

ESTA Standards Watch

Late November 2018

Volume 22, Number 22

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Five ESTA Standards in Public Review

Five ESTA standards and draft standards are available for public review at http://estalink.us/pr. In alphanumeric designation order they are:

BSR E1.20, Entertainment Technology -- Remote Device Management over USITT DMX512 Networks, is a revised version of ANSI E1.20 – 2010, usually referred to as simply "RDM." This revision is to clarify ambiguities, fix bugs, and incorporate some additional features. ANSI E1.20 is an extension to USITT DMX512 and ANSI E1.11 that allows for bi-directional communication on the primary data link. This allows a controller to discover RDM-enabled devices on the link, to set starting addresses and other configuration settings, and to request status messages. Comments are due before the end of day on December 17.

ANSI E1.34 - 2009, Entertainment Technology - Measuring and Specifying the Slipperiness of Floors Used in Live Performance Venues, is being considered for reaffirmation again (i.e., no changes in requirements, only updating copyright, etc.) The document describes a simple means of measuring and specifying the slipperiness of floor surfaces used by performers in live entertainment venues. The standard is not for normal walking and working surfaces, but only for those floor surfaces used by actors, dancers, and other similar artists when performing before an audience. Comments are due before the end of the day on December 17; the review is over when December 18 starts.

BSR E1.37-5, General Purpose Messages for ANSI E1.20, RDM, is a new standard that creates new Get/Set parameter messages (PIDs) for use with the ANSI E1.20 Remote Device Management protocol. Comments are due no later than December 24; the review is over when December 25 starts.

ANSI E1.48 - 2014, A Recommended Luminous Efficiency Function for Stage and Studio Luminaire Photometry, is being considered for reaffirmation. The standard specifies a V (λ) function that more accurately reflects the response of the human eye at the extreme blue and red ends of the spectrum than the 80+ year-old function used with many light meters. The differences between the functions are significant when measuring the output of RGB LED luminaires. Comments are due before the end of day on December 17.

BSR E1.62, Minimum specifications for mass-produced portable platforms, ramps, stairs, and choral risers for live performance events, is a new standard for 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. Larger, heavier units are outside the scope of this standard. The scope also covers the railings provided as fall protection accessories, and to the legging systems. The draft standard was offered for public review in early Autumn. Comments received then were addressed by making a few changes to the draft. The changes were substantive, so another public review is necessary. This is it. Comments are due no later than December 17.

Half a Dozen ESTA Standards Approved & Published

On November 6, ANSI's Board of Standards Review approved four ESTA standards. Three are new or revised standards and one is the reaffirmation without changes of an existing standard. They are available for free download from the TSP website at tsp.esta.org/free standards, thanks to the sponsorship of Prosight Specialty Insurance. They are available for sale from ANSI and IHS for the retail price of \$40. The four standards approved on November 6 are:

ANSI ES1.19-2018, Safety Requirements for Special Event Structures, is a new standard written as part of comprehensive event safety suite, with this section helping to identify design, fabrication, operation and use, inspection and maintenance requirements for the portable structures included in its scope.

ANSI E1.29-2009 (R2018), 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, is a reaffirmation of ANSI E1.29-2009. The standard exists to help product testing laboratories evaluate the safety of fog machines.

ANSI E1.42-2018, Entertainment Technology -- Design, Installation, and Use of Orchestra Pit Lifts, is a revision of ANSI E1.42-2016. The revisions are improvements to incorporate what has been learned since the 2016 edition was published.

ANSI E1.56-2018, Entertainment Technology -- Rigging Support Points, is a new standard offering guidance for the design, fabrication, installation, and testing of permanent and temporary rigging points and rigging lugs and their connection to existing building and venue structures. The goal is to eliminate questionable or unrated rigging points from the field.

But wait! There's more!!! On the next day, November 7, the Board of Standards Review approved two more ESTA standards. They are now on the TSP website for free download and for purchase from ANSI and IHS.

ANSI E1.31-2018, Entertainment Technology - Lightweight streaming protocol for transport of DMX512 using ACN, is a revision of the 2016 standard. It describes a mechanism to transfer DMX512A packets over a TCP/IP network using a subset of the ACN protocol suite. It covers data format, data protocol, data addressing, and network management. It also outlines a synchronization method to help ensure that multiple sinks can process this data concurrently when supervised by the same controller. This revision includes support for IPv6 as well as IPv4. The retail price is \$40.00.

