



# ESTA Standards Watch

August 2018 Volume 22, Number 15

---

## Table of Contents

Three New ESTA Standards Projects.....	1
Three ESTA Standards Available for Review.....	2
Registration Open for Unmanned Aircraft Systems Standardization Meeting.....	3
FCC OET Requests Comment on Nominet UK White Space Database System.....	3
FCC Seeks Comment on Use of Spectrum Bands Above 24 GHz For Mobile Radio Services.....	3
IES Webinar: Maintenance in the LED Era.....	3
WTO Technical Barrier to Trade Notifications.....	4
United States of America Notification USA/1386.....	4
Thailand Notification THA/515.....	4
Thailand Notification THA/516.....	4
Switzerland Notification CHE/232.....	5
ANSI Public Review Announcements.....	5
Due 17 September 2018.....	5
Due 2 October 2018.....	6
CSA Public Review Announcements.....	6
Due 1 September 2018.....	6
Due 2 September 2018.....	7
New ANS Projects.....	7
Final Actions on American National Standards.....	8
Draft IEC & ISO Documents.....	9
Recently Published IEC & ISO Documents.....	9
TSP Meeting Schedule.....	10
TSP Donors Who Have Made Long-Term, Multi-Year Pledges.....	11
Investors in Innovation, supporters of ESTA's Technical Standards Program.....	12

---

## Three New ESTA Standards Projects

Three new standards-drafting projects have been filed with ANSI. Two are completely new projects, and one is a revision of an existing standard. The completely new projects are:

### **BSR E1.65, Recommended practice for the periodic inspection, testing, and maintenance of Electrical and Electronic equipment used in the entertainment and live event industries**

This standard will establish the minimum requirements for periodic inspection and maintenance of electrical systems and equipment used in the entertainment and live event industries. It is intended to complement, not replace, the guidance offered in NFPA 70E, NFPA 70B, NFPA 78, and equipment manufacturer's instructions. It also will assist in identifying the qualifications required for personnel to perform the inspections competently. This is an Electrical Power Working Group project.

### **BSR E1.66, Safety Standard for Followspot Positions Erected for Short-term Use in Outdoor Entertainment Venues**

The standard will provide minimum specifications for followspot positions erected for short-term use in entertainment venues. These followspot positions are intended to support followspot luminaires and their operators in outdoor locations. The standard will specify provisions for safe worker access, fall protection, protection from weather, and protection from falling objects for workers and members of the public. It also will suggest the power supply requirements. This is a Followspot Position Working Group project.

The revision project is:

### **BSR E1.53, Overhead mounting of luminaires, lighting accessories, and other portable devices: specification and practice**

The standard covers specifications for the primary and secondary mounting devices for portable stage and studio luminaires and accessories. It also covers the mounting of these devices for special effects equipment (e.g. fog machines and bubble machines) that are often mounted along with lighting equipment on trusses and rigging system battens. The standard gives guidance on how to properly affix these mounting devices. The existing standard is being revised because the "safe working load" and "working load limit" marking requirements need clarification. The current mandatory language cannot fit legibly on some rated primary and secondary suspension devices. This is an Electrical Power Working Group project.

People who might be materially affected by these projects are invited to be involved in the work, either by joining the appropriate working group or by commenting on the documents in forthcoming public reviews. In general, the Electrical Power and Followspot Position working groups are looking for members who would be members of the following interest categories:

**Electrical Power Working Group:** designers, custom-market producers

**Followspot Position Working Group:** custom-market producers, dealer/rental companies, general interest.

---

### **Three ESTA Standards Available for Review**

Three documents are available for public review on the ESTA website at [http://tsp.esta.org/tsp/documents/public\\_review\\_docs.php](http://tsp.esta.org/tsp/documents/public_review_docs.php). People materially affected by the standards are invited to review them and to comment on them. Two of the documents are reaffirmations of existing standards; one is a proposed new standard. The reviews run through September 24; please comment before September 25 starts. The documents are:

#### **ANSI E1.5, Theatrical Fog Made with Aqueous Solutions of Di- and Trihydric Alcohols**

ANSI E1.5 – 2009, last reaffirmed in 2014, is being considered for reaffirmation. This standard describes the composition of theatrical fogs or artificial mists that are not likely to be harmful to healthy performers, technicians, or audience members of normal working age. It is limited to those fogs and mists made from a solution of water and one or more dihydric or trihydric alcohols, and is intended to be applied in theatres, arenas, and other places of entertainment or public assembly.

