



Technical Standards Program

ESTA Standards Watch

September 2017

Volume 21, Number 17

Table of Contents

Six ESTA Standards in Public Review.....	1
Columbus McKinnon Donates Online Training Seats to TSP.....	2
NEMA Advice on Water-Damaged Electrical Equipment.....	3
Theory of Operations Document for TSN Industrial Implementation Now Available.....	3
WTO Technical Barrier to Trade Notifications.....	3
Mexico Notification MEX/368.....	4
Saudi Arabia Notification SAU/995.....	4
Israel Notification ISR/950.....	4
Israel Notification ISR/955.....	5
Israel Notification ISR/956.....	5
Kenya Notification KEN/593.....	6
Rwanda Notification RWA/57.....	6
Rwanda Notification RWA/66.....	7
ANSI Public Review Announcements.....	7
Due 9 October 2017.....	7
Due 9 October 2017, NFPA Second Draft Reports.....	7
Due 16 October 2017.....	9
Due 23 October 2017.....	9
Due 31 October 2017.....	10
Due 7 November 2017.....	10
Due 16 November 2017, NFPA First Draft Reports.....	11
BSI Public Review Announcements.....	12
Due 31 October 2017.....	12
CSA Public Review Announcements.....	13
Due 7 October 2017.....	13
New ANS Projects.....	13
Final Actions on American National Standards.....	14
Draft IEC & ISO Standards.....	15
Recently Published IEC & ISO Documents.....	17
TSP Meeting Schedule.....	19
TSP Donors Who Have Made Long-Term, Multi-Year Pledges.....	20
Investors in Innovation, supporters of ESTA's Technical Standards Program.....	21

Six ESTA Standards in Public Review

Six standards are available for public review on the ESTA website at http://tsp.esta.org/tsp/documents/public_review_docs.php. Five have comment deadlines of 25 September 2017, but one is a week later, 2 October. People materially affected by these standards are invited to review them and comment on them, saying they are acceptable as they are or are in need of changes.

BSR E1.9, Entertainment Technology - Reporting Photometric Performance Data for Luminaires Used in Entertainment Lighting

This standard defines the minimum data to be presented on documents purporting to accurately describe the photometric performance of stage and studio luminaires used in the live entertainment and performance industries. This is a proposed reaffirmation of the standard first published in 2007. The closing date is 25 September 2017.

BSR E1.6-2, Design, Inspection, and Maintenance of Electric Chain Hoists for the Entertainment Industry

This standard covers the design, inspection, and maintenance of serially manufactured electric link chain hoists having capacity of 2 tons or less and used in the entertainment industry. This standard does not cover attachment to the load or to the overhead structure. Controls used for multiple hoist operation are excluded from the scope of this standard. This is a proposed revision of the existing E1.6-2 standard. Comments are due 25 September.

BSR E1.14, Entertainment Technology - Recommendations for Inclusions in Fog Equipment Manuals

The standard applies to the instruction manuals for fog-making equipment manufactured for use in the entertainment industry. Fog users must have some general knowledge of the technology, have a clear understanding of how to operate the fog system, and be aware of the potential hazards related to the use of fog, and fog systems. This standard establishes guidelines for manufacturers to provide to the user the necessary information required for the safe and responsible use of fog equipment. This is a proposed revision of the existing E1.14. Comments are due by 25 September.

BSR E1.25, Recommended Basic Conditions for Measuring the Photometric Output of Stage and Studio Luminaires by Measuring Illumination Levels Produced on a Planar Surface

E1.25 describes the basic conditions for measuring the photometric output of stage and studio luminaries by a variety of testing methods that measure the illumination levels produced by the luminaires on a planar surface. The conditions are intended to be reasonably achievable for a person doing measurements on a stage, in a studio, or in a rental shop. This is a proposed reaffirmation of E1.25, which was last revised in 2012. Comments are due 25 September.

BSR E1.36, Model Procedure for Permitting the Use of Tungsten-Halogen Incandescent Lamps and Stage and Studio Luminaires in Vendor Exhibit Booths in Convention and Trade Show Exhibition Halls

E1.36 is a model set of procedures that can be used by convention center and trade show exhibition hall staff to mitigate the risks perceived to be associated with the use of tungsten-halogen lamps and stage and studio luminaires in convention centers and trade show exhibition halls and to allow their use in a safe manner. This is a proposed revision of the standard first published in 2007. Comments are due 25 September.

BSR E1.31, Entertainment Technology—Lightweight streaming protocol for transport of DMX512 using ACN

E1.31, often called sACN, provides a very simple protocol that offers functionality comparable to proprietary DMX512 over Ethernet protocols while being compatible with the ANSI E1.17 suite of protocols. The standard is being revised, limited to the addition of IPv6 compatibility and the correction of errors. Input on additional features is not being sought at this time. Comments are due 2 October.

Columbus McKinnon Donates Online Training Seats to TSP

The Columbus McKinnon Corp. (CMCO) has donated 100 seats to their popular Lodestar Maintenance Training Course with the full registration fee going to support ESTA's Technical Standards Program (TSP). You can sign up for the course at tsp.esta.org/cmco and help support the TSP as you advance your education. For more than 30 years, CM-ET has been conducting one-day motor classes to familiarize entertainment technicians and riggers on safe and proper general maintenance and repair of the CM-ET Lodestar. You now can get the same level of information you would get if you attended one of CM's hands-on classes, but without the inconvenience and expense of traveling. Learn at your own pace and on your own schedule.

This course walks you through the disassembly of the classic model "L" CM-ET Lodestar. Topics include: function and inspection of key components, adjusting limit switches, inspecting and adjusting the brake,

understanding CMCO specifications and inspection requirements, types of proper documentation, understanding basic electricity and wiring diagrams, performing a load test, as well as general maintenance, inspection and troubleshooting. At the conclusion of the training, there's a test. A successful test will earn a certificate of training. Certified ETCP Technicians can earn 4 renewal credits.

CMCO, one of the world's leading manufacturers of electric chain hoist and rigging products, has been involved with the TSP since the program's inception, providing technical expertise on the Rigging Working Group as well as answering ESTA's recent call for support by becoming a Visionary level donor. Mike Garl, co-chair of the Technical Standards Council, commented, "CMCO has once again demonstrated their unwavering commitment to safety in the entertainment industry and to the future of the TSP. We thank them for their leadership and support."

NEMA Advice on Water-Damaged Electrical Equipment

The National Electrical Manufacturers Association has issued a reminder to contractors (and anyone else who is interested) of their useful guidance document, "Evaluating Water-Damaged Electrical Equipment" document aimed specifically at contractors who will be called in to help with the damage assessment once the waters have receded. The guide is free and available for download on NEMA's website at <http://www.nema.org/Standards/Pages/Evaluating-Water-Damaged-Electrical-Equipment.aspx>.

The document provides guidelines on how to handle electrical equipment that has been exposed to water. It's designed for suppliers, installers, inspectors and users of electrical products, and outlines items that require complete replacement or those that can be reconditioned by a trained professional. Such equipment includes:

- Electrical distribution equipment
- Motor circuits
- Power equipment
- Transformers
- Wire, cable and flexible cords
- Wiring devices
- GFCIs and surge protectors
- Luminaires and ballasts,
- Motors and electronic products

Theory of Operations Document for TSN Industrial Implementation Now Available

The Avnu Alliance has announced the availability of the "Theory of Operation for Time Sensitive Networks (TSN) – Enabled Industrial Systems," a recommended practices document. The Theory of Operations document provides a system architecture and requirements for an industrial model that enables multiple industry groups, vendors and protocols to share a TSN-based network. This comprehensive document introduces the fundamental mechanisms needed for a system architecture to build on, including:

- Time synchronization
- Quality of service mechanisms to support deterministic high-speed control traffic
- Network configuration informed by software defined networking concepts to provide flexible ad-hoc and pre-engineered networks

To learn more about the "Theory of Operations" and download the document, visit <http://avnu.org/theory-of-operation-for-tsn-enabled-industrial-systems/>.

