	11:00 – 13:00 EDT	Tuesday 27 July 2021
Electrical Power Working Group	15:00 – 17:00 EDT	Friday 23 July 2021
Event Safety Working Group	11:00 – 13:00 EDT	Friday 30 July 2021
Fog & Smoke Working Group	11:00 – 13:00 EDT	Friday 23 July 2021
Photometrics Working Group	15:00 – 17:00 EDT	Tuesday 27 July 2021
Rigging Working Group	11:00 – 13:00 EDT	Monday 26 July 2021
Stage Machinery Working Group	11:00 – 13:00 EDT	Friday 30 July 2021
Technical Standards Council	11:00 – 13:00 EDT	Monday 2 August 2021

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