#### **ANSI E1.29, Product Safety Standard for Theatrical Fog Generators that Create Aerosols of Water, Aqueous Solutions of Glycol or Glycerin, or Aerosols of Highly Refined Alkane Mineral Oil**

ANSI E1.29 – 2009, previously reaffirmed in 2014, is being considered for reaffirmation. The standard is intended to help guide product safety testing laboratories in evaluating fog-making equipment for design or construction defects that might create unacceptable hazards. It is based on UL 998 - 2006, Humidifiers, with modifications. Products covered are theatrical fog generators intended for use in professional theatrical entertainment, film and video production, theme parks, and fire safety training.

#### **BSR E1.62, Minimum specifications for mass-produced portable platforms, ramps, stairs, and choral risers for live performance events**

This proposed new standard covers mass-produced portable platforms, stair units and ramps used with those platforms, and choral risers, designed to be used for the presentation of music concerts, dramatic plays, fashion shows, and other entertainment and special events. The units covered by this standard are of a size and weight that allows them to be moved and erected by one or two people.

## Registration Open for Unmanned Aircraft Systems Standardization Meeting

The American National Standards Institute has announced the opening of registration for the 2018 meeting of its Unmanned Aircraft Systems Standardization Collaborative (UASSC), scheduled for September 20 in Washington, DC. The UASSC is a coordinating body whose primary deliverable will be a roadmap that identifies existing UAS (a.k.a. “drones”) standards and those in development, defines where gaps exist, and recommends additional standardization activity to address the gaps. The group itself is not developing standards. The purpose of the September 20 meeting is to review a first draft of the standardization roadmap, which is now in development and targeted for release a week prior to the meeting. The UASSC has four working groups (WGs) that examine standards issues across the spectrum of topical areas: WG1 covers airworthiness; WG2 covers general flight operations, personnel training, qualifications, and certification; WG3 covers flight operations for critical infrastructure inspections and commercial services; and WG4 covers flight operations for public safety. The working groups hold online meetings twice a month.

The UASSC meeting will be held from 09:00 to 17:00 EDT on September 20 at the AAMC Learning Center, 655 K Street, NW, Room LC 200 (2nd Floor), Washington, DC, followed by a networking reception at the same location. Participation is open to UAS stakeholders that have operations in the United States. There is no fee to participate but advance registration is required. The draft agenda and updates are available on the UASSC website, <http://www.ansi.org/uassc>.

---

## FCC OET Requests Comment on Nominet UK White Space Database System

The Federal Communication Commission’s Office of Engineering and Technology (OET) is requesting comment on the 45-day public trial of the Nominet UK (Nominet) white space database system that was completed on 26 July 2018. This database system is intended to support the operation of low power unlicensed transmitting devices on unoccupied spectrum within the broadcast television bands, the 600 MHz service band, the 600 MHz duplex gap, and in channel 37. This unoccupied spectrum is commonly known as the “white spaces.”

Nominet has provided a summary report on the trial of its white space database system to OET. This summary report identifies: 1) problems reported and their disposition, and 2) descriptions of changes made by Nominet to the channel availability calculator or registration systems during the trial period. We are requesting that interested parties submit comments on the trial and this report. A copy of Nominet’s summary report is available on the Commission’s Electronic Comment Filing System (ECFS) at: <https://www.fcc.gov/ecfs/filing/10730614627964>.

---

## FCC Seeks Comment on Use of Spectrum Bands Above 24 GHz For Mobile Radio Services

In a 31-page “Fourth Further Notice of Proposed Rulemaking” the FCC is seeking comment on how best to transition existing spectrum holdings in the 39 GHz band (38.6-40 GHz) to the new flexible-use band plan, in a manner that will promote the efficient use of this spectrum by incumbents and new licensees for fifth-generation (5G) wireless, Internet of Things, and other advanced services. The 39 GHz band, combined with the Upper 37 GHz band (37.6-38.6 GHz), offers a critical opportunity for 5G deployment, as it represents the largest amount of contiguous spectrum available for flexible-use wireless service in the millimeter wave (mmW) bands. Comments are due by 17 September 2018. More information is available at <https://docs.fcc.gov/public/attachments/FCC-18-110A1.pdf>.

---

## IES Webinar: Maintenance in the LED Era

At noon EDT, 16 August, the IES will offer a webinar on LED lighting maintenance. Not being maintenance-free, LED lighting requires maintenance practices more akin to stewardship than to reactive replacement. Based on RP-36 and other information, the joint IES-NALMCO webinar will provide an overview of effective maintenance practices for indoor and outdoor LED lighting and control systems. Webinars are free for IES members and \$20 for non-members. More information and registration are available at <https://www.ies.org/education/electronic-resources/webinars/>.