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.

Mexico Notification MEX/368

Date issued: 17 August 2017

Agency responsible: Ministry of Labour and Social Welfare (STPS)

National inquiry point: Direccion General de Normas (DGN)

Products covered: Diving equipment and personal protective equipment (90200003)

Title: Proyecto de Norma Oficial Mexicana PROY-NOM-014-1-STPS-2017, Buceo - Condiciones de seguridad e higiene. Exposición laboral a presiones diferentes a la atmosférica absoluta (Draft Mexican Official Standard PROY-NOM-014-1-STPS-2017: Diving - Safety and hygiene requirements. Occupational exposure to pressures other than absolute air pressure) (100 pages, in Spanish)

Description of content: The notified Standard is applicable throughout national territory and covers all underwater occupational activities.

Objective and rationale: The notified text establishes safety and hygiene requirements to protect the physical integrity and health of workers engaged in underwater occupational activities.

Relevant documents: . Mexican Official Standard NOM-019-STPS-2011: Constitución, integración, organización y funcionamiento de las comisiones de seguridad e higiene (Establishment, composition, organization and operation of safety and hygiene commissions)

. Mexican Official Standard NOM-020-STPS-2011: Recipientes sujetos a presión, recipientes criogénicos y generadores de vapor o calderas - Funcionamiento - Condiciones de seguridad (Pressurized containers, cryogenic vessels and steam generators or boilers - Operation - Safety requirements)

. Mexican Official Standard NOM-022-STPS-2015: Electricidad estática en los centros de trabajo - Condiciones de seguridad (Static electricity in the workplace - Safety requirements)

. Mexican Official Standard NOM-030-STPS-2009: Servicios preventivos de seguridad y salud en el trabajo - Funciones y actividades (Preventive occupational safety and health services - Functions and activities)

. Mexican Official Standard NOM-09-TUR-2002: Que establece los elementos a que deben sujetarse los guías especializados en actividades específicas (Requirements to be met by guides specializing in specific activities)

. Mexican Official Standard NOM-012-TUR-2016: Para la prestación de servicios turísticos de buceo (Tourist diving services)

. Mexican Official Standard NOM-047-SSA1-2011: Salud ambiental - Índices biológicos de exposición para el personal ocupacionalmente expuesto a sustancias químicas (Environmental health - Biological exposure indices for personnel occupationally exposed to chemical substances)

Proposed date of adoption: Not given by country

Proposed date of entry into force: Not given by country

Final date for comments: 10 October 2017

Full text: [https://tsapps.nist.gov/notifyus/docs/wto_country/MEX/full_text/pdf/MEX368\(spanish\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/MEX/full_text/pdf/MEX368(spanish).pdf)

Saudi Arabia Notification SAU/995

Date issued: 21 August 2017

Agency responsible: Saudi Arabia Standards Organization (SASO)

National inquiry point: Saudi Arabia Standards Organization (SASO)

Products covered: Elevators (HS codes: see the Annex (1), page 19)

Title: Technical Regulations For elevators used in buildings and installations (48 page(s), in Arabic)

Description of content: This regulation specifies the following: Terms and Definitions, scope, objectives, supplier Obligations, Labeling, Conformity Assessment Procedures, Responsibilities of regulatory authorities, the authorities of market survey Responsibilities, Violations and Penalties, general rules, Transitional rules, Appendix (lists, types)

Objective and rationale: Consumer protection and market surveillance

Relevant documents: See the Annex (1), page 19

Proposed date of adoption: Not given by country

Proposed date of entry into force: Not given by country

Final date for comments: 20 October 2017

Full text: [https://tsapps.nist.gov/notifyus/docs/wto_country/SAU/full_text/pdf/SAU995\(arabic\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/SAU/full_text/pdf/SAU995(arabic).pdf)

Israel Notification ISR/950

Date issued: 23 August 2017

Agency responsible: Israel WTO-TBT Enquiry Point, Ministry of Industry, Trade and Labor (MOITAL)

National inquiry point: Israel WTO-TBT Enquiry Point, Ministry of Industry, Trade and Labor (MOITAL)

Products covered: Plugs and socket-outlets (HS 8536)

Title: SI 32 part 1.1: Plugs and socket outlets for household and similar purposes: Plugs and socket-outlets for single phase up to 16A - General requirements (165 page(s), in English; 27 page(s), in Hebrew)

Description of content: Revision of the Mandatory Standard SI 32 part 1.1. This draft standard revision adopts the International Standard IEC 60884-1 - Edition 3.2: 2013-02, with the following changes that appear in the Hebrew section:

Changes the standard's scope as follows:

- o Narrows the standard's scope to apply to plugs and fixed or portable socket-outlets with a rated voltage greater than 50 V but not exceeding 250V and a rated current not exceeding 16A. The products removed from this standard's scope will be included in the future standard SI 32 part 1.2;
- o Removes from the standard's scope the second phrase "The rated current is limited to 16 A maximum for fixed socket-outlets provided with screwless terminals";
- o This standard applies also to: plugs that are part of a cord sets, plugs and portable plugs that are part of a cord extension sets, including plugs and portable socket outlets with one or few outlets, and to plugs and socket-outlets which are a component of an appliance;
- o The scope was extended to apply also to permanent plugs that include one device such as: switch, fuse or USB supply;
- . Adds new definitions to paragraph 3;
- . Removes the ratings requirements for 32A detailed in Table 1 of paragraph 6;
- . Prohibits the use of equipment type 0 and type 01 as specified in Israel mandatory standard SI 900 part1;
- . Adds new marking requirements to paragraph 8 for wires with nominal cross section of 2.5mm² and according to this amends paragraphs 12.2 and 23.2;
- . Replaces the first section of paragraph 9.1 and provides a new Table 201, that provides new dimensions for the accessories according to figures 203-212;
- . Adds new requirements to paragraph 10 dealing with protection against electric shock.

Objective and rationale: Protection of human health or safety

Relevant documents: Israel Mandatory Standard SI 32 part 1.1 (June 2012); International Standard IEC 60884-1 - Edition 3.2: 2013-02.

Proposed date of adoption: Not given by country

Proposed date of entry into force: Not given by country

Final date for comments: 22 October 2017

Full text: [https://tsapps.nist.gov/notifyus/docs/wto_country/ISR/full_text/pdf/ISR950\(hebrew\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/ISR/full_text/pdf/ISR950(hebrew).pdf)

Israel Notification ISR/955

Date issued: 24 August 2017

Agency responsible: Israel WTO-TBT Enquiry Point, Ministry of Industry, Trade and Labor (MOITAL)

National inquiry point: Israel WTO-TBT Enquiry Point, Ministry of Industry, Trade and Labor (MOITAL)

Products covered: Circuit-breakers for a.c. and d.c. operation (HS 853620, 853890)

Title: SI 60898 part 2: Electrical accessories - Circuit-breakers for overcurrent protection for household and similar installations: Circuit-breakers for a.c. and d.c. operation (21 page(s), in English; 5 page(s), in Hebrew)

Description of content: Revision of the Mandatory Standard 60898 part 2 dealing with circuit-breakers for a.c. and d.c. operation. This revised standard adopts the International Standard IEC 60898-2 Edition 2.0: 2016-08 with a few changes as indicated in the Hebrew section.

Both the old standard and this new revised standard will apply for a period of 1 year from publication in Israel Official Gazette. During this time product may be tested according to the old or the new revised standard.

Objective and rationale: Protection of human health or safety

Relevant documents: Israel Mandatory Standard SI 60898 (July 2009); International Standard IEC 60898-2 Edition 2.0: 2016-08.

Proposed date of adoption: Not given by country

Proposed date of entry into force: Not given by country

Final date for comments: 22 October 2017

Full text: [https://tsapps.nist.gov/notifyus/docs/wto_country/ISR/full_text/pdf/ISR955\(hebrew\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/ISR/full_text/pdf/ISR955(hebrew).pdf)

Israel Notification ISR/956

Date issued: 25 August 2017

Agency responsible: Israel WTO-TBT Enquiry Point, Ministry of Industry, Trade and Labor (MOITAL)

National inquiry point: Israel WTO-TBT Enquiry Point, Ministry of Industry, Trade and Labor (MOITAL)

Products covered: Electrical circuit-breakers (HS 853620, 853630, 853690, 853890)

Title: SI 61009 part 1: Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBOs): General rules (193 page(s), in English; 7 page(s), in Hebrew)

Description of content: Revision of the Mandatory Standard SI 61009 part 1 dealing with electrical circuit-breakers. This draft standard revision adopts the International Standard IEC 61009-1 Edition 3.2: 2013-09. This edition includes the following significant technical changes with respect to the previous edition:

- Complete revision of EMC sequences, including the new test T.2.6, already approved in IEC 61543;
- Clarification of RCDs current/time characteristics reported in Tables 2 and 3;
- Revision of test procedure for I_n between 5A and 200A;
- Tests for the use of RCBOs in IT systems;
- Testing procedure regarding the 6mA d.c. current superimposed to the fault current;
- Improvement highlighting RCDs with multiple sensitivity;
- Some alignments with IEC 60898-1.

In addition, paragraph 4.4 of the standard's Hebrew section prohibits the use of AC Type overcurrent circuit-breakers with sensitivity of up to 30mA in Israel.

Objective and rationale: Protection of human health or safety

Relevant documents: Israel Mandatory Standard SI 61009 part 1 (April 2013); International Standard IEC 61009-1 Edition 3.2: 2013-0

Proposed date of adoption: Not given by country

Proposed date of entry into force: Not given by country

Final date for comments: 24 October 2017

Full text: [https://tsapps.nist.gov/notifyus/docs/wto_country/ISR/full_text/pdf/ISR956\(hebrew\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/ISR/full_text/pdf/ISR956(hebrew).pdf)

Kenya Notification KEN/593

Date issued: 30 August 2017

Agency responsible: Ministry of Environment, Natural Resources and Regional Development Authorities

National inquiry point: Kenya Bureau of Standards, Standards Information Resource Centre (KEBS)

Products covered: Plastics in general

Title: Ban of Carrier bag; - bag constructed with handles and or without gussets; - Flat bag - Bag constructed without handles, and with or without gussets (1 page(s), in English)

Description of content: Ministry of Environment and Natural Resources has banned the use, manufacture and importation of all plastics and bags used for commercial and household packaging.

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

Relevant documents: Gazette Notice No. 2334

Proposed date of adoption: 28 August 2017

Proposed date of entry into force: 28 August 2017

Final date for comments: 29 October 2017

Full text: [https://tsapps.nist.gov/notifyus/docs/wto_country/KEN/full_text/pdf/KEN593\(english\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/KEN/full_text/pdf/KEN593(english).pdf)

Rwanda Notification RWA/57

Date issued: 31 August 2017

Agency responsible: Rwanda Bureau of Standards

National inquiry point: Rwanda Bureau of Standards

Products covered: Lifts, escalators

Title: DRS 365: 2017; Installation of electric lift - Safety requirements (27 page(s), in English)

Description of content: This Draft Rwanda Standard specifies the safety requirements for the installation of permanently new electric lifts with a car designed for the transportation of persons or persons and goods, suspended by ropes or chains and moving between guide rails inclined not more than 15° to the vertical.

Objective and rationale: Protection of human health or safety; Quality requirements

Relevant documents: • RS ISO 4190-1 Lift (Elevator) installation – Part 1: Class I, II, III and VI lifts

• RS ISO 4190-2 Lift (US: Elevator) installation – Part 2: Class IV lifts

• RS ISO 4190-3 Passenger lift installations – Part 3: Service lifts class V

• RS ISO 4190-5 Lift (Elevator) installation – Part 5: Control devices, signals and additional Fittings

• RS ISO 4190-6 Lifts and service lifts (USA: elevators and dumbwaiters) - Part 6: Passenger lifts to be installed in residential buildings - Planning and selection

- RS ISO 13857 Safety of machinery -- Safety distances to prevent hazard zones being reached by upper and lower limbs
- RS IEC 60947-4-1, Low-voltage switchgear and controlgear - Part 4: Contactors and motor-starters - Section 1: Electromechanical contactors and motor-starters.
- RS IEC 60947-5-1, Low-voltage switchgear and controlgear - Part 5: Control circuit devices and switching elements - Section 1: Electromechanical control circuit devices. 80 IEC 61000-4 Electromagnetic compatibility (EMC) - Part 4: Testing and measurement techniques

Proposed date of adoption: Not given by country

Proposed date of entry into force: Not given by country

Final date for comments: 30 October 2017

Full text: [https://tsapps.nist.gov/notifyus/docs/wto_country/RWA/full_text/pdf/RWA57\(english\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/RWA/full_text/pdf/RWA57(english).pdf)

Rwanda Notification RWA/66

Date issued: 31 August 2017

Agency responsible: Rwanda Bureau of Standards

National inquiry point: Rwanda Bureau of Standards

Products covered: Occupational safety, Industrial hygiene

Title: DRS 354: 2017; Occupational health and safety for non-food industrial workers - Facility requirements (17 page(s), in English)

Description of content: This Draft Rwanda Standard provides facility requirements for non-food industries to ensure safety and health of workers during industrial activities.

Objective and rationale: Protection of human health or safety; Quality requirements

Relevant documents: RS 183, Occupational health and safety – Management systems – Requirements; RS 236, Acoustics – Noise pollution – Tolerance limits

Proposed date of adoption: Not given by country

Proposed date of entry into force: Not given by country

Final date for comments: 30 October 2017

Full text: [https://tsapps.nist.gov/notifyus/docs/wto_country/RWA/full_text/pdf/RWA66\(english\).pdf](https://tsapps.nist.gov/notifyus/docs/wto_country/RWA/full_text/pdf/RWA66(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.

Due 9 October 2017

BSR/TIA 5050-201x, Telecommunications, Communications Products, Receive Volume Control Requirements for Wireless (Mobile) Devices (new standard)

This Standard establishes receive volume control requirements and testing methods for narrowband, wideband, super-wideband, and full band wireless (mobile) handsets. Current volume control requirements for these devices are included in different standards documents with different requirements. The method in this standard uses conversational gain, the acoustic output signal from a device relative to the signal level that would be present in a face-to-face conversation at a distance of 1 meter.

Single copy price: \$93.00

Order from and send comments to: TIA, standards@tiaonline.org

BSR/UL 1576-201x, Standard for Safety for Flashlights and Lanterns (new standard)

Proposed first edition of the Standard for Flashlights and Lanterns.

Single copy price: Contact comm2000 for pricing and delivery options

Obtain an electronic copy from: Order from: comm2000, <http://www.comm-2000.com>

Send comments to: Beth Northcott, Elizabeth.Northcott@ul.com

Due 9 October 2017, NFPA Second Draft Reports

The NFPA Committees have met and considered the public review comments on the following NFPA documents. The dispositions of the comments are now published in the Second Draft Report for each document in the 2017 Fall Revision Cycle. The 2017 Fall Revision Cycle Second Draft Report and official scope are located on each

document's information page under the next edition tab. The URL format is <http://www.nfpa.org/doc#next> (e.g., <http://www.nfpa.org/101next> for NFPA 101), can easily access the document's information page.