## WTO Technical Barrier to Trade Notifications

The U.S. Department of Commerce's service, Notify U.S., recently has announced WTO Technical Barrier to Trade notices that may be of interest to *Standards Watch* readers. If you have a problem with the TBTs, you can protest through your representative to the WTO. See "Guidance for Comment Submissions by U.S. Industry on TBT Notifications" at <http://tsapps.nist.gov/notifyus/data/guidance/guidance.cfm> or <http://ec.europa.eu/enterprise/tbt/> for advice on filing objections.

### United States of America Notification USA/1386

**Date issued:** 6 August 2018

**Agency responsible:** Environmental Protection Agency (EPA)

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

**Products covered:** Chemical substances

**Title:** Significant New Use Rules on Certain Chemical Substances (1 page in English)

**Description of content:** EPA is proposing significant new use rules (SNURs) under the Toxic Substances Control Act (TSCA) for 145 chemical substances which were the subject of premanufacture notices (PMNs). The chemical substances are subject to Orders issued by EPA pursuant to section 5(e) of TSCA. This action would require persons who intend to manufacture (defined by statute to include import) or process any of these 145 chemical substances for an activity that is designated as a significant new use by this rule to notify EPA at least 90 days before commencing that activity. The required notification initiates EPA's evaluation of the intended use within the applicable review period. Persons may not commence manufacture or processing for the significant new use until EPA has conducted a review of the premanufacture notice, made an appropriate determination on the notification, and has taken such actions as are required with that determination. In addition to this notice of proposed rulemaking, EPA is issuing the action as a direct final rule elsewhere in this issue of the Federal Register.

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

**Relevant documents:** 83 Federal Register (FR) 37455, 1 August 2018; Title 40 Code of Federal Regulations (CFR) Part 721.

Significant New Use Rules on Certain Chemical Substances, Direct Final Rule published 1 August 2018 will be notified as Add.1: <https://www.gpo.gov/fdsys/pkg/FR-2018-08-01/html/2018-15995.htm>

<https://www.gpo.gov/fdsys/pkg/FR-2018-08-01/pdf/2018-15995.pdf>

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

**Final date for comments:** 31 August 2018

**Full text:** [https://members.wto.org/crnattachments/2018/TBT/USA/18\\_4205\\_00\\_e.pdf](https://members.wto.org/crnattachments/2018/TBT/USA/18_4205_00_e.pdf)

### Thailand Notification THA/515

**Date issued:** 26 July 2018

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

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

**Products covered:** Radio communication equipment used in land mobile

**Title:** Draft NBTC TS 1001-2561(2018): Radiocommunications Equipment Used in Land Mobile Service using VHF/UHF for Speech Communication (10 pages in Thai)

**Description of content:** NBTC TS 1001-2561, which supersedes NTC TS 1001-2553, specifies minimum technical requirements for Used in Land Mobile Service using VHF/UHF for Speech Communications. Amendments are made by adding the Electrical Safety Requirements TISI 1561-2556 and IEC 62368-1 while Radio Frequency Requirements mainly remain the same with some minor updates from previous version of this standard (NTC TS 1001-2553).

**Objective and rationale:** Technical performance and safety

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

**Final date for comments:** 24 September 2018

**Full text:** [https://tsapps.nist.gov/notifyus/docs/wto\\_country/THA/full\\_text/pdf/THA515\(thai\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/THA/full_text/pdf/THA515(thai).pdf)

### Thailand Notification THA/516

**Date issued:** 26 July 2018

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

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

**Products covered:** Radio communication equipment used in land mobile

**Title:** Draft NBTC TS 1024-2561(2018): Radiocommunications Equipment Used in Land Mobile Service using VHF/UHF for Speech and/or Data Communications (10 pages in Thai)

**Description of content:** NBTC TS 1024-2561, which supersedes NTC TS 1024-2552, specifies minimum technical requirements for Used in Land Mobile Service using VHF/UHF for Speech and/or Data Communications.

Amendments are made by adding the Electrical Safety Requirements TISI 1561-2556 and IEC 62368-1 while Radio Frequency Requirements mainly remain the same with some minor updates from previous version of this standard (NTC TS 1024-2552).