BSR/NFPA 22-201x, Standard for Water Tanks for Private Fire Protection (revision of ANSI/NFPA 22-2012)

Provides the minimum requirements for the design, construction, installation, and maintenance of tanks and accessory equipment that supply water for private fire protection, including the following: (1) Gravity tanks, suction tanks, pressure tanks, and embankment-supported coated fabric suction tanks; (2) Towers; (3) Foundations; (4) Pipe connections and fittings; (5) Valve enclosures; (6) Tank filling; and (7) Protection against freezing.

BSR/NFPA 33-201x, Standard for Spray Application Using Flammable or Combustible Materials (revision of ANSI/NFPA 33-2015)

This standard shall apply to the spray application of flammable or combustible materials, as defined in this standard, either continuously or intermittently by any of the following methods: (1) Compressed air atomization; (2) Airless or hydraulic atomization; (3) Electrostatic application methods; or (4) Other means of atomized application. This standard shall also apply to the application of flammable or combustible materials, as defined in this standard, either continuously or intermittently by any of the following methods: (1) Fluidized bed application methods; (2) Electrostatic fluidized bed application methods; or (3) Other means of fluidized application. This standard shall also apply to spray application of water-borne, waterbased, and water-reducible materials that contain flammable or combustible liquids or that produce combustible deposits or residues.

BSR/NFPA 34-201x, Standard for Dipping, Coating, and Printing Processes Using Flammable or Combustible Liquids (revision of ANSI/NFPA 34 -2014)

This standard shall apply to dipping, roll coating, flow coating, curtain coating, printing, cleaning, and similar processes, referred to in this standard as “coating processes” or “processes,” in which articles or materials are passed through tanks, vats, or containers, or passed over rollers, drums, or other process equipment that contain flammable or combustible liquids.

BSR/NFPA 79-201x, Electrical Standard for Industrial Machinery (revision of ANSI/NFPA 79-2012)

The provisions of this standard shall apply to the electrical/electronic equipment, apparatus, or systems of industrial machines operating from a nominal voltage of 600 volts or less, and commencing at the point of connection of the supply circuit conductors to the electrical equipment of the machine. This standard does not include the additional requirements for machines intended for use in hazardous (classified) locations.

BSR/NFPA 92-201x, Standard for Smoke Control Systems (revision of ANSI/NFPA 92-2014)

This standard shall apply to the design, installation, acceptance testing, operation, and ongoing periodic testing of smoke control systems.

BSR/NFPA 204-201x, Standard for Smoke and Heat Venting (revision of ANSI/NFPA 204-2014)

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 venting systems 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.

BSR/NFPA 241-201x, Standard for Safeguarding Construction, Alteration, and Demolition Operations (revision of ANSI/NFPA 241-2012)

This standard shall apply to structures in the course of construction, alteration, or demolition, including those in underground locations.

BSR/NFPA 705-201x, Recommended Practice for a Field Flame Test for Textiles and Films (revision of ANSI/NFPA 705-2012)

This recommended practice provides guidance to enforcement officials for the field application of an open flame to textiles and films that have been in use in the field or for which reliable laboratory data are not available. There is no known correlation between this recommended practice and NFPA 701, or full-scale fire behavior. [This is a way of saying that the test is not known to be valid, and those who have used it know it is not reliable—but

here's the method, in case you must take a wooden match to a sample and then argue about whether it passed the test or not.]

BSR/NFPA 1081-201x, Standard for Industrial Fire Brigade Member Professional Qualifications (revision of ANSI/NFPA 1081-2011)

This standard identifies the minimum job performance requirements (JPRs) necessary to perform the duties as a member of an organized industrial fire brigade providing services at a specific facility or site.

Due 16 October 2017

BSR A14.2-201x, Standard for Ladders - Portable Metal – Safety Requirements (new standard)

The purpose of this standard is to provide reasonable safety for life, limb, and property. In order to develop an effective safety program, the standard may serve also as a basis for purchase requirements and for instructions in personnel training, and in the preparation of motivational/instructional material such as safety practices, manuals, posters, and the like. This standard is also intended to provide the manufacturer, purchaser, and user of metal ladders with a set of performance and dimensional requirements against which this product may be compared. The format of the standard has been modified to place all tables and figures at the end. [This is listed as a new standard, but the A14.x ladder standards go back over twenty years; they were considered when ESTA's E1.1 wire rope ladder standard was under development in 1996.]

Single copy price: \$250.00

Order from and send comments to: Ben Barclay, info@americanladderinstitute.org

BSR A14.5-201x, Standard for Ladders - Portable Reinforced Plastic -Safety Requirements (new standard)

The purpose of this standard is to provide reasonable safety for life, limb, and property. In order to develop an effective safety program, the standard may serve also as a basis for purchase requirements and for instructions in personnel training, and in the preparation of motivational/ instructional material such as safety practices, manuals, posters, and the like. This standard is also intended to provide the manufacturer, purchaser, and user of reinforced plastic ladders with a set of performance and dimensional requirements against which this product may be compared. The format of the standard has been modified to place all tables and figures at the end.

Single copy price: \$250.00

Order from and send comments to: Ben Barclay, info@americanladderinstitute.org

BSR/ASHRAE Standard 203-201X, Method of Test for Determining Heat Gain of Office Equipment Used in Buildings (revision of ANSI/ASHRAE Standard 203-2015)

This standard prescribes methods of test to determine the range and average operating heat gains of electrical equipment for use in cooling load calculations.

Obtain an electronic copy from: Free download at <http://www.ashrae.org/standards-research--technology/public-review-drafts>

Send comments to: Online Comment Database, <http://www.ashrae.org/standards-research--technology/public-reviewdrafts>

BSR/IAPMO UPC 1-201x, Uniform Plumbing Code (revision of ANSI/IAPMO UPC 1-2015)

This code provides minimum standards and requirements to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, installation, quality of materials, location, operation and maintenance or use of plumbing systems. The provisions of this code apply to the erection, installation, alteration, repair, relocation, addition to, use, or maintenance of plumbing systems.

Single copy price: \$10.00

Order from: Lynne Simnick, lynne.simnick@iapmo.org

Send comments to: Gabriella Davis, gaby.davis@iapmo.org

Due 23 October 2017

BSR/AWS A3.0M/A3.0-201x, Standard Terms and Definitions Including Terms for Adhesive Bonding, Brazing, Soldering, Thermal Cutting, and Thermal Spraying (revision of ANSI/AWS A3.0M/A3.0-2009)

This standard is a glossary of the technical terms used in the welding industry. Its purpose is to establish standard terms to aid in the communication of information related to welding and allied processes. Since it is intended to be a comprehensive compilation of welding terminology, nonstandard terms used in the welding industry are also included. All terms are arranged in alphabetical sequence.

Single copy price: \$86.00
Order from: Stephen Borrero, sborrero@aws.org
Send comments to: adavis@aws.org

BSR/UL 508C-201X, Standard for Safety for Power Conversion Equipment (revision of ANSI/UL 508C-2016)
Revised the addition of requirements for Modular Drive Systems proposal based on the comments received during the ballot phase.

Single copy price: Contact comm2000 for pricing and delivery options
Obtain an electronic copy from: comm2000, <http://www.comm-2000.com>
Send comments to: Casey Granata, Casey.Granata@UL.Com

BSR/UL 61800-5-1- 201X, Standard for Safety for Adjustable Speed Electrical Power Drive Systems - Part 5-1: Safety Requirements – Electrical, Thermal and Energy (revision of ANSI/UL 61800-5-1-2017)

Revised the addition of requirements for Modular Drive Systems proposal based on the comments received during the ballot phase.