**Objective and rationale:** Technical performance and safety

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

**Final date for comments:** 24 September 2018

**Full text:** [https://tsapps.nist.gov/notifyus/docs/wto\\_country/THA/full\\_text/pdf/THA516\(thai\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/THA/full_text/pdf/THA516(thai).pdf)

## Switzerland Notification CHE/232

**Date issued:** 6 August 2018

**Agency responsible:** Federal Office of Public Health (FOPH)

**National inquiry point:** Swiss Association for Standardization (SNV)

**Products covered:** Laser pointer products

**Title:** Draft Ordinance to the Federal Act on Protection Against Hazards Arising from Non-Ionising Radiation and Sound (O-NIRSA) (23 pages, available in German, French, and Italian)

**Description of content:** An increasing number of laser pointers has been placed on the market that pose a danger to human health and to pilots or locomotive drivers. In order to avoid both dangerous glare and direct eye damage in the future, only class 1 lasers pointers will be allowed to be placed on the market.

The notified draft ordinance prohibits therefore the import, transit, supply and possession of the following laser pointers: a. Class 1M, 2, 2M, 3R, 3B and 4 laser pointers in accordance with SN EN 60825-1:20147, "Safety of laser products - Part 1: Equipment classification and requirements"; b. laser pointers which are not, or not correctly, labelled with a laser class; c. any accessories which focus the laser radiation emitted by laser pointers.

**Objective and rationale:** The aim is to avoid eye injuries and dangerous glare due to laser pointers.

**Relevant documents:** Draft Ordinance to the Federal Act on Protection Against Hazards Arising from Non-Ionising Radiation and Sound (O-NIRSA); available in German, French, Italian . German:

[https://www.bag.admin.ch/dam/bag/de/dokumente/str/nis/NISSGV/v-nissg.pdf.download.pdf/V-NISSG\\_DE.pdf](https://www.bag.admin.ch/dam/bag/de/dokumente/str/nis/NISSGV/v-nissg.pdf.download.pdf/V-NISSG_DE.pdf)

French: [https://www.bag.admin.ch/dam/bag/fr/dokumente/str/nis/NISSGV/v-nissg.pdf.download.pdf/V-NISSG\\_FR.pdf](https://www.bag.admin.ch/dam/bag/fr/dokumente/str/nis/NISSGV/v-nissg.pdf.download.pdf/V-NISSG_FR.pdf)

Italian: [https://www.bag.admin.ch/dam/bag/it/dokumente/str/nis/NISSGV/v-nissg.pdf.download.pdf/V-NISSG\\_IT.pdf](https://www.bag.admin.ch/dam/bag/it/dokumente/str/nis/NISSGV/v-nissg.pdf.download.pdf/V-NISSG_IT.pdf)

Federal Act on Protection Against Hazards Arising from Non-Ionising Radiation and Sound (NIRSA); available in German, French, Italian and English . German: <https://www.admin.ch/opc/de/federal-gazette/2017/4211.pdf>

French: <https://www.admin.ch/opc/fr/federal-gazette/2017/394>

**Proposed date of adoption:** 1 March 2019

**Proposed date of entry into force:** 1 January 2020

**Final date for comments:** 5 October 2018

**Full text:** [https://tsapps.nist.gov/notifyus/docs/wto\\_country/CHE/full\\_text/pdf/CHE232\(english\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/CHE/full_text/pdf/CHE232(english).pdf)

---

## ANSI Public Review Announcements

The following documents have been announced for public review by ANSI. 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 17 September 2018**

**BSR/AWS J1.3M/J1.3-201x, Specification for Materials Used in Resistance Welding Applications** (new standard)

Specifies materials for resistance welding electrodes, common applications, and conformance verification.

Single copy price: \$35.00

Order from and send comments to: Mario Diaz, [mdiaz@aws.org](mailto:mdiaz@aws.org)

## Due 2 October 2018

### **BSR/ASME HST-2-201x, Performance Standard for Hand Chain Manually Operated Chain Hoists** (revision of ANSI/ASME HST-2-2014)

Update definitions in this standard to reflect other volumes in the series and update the formatting of the document and references to reflect changes made in newer standards.

Single copy price: Free

Obtain an electronic copy from: <http://cstools.asme.org/publicreview>

Send comments to: Elijah Dominguez, [domingueze@asme.org](mailto:domingueze@asme.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 1 September 2018

#### **C22.1, Amendment - Canadian Electrical Code, Part I, Subject No. 4331, Overcurrent protection for transformers or other devices having Class 2 outputs.**

Revise Rule 16-202 as shown.

16-202 Methods of installation on the supply side of overcurrent protection, transformers, or devices having Class 2 outputs

1) In Class 2 circuits, the conductors and equipment on the supply side of overcurrent protection, transformers, or devices having Class 2 outputs shall be installed in accordance with the requirements of other appropriate Sections of this Code.

2) Where the transformers or other devices having Class 2 outputs are supplied from electric lighting and power circuits, the transformer or devices shall be protected on the supply side by an overcurrent device rated or set in accordance with Section 26 of this Code, but in no case exceeding 20 A.

#### **C22.1, Amendment - Canadian Electrical Code, Part I, Subject No. 4336, New definition and Rule for Section 10, "Equipotential grounding".**

(A) Add new term to Rule 10-004, special terminology.

Equipotential grounding – the grounding of non-current-carrying conductive parts which have been bonded together in accordance with 10-700 to maintain a substantially equal electric potential to earth and to mitigate undesirable effects of lightning and gradient voltages from other sources.

(B) Add new Rule 10-120 as shown.

10-120 Equipotential grounding of multiple buildings, structures or distribution centers fed from one system.

1) Equipotential grounding shall be directly connected to the non-current carrying conductive parts of all distributed electrical systems fed from an electrical system in accordance with sub-rule 2&3.

2) Buildings interconnected by a bonding conductor run with the feeder conductors in accordance with 10-614, shall have all non-current carrying metal parts of the building which have been bonded as per 10-700 grounded to an equipotential ground rod located at that building.

3) Remote or standalone facilities or distribution centers interconnected by a bonding conductor run with the feeder conductors in accordance with 10-614, shall have all non-current carrying metal parts which have been bonded as per 10-700 grounded to an equipotential ground electrode connected to the non-current-carrying conductive parts of the electrical equipment at the point of distribution.

4) Equipotential grounding may be exempted where:

a) a soil resistivity study or other engineering design methods can show that elimination of the equipotential grounding will not create an unsafe installation, or

---

b) a single branch circuit or a multi-wire branch circuit incorporating a bonding conductor, supplies one outlet only in a remote or standalone facility, structure, or building.

**C22.1, Amendment - Canadian Electrical Code, Part I, Subject No. 4335, Revision to Rule 14-100, overcurrent protection of NS Cables and, USEB and USEI cables.**

Add new Item 14-100 h) as shown.

14-100 Overcurrent protection of conductors (see Appendix B)

Each ungrounded conductor shall be protected by an overcurrent device at the point where it receives its supply of current and at each point where the size of conductor is decreased, except that such protection shall be permitted to be omitted in each of the following cases:

(No changes to a) through e))

f) where the smaller conductor supplies a transformer, and

i) the conductor supplying the primary of the transformer has an ampacity not less than one third that of the larger conductor;

ii) the conductor supplied by the secondary of the transformer has an ampacity not less than the ampacity of the primary conductor multiplied by the ratio of the primary to the secondary voltage;

iii) the total length of one primary plus one secondary conductor (the longest, if more than one winding), excluding any portion of the primary conductor that is protected at its own ampacity, does not exceed 7.5 m;

iv) the primary and secondary conductors are protected from mechanical damage; and

v) the secondary conductor terminates in a single overcurrent device rated or set at a value not exceeding its ampacity; or

g) where the smaller conductor

i) is supplied by a circuit at not more than 750 V;

ii) is supplied from an overhead or underground circuit and is run overhead or underground except where it enters a building;

iii) is installed in accordance with the requirements of Section 6; and

iv) terminates in service equipment in accordance with Section 6. or

h) where the smaller conductor

i) is supplied by a circuit at not more than 750 V;

ii) is supplied from an overhead or underground circuit and is run overhead or underground except where it enters a building;

iii) is installed in accordance with the requirements of Sections 4 & 10; and

iv) terminates in distribution equipment with a single point of disconnect.

**Due 2 September 2018**

**Z259.18, Counterweighted guardrail systems (new standard)**

This standard specifies requirements for the design, performance, testing, marking, and instructions of manufactured free-standing guardrails that rely on mass and friction and that are intended to protect workers from a fall hazard. These guardrails are not fixed to a structure.

---

**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 CSA B44.1/ASME A17.5-201x, Elevator and Escalator Electrical Equipment** (revision of ANSI CSA B44.1/ASME A17.5-2014)

The requirements of this standard apply to the following electrical equipment for elevators, escalators, moving walks, dumbwaiters, material lifts, and elevating devices for persons with physical disabilities (platform lifts and stairway chairlifts): (a) motor controllers; (b) motion controllers; (c) operation controllers; (d) operating devices; and (e) all other electrical equipment not listed/certified and labeled/marked according to another product safety

standard or code.