Single copy price: Contact comm2000 for pricing and delivery options
Obtain an electronic copy from: comm2000, <http://www.comm-2000.com>
Send comments to: Casey Granata, Casey.Granata@UL.Com

BSR/UL 61800-5-1- 201X, Standard for Safety for Adjustable Speed Electrical Power Drive Systems - Part 5-1: Safety Requirements – Electrical, Thermal and Energy (revision of ANSI/UL 61800-5-1-2017)

The following is proposed: (1) Use of thermistors to comply with 5.1.5DV; (2) CDM/BDM controlling multiple motors; (3) Clarification of spacings and internal wire insulation for rectified AC voltages; (4) Slash and straight voltage ratings for drives with a 3-phase input; (5) Control circuit transformer protection; (6) Signal words; (7) Component analysis for breakdown of components test; (8) Dust test requirement for equipment rated other than Type 1, 2, 3R, and 3RX; (9) Clarification of deflection test prior to clearance measurement; (10) Requirement for power factor for breakdown of components test circuit; (11) DVD.2 Construction; and (12) Revision to line capacitors.

Single copy price: Contact comm2000 for pricing and delivery options
Obtain an electronic copy from: comm2000, <http://www.comm-2000.com>
Send comments to: Casey Granata, Casey.Granata@UL.Com

Due 31 October 2017

BSR/ASME HST-1-201x, Performance Standard for Electric Chain Hoists (revision of ANSI/ASME HST-1-2012)

This standard establishes performance requirements for electric chain hoists for vertical lifting service involving material handling of freely suspended (unguided) loads using the load chain of the roller or welded link types with one of the following types of suspension:

- (1) lug;
- (2) hook or clevis; or
- (3) trolley.

Single copy price: Free
Obtain an electronic copy from: <http://cstools.asme.org/publicreview>
Send comments to: Grace Bolan, bolang@asme.org

Due 7 November 2017

BSR/IEEE 45.1-201x, Recommended Practice for Electrical Installations on Shipboard - Design (new standard)

The recommendations for electrical power generation, distribution, and electric propulsion system design for use on shipboard are established by this document. [*Standards Watch* readers doing shipboard showroom lighting, sound, or scenery automation have a stake in this.]

Single copy price: \$184.00
Order from: online: <http://standards.ieee.org/store>
Send comments (with copy to psa@ansi.org) to: k.evangelista@ieee.org

BSR/IEEE 3001.11-201x, Recommended Practice for Application of Controllers and Automation to Industrial and Commercial Power Systems (new standard)

This recommended practice covers the selection and application of controllers and automation to industrial and commercial power systems. It is likely to be of greatest value to the power-oriented engineer with limited experience with this equipment. It can also be an aid to all engineers responsible for the electrical design of industrial and commercial power systems.

Single copy price: \$92.00

Order from: online: <http://standards.ieee.org/store>

Send comments to: k.evangelista@ieee.org

BSR/IEEE C62.42.3-201x, Guide for the Application of Surge-Protective Components in Surge Protective Devices and Equipment Ports - Part 3: Silicon PN-Junction Clamping Diodes (new standard)

The C62.42 guide series covers surge-protective components (SPCs) used in power and telecom surge protective devices (SPDs) and equipment ports. This part, Part 3 of the C62.42 series, describes Silicon PN-Junction Clamping Diode SPCs and covers: technology variants, component construction, characteristics, ratings, and application examples.

Single copy price: N/A

Order from: online: <http://standards.ieee.org/store>

Send comments to: k.evangelista@ieee.org

Due 16 November 2017, NFPA First Draft Reports

The National Fire Protection Association has announced the availability of NFPA *First Draft Report* for concurrent review and comment by NFPA and ANS. *The First Draft Report* for documents in the 2018 Fall Revision Cycle have been posted on the document's specific URL site. *The First Draft Reports* contain the disposition of public input received for those proposed documents. Anyone wishing to review the *First Draft Report* for documents in the 2018 Fall Revision Cycle may do so on each document's information page under the next edition tab. The document's specific URL, for example <http://www.nfpa.org/doc#next> (<http://www.nfpa.org/101next>), can allow easy access to the document's information page. All comments on the 2018 Fall Revision Cycle *First Draft Report* must be received by 16 November 2017.

BSR/NFPA 70B-201x, Recommended Practice for Electrical Equipment Maintenance (revision of ANSI/NFPA 70B-2015)

This recommended practice applies to preventive maintenance for electrical, electronic, and communication systems, and equipment and is not intended to duplicate or supersede instructions that manufacturers normally provide. Systems and equipment covered are typical of those installed in industrial plants, institutional and commercial buildings, and large multifamily residential complexes. Consumer appliances and equipment intended primarily for use in the home are not included.

BSR/NFPA 551-201x, Guide for the Evaluation of Fire Risk Assessments (revision of ANSI/NFPA 551-2012)

This guide is intended to provide assistance, primarily to authorities having jurisdiction (AHJs), in evaluating the appropriateness and execution of a fire risk assessment (FRA) for a given fire safety problem. While this guide primarily addresses regulatory officials, it also is intended for others who review FRAs, such as insurance company representatives and building owners.

BSR/NFPA 701-201x, Standard Methods of Fire Tests for Flame Propagation of Textiles and Films (revision of ANSI/NFPA 701-2014)

Test Method 1. A small-scale test method appeared in NFPA 701 until the 1989 edition. It was eliminated from the test method because it has been shown that materials that "pass" the test do not necessarily exhibit a fire performance that is acceptable. The test was not reproducible for many types of fabrics and could not predict actual full-scale performance. It should not, therefore, be used. (1) Test Method 1 shall apply to fabrics or other materials used in curtains, draperies, or other window treatments. Vinyl-coated fabric blackout linings shall be tested according to Test Method 2. (2) Test Method 1 shall apply to single-layer fabrics and to multilayer curtain and drapery assemblies in which the layers are fastened together by sewing or other means. Vinyl-coated fabric blackout linings shall be tested according to Test Method 2. (3) Test Method 1 shall apply to specimens having an areal density less than or equal to 700 g/m² (21 oz/yd²), except where Test Method 2 is required to be used.

BSR/NFPA 900-201x, Building Energy Code (revision of ANSI/NFPA 900-2015)

These regulations shall control the minimum energy-efficient requirements for the following: (1) The design, construction, reconstruction, alteration, repair, demolition, removal, inspection, issuance, and revocation of permits or licenses, installation of equipment related to energy conservation in all buildings and structures and parts thereof; (2) The rehabilitation and maintenance of construction related to energy efficiency in existing buildings; (3) The standards or requirements for materials to be used in connection therewith.

BSR/NFPA 914-201x, Code for Fire Protection of Historic Structures (revision of ANSI/NFPA 914-2014)

This code describes principles and practices of fire safety for historic structures and for those who operate, use, or visit them. Collections within libraries, museums, and places of worship are not within the scope of this code. (A. Collections within libraries, museums, and places of worship should be evaluated and protected in accordance with NFPA 909, Code for the Protection of Cultural Resource Properties - Museums, Libraries, and Places of Worship.

BSR/NFPA 1600-201x, Standard on Disaster/Emergency Management and Business Continuity/Continuity of Operations Programs (revision of ANSI/NFPA 1600-2015)

This standard shall establish a common set of criteria for all hazards disaster/emergency management and business continuity programs, referred to in this standard as “the program.” The Emergency Management and Business Continuity community comprises many different entities, including the government at distinct levels (e.g., federal, state/provincial, territorial, tribal, indigenous, and local levels); commercial business and industry; not-for-profit and nongovernmental organizations; and individual citizens. Each of these entities has its own focus, unique mission and responsibilities, varied resources and capabilities, and operating principles and procedures.