Contact: Mayra Santiago, [ansibox@asme.org](mailto:ansibox@asme.org)

**BSR/IEEE 1735-201x, Recommended Practice for Encryption and Management of Electronic Design Intellectual Property (IP)** (new standard)

This standard specifies embeddable and encapsulating mark-up syntaxes for design IP encryption and rights management, together with recommendations for integration with design specification formats described in other standards. It also recommends use models for interoperable tool and hardware flows, which will include selecting encryption and encoding algorithms and encryption key management. The recommendation includes a description of the trust model assumed in the recommended use models. This standard does not specifically include any consideration of digitally encoded entertainment media. In the context of this document, the term "IP" will be used to mean Intellectual Property electronic design data. Electronic Design Intellectual Property is a term used in the electronic design community. It refers to a reusable collection of design specifications which represent the behavior, properties, and/or representation of the design in various media. Examples of these collections include, but are not limited to: A unit of electronic system design, a design verification and analysis scheme (e.g., test bench), a netlist indicating elements and the interconnection thereof to implement a function, a set of fabrication instructions, a physical layout design or chip layout, a design intent specification. The term is partially derived from the common practice for the collection to be considered the intellectual property of one party. Hardware and software descriptions are encompassed by this term.

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

**BSR/UL 5800-201x, Standard for Safety for Battery Fire Containment Products** (new standard)

This standard includes requirements covering fire testing and performance criteria to evaluate battery fire containment products. The fire condition represented by the standard simulates the ignition of a battery-powered device and combustible components and assemblies within an enclosure. This standard does not cover fires caused by non-battery-operated devices.

Contact: Susan Malohn, [Susan.P.Malohn@ul.com](mailto:Susan.P.Malohn@ul.com)

**BSR/TIA 758-C-201x, Customer-Owned Outside Plant Telecommunications Infrastructure Standard** (revision and redesignation of ANSI/TIA 758-B-2012)

The purpose of this standard is to enable the planning and installation of an outside-plant-structured cabling system infrastructure. This standard establishes the recommendations and requirements used in the design of the telecommunication pathways and spaces, and the cabling installed between buildings or points in a customer-owned campus environment. Customer-owned campus facilities are typically termed "outside plant (OSP)". For the purpose of this standard, they are termed "customer-owned OSP."

Contact: Teesha Jenkins, [standards@tiaonline.org](mailto:standards@tiaonline.org)

---

## Final Actions on American National Standards

The documents listed below have been approved by the ANSI Board of Standards Review or by an ANSI-Audited Designator on the date noted.

**ANSI/ASSP A10.28-2018**, Safety Requirements for Work Platforms Suspended from Cranes or Derricks (revision and redesignation of ANSI/ASSE A10.28-2011): 27 July 2018

**ANSI/ASSP/ISO 31000-2018**, Risk Management Guidelines (identical national adoption of ISO 31000-2018 and revision of ANSI/ASSE Z690.2-2011): 20 July 2018

**ANSI/IES TM-30-2018**, IES Method for Evaluating Light Source Color Rendition (new standard): 27 July 2018

**ANSI/NFPA 51B-2014**, Standard for Fire Prevention During Welding, Cutting, and Other Hot Work (revision of ANSI/NFPA 51B-2013): 15 July 2018

## Draft IEC & ISO Documents

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

**ISO/DIS 14006**, Environmental management systems - Guidelines for incorporating ecodesign, 20 August 2018, \$112.00

**34D/1403/CD, IEC 60570/AMD2/FRAG2 ED4**: Electrical supply track systems for luminaires, 1 October 2018

**34D/1404/CD, IEC 60598-1/AMD2/FRAG27 ED8**: Luminaires - Part 1: General requirements and tests, 1 October 2018

**106/460/CDV, IEC 62209-2/AMD1 ED1**: Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz), 1 October 2018

**ISO/DIS 19454**, Building environment design - Indoor environment - Daylight opening design for sustainability principles in visual environment, 19 October 2018, \$88.00

**ISO/DIS 14007**, Environmental management - Guidelines for determining environmental costs and benefits, 19 October 2018, \$88.00

---

## Recently Published IEC & ISO Documents

Listed here are documents recently approved by the IEC and ISO. A list of resellers is available at <http://webstore.ansi.org/faq.aspx#resellers>.