BSI Public Review Announcements

BSI Standards has announced draft document for public review that might be of interest to Standards Watch readers. BSI documents may be commented on at <http://drafts.bsigroup.com/> and <https://standardsdevelopment.bsigroup.com/>. BSI is transitioning to a new website; during this transition, some standards are on one site and some are on the other.

Due 31 October 2017

BS 5975:2018 Code of practice for temporary works procedures and the permissible stress design of falsework

This British Standard gives recommendations and guidance on the procedural controls to be applied to all aspects of temporary works in the construction industry. It also includes guidance on design, specification, construction, use and dismantling of falsework. This standard gives guidance on permissible stress design of falsework. This guidance is also applicable to the design of what is termed class A falsework[1] in BS EN 12812, the design of which is specifically excluded from BS EN 12812.

Section 1 gives recommendations in relation to training. These recommendations recognize that institutions of further education should include training in relation to temporary works as part of their syllabus in addition to the need to advise on training provided for PC's TWCs to ensure consistency of standards of training.

Section 2 gives recommendations for the procedures required to ensure that temporary works are conceived, designed, specified, constructed, used and dismantled all in a safe and controlled manner suitable for all construction projects.

Construction sites and methods adopted for controlling the temporary works vary. This standard recognizes that the extent of control measures required are greater on the larger or more complex projects, as can be encountered on major infrastructure projects, power stations, airports etc. Generally procedures should be in line with this standard but additional client specific procedures might be required on major infrastructure projects. These procedures now include clauses on the roles of clients, permanent works designers and construction management organizations.

Section 3 covers the design of temporary works and in particular the design of falsework and relevant formwork. In addition Section 3 covers: materials including material factors; loads and load factors; design of falsework, including both proprietary equipment and traditional scaffolding solutions; wind loading (reference to temporary and permanent stability) and reference to other British Standards for the design of structural steelwork, reinforced concrete and excavation support.

The structural design element in this standard is additional information necessary for the structural design of falsework. It can be used in conjunction with existing structural standards.

CSA Public Review Announcements

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

Due 7 October 2017

CSA Z5000 Building commissioning for energy using systems (new standard)

The first edition of CSA Z5000 (Building Commissioning for Energy Using Systems) has been developed to assist the building commissioning industry in assessing whether or not a building is performing as expected for energy and water efficiency goals. It applies to new construction of Part 3 Buildings defined by the National Building Code of Canada.

The Z5000 standard provides requirements for the commissioning of energy and water monitoring systems for usage through the building envelope, mechanical equipment, electrical equipment and domestic water systems. The commissioning process and concepts in Z5000 are based upon CSA Standards Z320-11 (R2016) - Building Commissioning Standard, and CAN/CSA-Z8001-13 - Commissioning of health care facilities and other industry commissioning best practices and guidelines. The Z5000 standard provides requirements for measuring energy and water use, and ensuring those systems which monitor this use are designed, installed and commissioned so that accurate comparisons between the predicted and actual use of these resources after occupancy can be assessed and presented to the building owners, tenants and the local authorities.

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, or (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/ASCE T&DI 21-201x, Automated People Mover Standard (revision of ANSI/ASCE T&DI 21-2013)

ANSI/ASCE/T&DI 21 presents the minimum requirements for the design, construction, operation, and maintenance of APM systems. The standard covers the operating environment, safety, system dependability, automatic train control, and communications, and provides information on vehicles and propulsion and braking systems (PBS), along with information on electrical systems, stations, and guideways also providing information on security; emergency preparedness; system verification and demonstration; operation, maintenance and training; and operational monitoring.

Contact: James Neckel, jneckel@asce.org

BSR ASSE A10.28-201X, Safety Requirements for Work Platforms Suspended from Cranes or Derricks (revision of ANSI ASSE A10.28-2011)

This standard applies to platforms suspended from the load lines of cranes or derricks in order to (1) perform work at elevations that cannot normally be reached by other types of scaffolds or aerial work platforms or (2) transport personnel to elevations where other means of access are unsafe or impractical because of design or worksite conditions.

Contact: Tim Fisher, (847) 768-3411, TFisher@ASSE.org

BSR ASSE A10.50-201X, Practices for the safe use of drones for construction and demolition operations (new standard)

This standard establishes practices for the safe use of drones for construction and demolition operations.

Contact: Tim Fisher, TFisher@ASSE.org

BSR/NALFA LF-01-201x, Laminate Flooring Specifications and Test Methods (revision of ANSI/NALFA LF-01-2010)

The product standard shall apply to the performance of residential, commercial, and industrial use of laminate flooring. The standard will be useful in guiding manufacturers and educating suppliers and consumers about the minimal performance requirements of laminate flooring in residential, light commercial, and commercial- and industrial use settings.

Contact: David Goch, dgoch@wc-b.com

BSR/NALFA LF-02-201x, Sustainability Assessment of Laminate Flooring (revision of ANSI/NALFA LF-02-2010)

To assist in the clarification, and quantification, of the sustainability, i.e., the "green", properties of consumer, commercial, and industrial laminate flooring.

Contact: David Goch, dgoch@wc-b.com

BSR/NALFA LF-03-2018-201x, Flooring Underlayment Specifications and Test Methods (new standard)

The product standard shall apply to the performance of underlayment for use with residential, commercial and industrial laminate flooring. The standard will be useful in guiding manufacturers and educating suppliers and consumers about the minimal performance requirements of underlayment in residential, light commercial, and commercial and industrial laminate flooring use settings.

Contact: David Goch, dgoch@wc-b.com

BSR/UL 62133-1-201x, Standard for Safety for Secondary Cells and Batteries Containing Alkaline or Other Non-Acid Electrolytes - Safety Requirements for Portable Sealed Secondary Cells, and for Batteries Made from Them, for Use in Portable Applications - Part 1: Nickel Systems (national adoption with modifications of IEC 62133-1)

This part of IEC 62133 specifies requirements and tests for the safe operation of portable sealed secondary nickel cells and batteries containing alkaline electrolyte, under intended use and reasonably foreseeable misuse.

Contact: Megan Van Heirsele, Megan.M.VanHeirsele@ul.com

BSR/UL 62133-2-201x, Standard for Safety for Secondary Cells and Batteries Containing Alkaline or Other Non-Acid Electrolytes - Safety Requirements for Portable Sealed Secondary Cells, and for Batteries Made from Them, for Use in Portable Applications - Part 2: Lithium Systems (national adoption with modifications of IEC 62133-2)

This part of IEC 62133 specifies requirements and tests for the safe operation of portable sealed secondary lithium cells and batteries containing non-acid electrolyte, under intended use and reasonably foreseeable misuse.

Contact: Megan Van Heirsele, Megan.M.VanHeirsele@ul.com

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/ASHRAE/ICC/USGBC/IES 189.1aa-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2014): 23 August 2017

ANSI/ASHRAE/ICC/USGBC/IES 189.1ak-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2014): 23 August 2017

ANSI/ASHRAE/ICC/USGBC/IES 189.1aq-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2014): 23 August 2017

ANSI/ASHRAE/ICC/USGBC/IES 189.1aw-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2014): 23 August 2017

ANSI/ASHRAE/ICC/USGBC/IES 189.1ay-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2014): 23 August 2017

ANSI/ASHRAE/ICC/USGBC/IES 189.1az-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2014): 23 August 2017

ANSI/ASSE Z9.3-2017, Spray Finishing Operations: Safety Code for Design, Construction and Ventilation (revision and redesignation of ANSI/AIHA Z9.3-2007): 24 August 2017

ANSI/UL 8750-2017b, Standard for Light Emitting Diode (LED) Equipment for Use in Lighting Products (revision of ANSI/UL 8750 -2016): 17 August 2017

ANSI/UL 8750-2017c, Standard for Safety for Light Emitting Diode (LED) Equipment for Use in Lighting Products (revision of ANSI/UL 8750-2016): 17 August 2017

Draft IEC & ISO Standards

This section lists proposed standards 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 documents should be sent to Charles T. Zegers at czegers@ansi.org. Comments from US citizens regarding ISO documents should be sent to Karen Hughes at isot@ansi.org. Any prices, if shown, are for purchases through ANSI; prices elsewhere may differ. The sort order is by due date then alphanumeric.