**ISO 8100-20:2018**, Lifts for the transport of persons and goods - Part 20: Global essential safety requirements (GESRs), \$232.00

**ISO/TR 18828-1:2018**, Industrial automation systems and integration - Standardized procedures for production systems engineering - Part 1: Overview, \$68.00

**ISO/IEC 18000-4:2018**, Information technology - Radio frequency identification for item management - Part 4: Parameters for air interface communications at 2,45 GHz, \$232.00

## TSP Meeting Schedule

The next set of meetings will be held 4-8 October 2018 at the Marriott Solana in Westlake, TX. The most up to date version of the meeting schedule and a "Reserve a hotel room" link are available at <http://tsp.esta.org/tsp/meetings/index.php>. The preliminary schedule for the meetings in January 2019 at NAMM in Anaheim is there, too.

Control Protocols E1.33 TG	19:00 – 23:00	Friday, 5 October 2018
Control Protocols NAEP TG	20:00 – 22:00	Saturday, 6 October 2018
Control Protocols NextGen CP	14:00 – 18:00	Saturday, 6 October 2018
Control Protocols Working Group	09:00 – 13:00	Saturday, 6 October 2018
Electrical Power Inspection TG	09:00 – 13:00	Friday, 5 October 2018
Electrical Power Working Group	14:00 – 18:00	Friday, 5 October 2018
Event Safety Communications TG	14:00 – 18:00	Friday, 5 October 2018
Event Safety Fire Safety TG	09:00 – 13:00	Friday, 5 October 2018
Event Safety Working Group	14:00 – 18:00	Saturday, 6 October 2018
Floors Working Group	09:00 – 13:00	Friday, 5 October 2018
Rigging Working Group	19:00 – 23:00	Saturday, 6 October 2018
Stage Machinery E1.64 TG	14:00 – 18:00	Thursday, 4 October 2018
Stage Machinery Working Group	19:00 – 23:00	Friday, 5 October 2018
Technical Standards Council	09:00 – 13:00	Sunday, 7 October 2018

## ESTA Standards Watch

is distributed as a benefit to ESTA members and as a communications medium for ESTA's Technical Standards Program. Original material is copyright the Entertainment Services and Technology Association.

### Editors:

Karl G. Ruling, Technical Standards Manager  
Entertainment Services and Technology Association  
630 Ninth Avenue, Suite 609  
New York, NY 10036  
USA  
[karl.ruling@esta.org](mailto:karl.ruling@esta.org)  
1 212 244 1505 ext. 703  
Fax 1 212 244 1502

Richard Nix, Asst. Technical Standards Manager  
Entertainment Services and Technology Association  
630 Ninth Avenue, Suite 609  
New York, NY 10036  
USA  
[richard.nix@esta.org](mailto:richard.nix@esta.org)  
1 212 244 1505 ext. 649  
Fax 1 212 244 1502

## **TSP Donors Who Have Made Long-Term, Multi-Year Pledges**

About the Stage  
Altman Lighting  
Barbizon Lighting Company  
B-Hive Industries  
Scott Blair  
BMI Supply  
Boston Illumination Group  
Candela Controls  
Chauvet  
City Theatrical  
Clark-Reder Engineering  
Columbus McKinnon Corporation  
Tracey Cosgrove and Mark McKinney  
Bruce Darden  
Doug Fleenor Design  
Earl Girls Inc. EGI Pro  
Electronic Theatre Controls  
Entertainment Project Services  
Geiger Engineers, PC  
Tony Giovannetti  
GLP German Light Products  
Golden Sea Professional Equipment Limited  
H & H Specialties  
Harlequin Floors  
High Output  
Neil Huff  
Hughston Engineering  
IATSE Local 891  
InCord  
Beverly and Tom Inglesby  
Interactive Technologies  
InterAmerica Stage  
iWeiss Inc.  
J.R. Clancy  
Jules Lauve  
Brian Lawlor  
Lex Products  
Lycian Stage Lighting  
John T. McGraw  
McLaren Engineering Group  
Mike Garl Consulting  
Mike Wood Consulting  
Morpheus Lights  
NAMM  
Niscon  
Oasis Stage Werks  
Reed Rigging  
Reliable Design Services  
Robe  
Rosco Laboratories  
Rose Brand  
Alan M. Rowe  
David Saltiel  
Sapsis Rigging  
Stage Equipment & Lighting  
Stage Rigging  
Stagemaker  
Stageworks  
Syracuse Scenery and Stage Lighting, Co.  
Dana Taylor  
Steve Terry  
Texas Scenic Company  
Theatre Projects Consultants  
Theatre Safety Programs  
TMB  
Tyler Truss Systems  
Vertigo  
Vincent Lighting Systems  
Steve Walker & Associates  
Walt Disney Parks and Resorts  
Westview Productions  
WNP Services, Inc.  
XSF Xtreme Structures and Fabrication

## Investors in Innovation, supporters of ESTA's Technical Standards Program

### VISIONARY LEADERS (\$50,000 & up)

ETC

ProSight Specialty Insurance

---

### VISIONARY (\$10,000 & up; >100 employees/members)

Chauvet Professional

Cisco

Columbus McKinnon Entertainment Technology

Martin by Harman

Robe

Walt Disney Parks and Resorts

### VISIONARY (\$5,000 & up; 20–100 employees/members)

Altman Lighting, Inc.