ISO/DIS 16283-2, Acoustics - Field measurement of sound insulation in buildings and of building elements - Part 2: Impact sound insulation, 20 September 2017, \$112.00

110/901/FDIS, IEC 62341-6-3 ED2: Organic light emitting diode (OLED) displays - Part 6-3: Measuring methods of image quality, 29 September 2017

CIS/H/331/DC, CISPR/H/312/CDV - Project IEC 61000-6-3/AMD2 ED2 - Amendment 2 to IEC 61000 6 3: Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments - Class A/Class B limits within the commercial and light industrial environments, 29 September 2017

CIS/H/332/DC, CISPR/H/312/CDV - Project IEC 61000-6-3/AMD2 ED2 - Amendment 2 to IEC 61000 6 3: Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments - Clarification of test requirements and conditions for DC powered systems operated with an external charger/converter (AC/DC and DC/DC), 29 September 2017

CIS/H/334/DC, CIS/H/312/CDV - Project IEC 61000-6-3/AMD2 ED2 - Amendment 2 to IEC 61000 6 3: Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments - Proposal to clarify asymmetric mode conducted emissions in accordance with CISPR 32, 29 September 2017

110/900/CD, IEC 62906-5-1 ED1: Laser display devices - Part 5-1: Measurement of optical performance for laser front projection, 1 October 2017

65E/563/CD, IEC 63082-1 ED1: Intelligent Device Management – Part 1: Concepts and Terminology, 2 October 2017

77B/781A/CD, IEC 61000-4-3 ED4: Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques – Radiated, radio-frequency, electromagnetic field immunity test, 2 October 2017

14/916/CDV, IEC/IEEE 60076-21 ED1: Power transformers - Part 21: Standard requirements, terminology, and test code for step-voltage regulators, 1 November 2017

23J/437/CD, IEC 61020-1 ED3: Electromechanical switches for use in electrical and electronic equipment - Part 1: Generic specification, 1 November 2017

44/795/CD, IEC 62998-721 ED1: Safety of machinery - Electrosensitive protective equipment - Safety-related sensors used for protection of person, 1 November 2017

119/186/CD, IEC 62899-101 ED1: Printed Electronics - Part 101: Terminology - Vocabulary, 1 November 2017

121A/165/CD, IEC 60947-9-1 ED1: Low-voltage switchgear and controlgear - Part 9-1: Arc quenching devices, 1 November 2017

CIS//564/CD, Amendment 1 - CISPR 32: Electromagnetic compatibility of multimedia equipment - Emission requirements - Fragment 1, 1 November 2017

CIS//565/CD, Amendment 1 - CISPR 32: Electromagnetic compatibility of multimedia equipment - Emission requirements - Fragment 3, 1 November 2017

CIS//566/CD, Amendment 1 - CISPR 32: Electromagnetic compatibility of multimedia equipment - Emission requirements - Fragment 2, 1 November 2017

CIS//567/CD, Amendment 1 - CISPR 32: Electromagnetic compatibility of multimedia equipment - Emission requirements - Fragment 5, 1 November 2017

CIS//568/CD, Amendment 1 - CISPR 32: Electromagnetic compatibility of multimedia equipment - Emission requirements - Fragment 6, 1 November 2017

64/2220/CDV, IEC 60364-8-2 ED1: Low-voltage electrical installations - Part 8-2: Smart Low-Voltage Electrical Installations, 2 November 2017

100/2957A/CDV, IEC 60268-21 ED1: Sound system equipment - Loudspeakers - Acoustical (output based) measurements, 3 November 2017

ISO/IEC 23001-11/DAmD3, Information technology - MPEG systems technologies - Part 11: Energy-efficient media consumption (green metadata) - Amendment 3, 17 November 2017, \$71.00

ISO/IEC DIS 23005-2, Information technology - Media context and control - Part 2: Control information, 17 November 2017, \$230.00

ISO/IEC DIS 26553, Information technology - Software and systems engineering - Tools and methods for product line realization, 17 November 2017, \$134.00

ISO/IEC DIS 26554, Information technology - Software and systems engineering - Tools and methods for product line testing, 17 November 2017, \$134.00

ISO/IEC DIS 26556, Information technology - Software and systems engineering - Tools and methods for product line organizational management, 17 November 2017, \$134.00

ISO/IEC DIS 23005-3, Information technology - Media context and control - Part 3: Sensory information, 19 November 2017, \$165.00

ISO/IEC DIS 23005-4, Information technology - Media context and control - Part 4: Virtual world object characteristics, 19 November 2017, \$215.00

ISO/IEC DIS 23008-9, Information technology - High efficiency coding and media delivery in heterogeneous environments - Part 9: 3D Audio conformance testing, 19 November 2017, \$155.00

ISO/IEC 21000-8/DAmD4, Information technology – Multimedia framework (MPEG-21) - Part 8: Reference software - Amendment 4: Media value chain ontology extensions on time-segments and multitrack audio, 20 November 2017, \$33.00

ISO/IEC 23003-4/DAmD3, Information technology - MPEG audio technologies - Part 4: Dynamic Range Control - Amendment 3: Conformance, 20 November 2017, \$102.00

ISO/IEC DIS 23001-13, Information technology - MPEG systems technologies - Part 13: Media orchestration, 20 November 2017, \$146.00

Recently Published IEC & ISO Documents

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

IEC 60050-102 Amd.1 Ed. 1.0 b:2017, Amendment 1 – International electrotechnical vocabulary - Part 102: Mathematics – General concepts and linear algebra, \$47.00

IEC 60050-103 Amd.1 Ed. 1.0 b:2017, Amendment 1 – International electrotechnical vocabulary - Part 103: Mathematics – Functions, \$23.00

IEC 60050-114 Amd.1 Ed. 1.0 b:2017, Amendment 1 – International Electrotechnical Vocabulary - Part 114: Electrochemistry, \$12.00

IEC 60050-161 Amd.7 Ed. 1.0 en:2017, Amendment 7 – International electrotechnical vocabulary - Part 161: Electromagnetic compatibility, \$12.00

IEC 60050-300 Amd.3 Ed. 1.0 b:2017, Amendment 3 – International electrotechnical vocabulary - Electrical and electronic measurements and measuring instruments - Part 314: Specific terms according to the type of instrument, \$12.00

IEC 60050-521 Amd.1 Ed. 2.0 b:2017, Amendment 1 – International Electrotechnical Vocabulary - Part 521: Semiconductor devices and integrated circuits, \$12.00

IEC 60050-531 Amd.1 Ed. 1.0 b:2017, Amendment 1 – International electrotechnical vocabulary - Part 531: Electronic tubes, \$12.00

IEC 60050-702 Amd.3 Ed. 1.0 b:2017, Amendment 3 – International electrotechnical vocabulary - Part 702: Oscillations, signals and related devices, \$23.00

IEC 60050-704 Amd.2 Ed. 1.0 b:2017, Amendment 2 – International electrotechnical vocabulary - Part 704: Transmission, \$12.00

IEC 60050-705 Amd.3 Ed. 1.0 b:2017, Amendment 3 – International electrotechnical vocabulary - Part 705: Radio wave propagation, \$12.00

IEC 60050-713 Amd.2 Ed. 1.0 b:2017, Amendment 2 – International electrotechnical vocabulary - Part 713: Radiocommunications: transmitters, receivers, networks and operation, \$12.00

IEC 60050-714 Amd.2 Ed. 1.0 b:2017, Amendment 2 – International electrotechnical vocabulary - Part 714: Switching and signalling in telecommunications, \$12.00

IEC 60050-721 Amd.2 Ed. 1.0 b:2017, Amendment 2 – International electrotechnical vocabulary - Part 721: Telegraphy, facsimile and data communication, \$12.00

IEC 60050-722 Amd.1 Ed. 1.0 b:2017, Amendment 1 – International electrotechnical vocabulary - Part 722: Telephony, \$12.00

IEC 60050-723 Amd.3 Ed. 1.0 b:2017, Amendment 3 – International electrotechnical vocabulary - Part 723: Broadcasting: Sound, television, data, \$12.00

IEC 60050-726 Amd.2 Ed. 1.0 b:2017, Amendment 2 – International electrotechnical vocabulary - Part 726: Transmission lines and waveguides, \$12.00

IEC 60050-731 Amd.2 Ed. 1.0 b:2017, Amendment 2 – International electrotechnical vocabulary - Part 731: Optical fibre communication, \$12.00

IEC 60050-551-20 Amd.1 Ed. 1.0 b:2017, Amendment 1 – International electrotechnical vocabulary - Part 551-20: Power electronics - Harmonic analysis, \$12.00

IEC 61131-2 Ed. 4.0 b:2017, Industrial-process measurement and control - Programmable controllers - Part 2: Equipment requirements and tests, \$375.00

IEC 62443-2-4 Amd.1 Ed. 1.0 en:2017, Amendment 1 - Security for industrial automation and control systems - Part 2-4: Security program requirements for IACS service providers, \$117.00

IEC 62443-2-4 Ed. 1.1 en:2017, Security for industrial automation and control systems - Part 2-4: Security program requirements for IACS service providers, \$469.00

IEC 62733 Ed. 1.0 b cor.1:2017, Corrigendum 1 - Programmable components in electronic lamp controlgear - General and safety requirements, \$0.00

ISO 7243:2017, Ergonomics of the thermal environment - Assessment of heat stress using the WBGT (wet bulb globe temperature) index, \$103.00

ISO 8000-2:2017, Data quality - Part 2: Vocabulary, \$45.00

ISO 10110-7:2017, Optics and photonics - Preparation of drawings for optical elements and systems - Part 7: Surface imperfections, \$68.00

ISO 14997:2017, Optics and photonics - Test methods for surface imperfections of optical elements, \$103.00

ISO 37154:2017, Smart community infrastructures - Best practice guidelines for transportation, \$138.00

ISO/IEC 14543-5-8:2017, Information technology - Home electronic systems (HES) architecture - Part 5-8: Intelligent grouping and resource sharing for HES Class 2 and Class 3 - Remote access core protocol, \$185.00

TSP Meeting Schedule

The November meetings will be at the Tropicana Las Vegas Casino Hotel Resort, 3801 Las Vegas Blvd. South. The schedule is preliminary; meetings will be added, deleted, and rescheduled between now and November. The most up to date schedule can be found on the ESTA website at <http://tsp.esta.org/tsp/meetings/index.php>, where there is a "Reserve a Hotel Room" link. All working group meetings will have a WebEx option.

Control Protocols Working Group (CPWG)	09:00 – noon	Thursday 16 November 2017
CPWG BSR E1.20 TG	14:00 – 17:00	Sunday 19 November 2017
CPWG BSR E1.33, RDMnet TG	10:00 – 18:00	Monday 20 November 2017
CPWG BSR E1.37-4 TG	13:00 – 15:00	Thursday 16 November 2017
CPWG BSR E1.59 TG	09:00 – 13:00	Wednesday 15 November 2017
Electrical Power Working Group (EPWG)	19:00 – 22:00	Friday 17 November 2017
Event Safety Crowd Management TG	14:00 – 18:00	Wednesday 15 November 2017
	09:00 – 13:00	Thursday 16 November 2017
Event Safety Communications TG	14:00 – 17:00	Thursday 16 November 2017
Event Safety Fire TG	14:00 – 17:00	Thursday 16 November 2017
Event Safety Rigging TG	14:00 – 18:00	Friday 17 November 2017
Event Safety Weather TG	09:00 – noon	Thursday 16 November 2017
Event Safety Working Group (ESWG)	09:00 – noon	Friday 17 November 2017
Floors Working Group (FWG)	13:00 – 14:30	Friday 17 November 2017
Fog & Smoke Working Group (FSWG)	15:00 – 17:00	Friday 17 November 2017
Photometrics Working Group (PWG)	13:00 – 15:00	Thursday 16 November 2017
Rigging E1.6-3 TG	14:00 – 18:00	Wednesday 15 November 2017
Rigging E1.6-4 TG	14:00 – 17:00	Thursday 16 November 2017
Rigging Working Group (RWG)	19:00 – 23:00	Wednesday 15 November 2017
Stage Lifts Working Group (SLWG)	09:00 – 11:00	Saturday 18 November 2017
Technical Standards Council (TSC)	14:00 – 18:00	Wednesday 15 November 2017

The January 2018 meetings will take place in conjunction with the NAMM Show at the Anaheim Convention Center, which is scheduled for 25-28 January 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
1 212 244 1505 ext. 703
Fax 1 212 244 1502

Erin Grabe, Asst. Technical Standards Manager
Entertainment Services and Technology Association
630 Ninth Avenue, Suite 609
New York, NY 10036
USA
erin.grabe@esta.org
1 212 244 1505 ext. 606
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
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
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
Tomcat
Tyler Truss Systems
VER
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
Columbus McKinnon Entertainment Technology
Martin Professional
Robe

United States Institute for Theatre Technology
VER
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)

B-Hive Industries, Inc.
Scott Blair
Boston Illumination Group
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
Jules Lauve
Brian Lawlor
Limelight Productions, Inc.
John T. McGraw
Mike Garl Consulting

Mike Wood Consulting
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)

Barbizon Electric
Golden Sea Professional Equipment Limited
IATSE Local 891
Lex

NAMM
Rosco Laboratories
Texas Scenic Company

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

American Society of Theatre Consultants
City Theatrical Inc.
InterAmerica Stage, Inc.
Lycian Stage Lighting

Morpheus Lights
Niscon Inc.
Syracuse Scenery and Stage Lighting
XSF Xtreme Structures and Fabrication

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

About the Stage
Benjamin Cohen
Bruce Darden
Tony Giovannetti
Indianapolis Stage Sales & Rentals, Inc.
Jason Kyle
Eric Loader

LuciTag
Lumenradio AB
Moss LED
Nudelta Digital
Project SSSH Incorporated
Stephen Vanciel

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

Ian Foulds, IATSE Local 873
Harlequin Floors

IATSE Local 80
PSAV

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.
Tomcat
Total Structures
Ultratec Special Effects
Vincent Lighting Systems

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

AC Power Distribution, Inc.
Michael Cowger
Milton Davis
Peter Donovan
Pat Grenfell
Mitch Hefter
Bill Hektner
Alan Hendrickson
Hoist Sales and Services
Beverly and Tom Inglesby
Intensity Advisors
JSAV
Eddie Kramer
Michael Lay
John Musarra

Shawn Nolan
Lizz Pittsley
Phil Reilly
Robert Scales
Charles Scott
Michael Skinner
Skjonberg Controls Inc.
Studio T+L, LLC
John Szewczuk
Teclumen
Theta Consulting
Tracy Underhill
Ken Vannice 
Robert L. Williams

 Planned Giving donor