German Light Products

JR Clancy

McLaren Engineering Group

Rose Brand

Stage Rigging

TMB

Tyler Truss Systems, Inc.

### VISIONARY (\$500 & up; <20 employees/members)

About the Stage

B-Hive Industries, Inc.

Scott Blair

Boston Illumination Group

Louis Bradfield

Candela Controls Inc.

Clark Reder Engineering

Tracey Cosgrove & Mark McKinney

Doug Fleenor Design

EGI Event Production Services

Entertainment Project Services

Neil Huff

Hughston Engineering Inc.

Interactive Technologies

Lankey & Limey Ltd.

Jules Lauve

Brian Lawlor

Limelight Productions, Inc.

John T. McGraw

Mike Garl Consulting

Mike Wood Consulting

Power Gems

Reed Rigging

Reliable Design Services

Alan Rowe

David Saltiel

Sapsis Rigging Inc.

Stageworks

Dana Taylor

Steve Terry

Theatre Projects

Theatre Safety Programs

Tobins Lake Sales Theatrical Supply

Vertigo

Steve A. Walker & Associates

Westview Productions

WNP Services

---

### INVESTOR (\$3,000–\$9,999; >100 employees/members)

Actors' Equity Association

Barbizon Lighting Company

Golden Sea Professional Equipment Limited

IATSE Local 728

IATSE Local 891

Lex

NAMM

Rosco Laboratories

Texas Scenic Company

### INVESTOR (\$1,500–\$4,999; 20–100 employees/members)

American Society of Theatre Consultants

Area Four Industries

BMI Supply

City Theatrical Inc.

InterAmerica Stage, Inc.

Lycian Stage Lighting

Morpheus Lights

Niscon Inc.

Syracuse Scenery and Stage Lighting

Tomcat

XSF Xtreme Structures and Fabrication

---

**INVESTOR** (\$200–\$499; <20 employees/members)

Benjamin Cohen  
Bright Ideas Custom Electronics Inc.  
Bruce Darden  
K5600, Inc.  
Indianapolis Stage Sales & Rentals, Inc.  
Jason Kyle

Eric Loader  
Moss LED  
Robert Scales  
Stephen Vanciel  
Suga Koubou Co., Ltd.  
VU-Industry Vision Technology  
Xpro Light

---

**SUPPORTER** (<\$3,000; >100 employees/members)

Ian Foulds, IATSE Local 873  
Harlequin Floors  
PSAV

Thern Stage Equipment  
USAI Lighting

---

**SUPPORTER** (<\$1,500; 20–100 employees/members)

Aerial Arts  
Blizzard Lighting, LLC  
Creative Stage Lighting  
Geiger Engineers  
H&H Specialties  
High Output  
InCord  
iWeiss  
Oasis Stage Werks

Serapid  
Stage Equipment & Lighting  
Stagemaker  
Thermotex Industries, Inc.  
Total Structures  
Ultratec Special Effects  
Vincent Lighting Systems  
Zhuhai Shengchang Electronics Co.

---

**SUPPORTER** (<\$200; <20 employees/members)

AC Power Distribution, Inc.  
Michael Cowger  
Peter Donovan  
Entertainment Project Services, LLC  
Tony Giovannetti  
Pat Grenfell  
Mitch Hefter  
Bill Hektner  
Alan Hendrickson  
Hoist Sales and Services  
John Huntington  
Beverly and Tom Inglesby  
Intensity Advisors  
JSAV  
Eddie Kramer  
J.P. Kyle

Michael Lay  
John Musarra  
Shawn Nolan  
Lizz Pittsley  
Phil Reilly  
Charles Scott  
Michael Skinner  
Skjonberg Controls Inc.  
Stage Labor of the Ozarks  
Studio T+L, LLC  
John Szewczuk  
Teclumen  
Theta Consulting  
Tracy Underhill  
Robert L. Williams

---

Planned Giving donor: Ken Vannice