ANSI E1.51-2018, The Selection, Installation, and Use of Single-Conductor Portable Power Feeder Cable Systems for Use At 600 Volts Nominal or Less for the Distribution of Electrical Energy in the Television, Film, Live Performance and Event Industries in Canada, is a new standard written to give guidance on single-conductor portable power feeder cable. This is a power distribution technology about which the Canadian Electrical Code is largely silent. This document offers guidance lacking in the CEC. The retail price is \$15.00.

FCC Approves Use of Galileo Navigation System in the United States

On November 15 the Federal Communications Commission granted in part the European Commission's request for a waiver of the Commission's rules so that non-Federal devices in the United States may access specific signals transmitted from the Galileo Global Navigation Satellite System. Consumers and industry in the United States will now be permitted to access satellite signals from the Galileo system to augment the U.S. Global Positioning System (GPS), and thus benefit from improved availability, reliability, and resiliency of position, navigation, and timing services in the United States. Now you won't get busted for receiving positioning data from Galileo!

The press release announcing this approval is available at https://docs.fcc.gov/public/attachments/DOC-355098A1.pdf. The official Order is available at https://docs.fcc.gov/public/attachments/FCC-18-158A1.pdf. Commissioner Jessica Rosenworcel's comments on the order, praising it but also pointing out that many phones can receive foreign signals, whether approved or not, are available at https://docs.fcc.gov/public/attachments/DOC-355098A5.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 16 December 2018

RIA TR R15.806-2018, Technical Report for Industrial Robots and Robot Systems - Testing Methods for Power & Force Limiting Collaborative Applications (technical report)

This Technical Report, RIA TR R15.806-2018 ("TR 806"), describes test methods and metrics for measuring the pressures and forces associated with quasi-static and transient contact events of collaborative industrial robot applications where risk reduction is provided primarily by robots with power and force limiting (PFL) by inherently safe design or safety functions according to ANSI/RIA R15.06-2012 and RIA TR R15.606-2016 ("TR 606"). TR 806 also provides guidance on determining the conditions of the test measurements. TR 606 contains an informative annex, Annex A, with pressure biomechanical values shown in controlled psychophysical studies to be consistently within human pain tolerance limits. Force values in Annex A are derived from literature studies concerning minor injury. It is possible that greater values for pressure or force will also avoid pain or injury. TR 606 does not describe how to measure pressures and forces due to collaborative application contact situations. This document, R15.806, provides guidance about how to perform this verification.

Single copy price: \$45.00

Order from and send comments to: Carol Franklin, cfranklin@robotics.org

Due 31 December 2018

BSR/ASHRAE Addendum 62.1ab-201x, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2016)

Indoor CO_2 has had a prominent place in discussions of ventilation and IAQ for many years. The relevant issues include the impacts of CO_2 on building occupants, the use of CO_2 to control outdoor air ventilation rates, CO_2 monitoring as an indicator of general IAQ conditions and the use of indoor CO_2 to estimate building ventilation rates. This proposed addendum adds a new Normative Appendix D, Estimation of Steady-State Indoor CO_2 Concentrations Based on Per Person Ventilation Rates and Occupant Characteristics.

Single copy price: \$35.00

Obtain an electronic copy from: https://www.ashrae.org/technical-resources/standards-and-guidelines/public-reviewdrafts

Comment at: https://www.ashrae.org/technical-resources/standardsand-quidelines/public-review-drafts

BSR/ASHRAE Addendum 62.1ac-201x, Ventilation for Acceptable Indoor Air Quality (addenda to

ANSI/ASHRAE Standard 62.1-2016)

Informative Appendix C (Summary of Selected Air Quality Guidelines) in 62.1-2016 was deleted in a previous addendum. This proposed addendum adds a new Informative Appendix C with content supportive of changes to the Indoor Air Quality Procedure (IAQP).

Single copy price: \$35.00

Obtain an electronic copy from: https://www.ashrae.org/technical-resources/standards-and-guidelines/public-

reviewdrafts

Comment at: https://www.ashrae.org/technical-resources/standardsand-quidelines/public-review-drafts

BSR/ASHRAE/IES Addendum 90.1bb-201x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2016)

This addendum revises LPD values. In response to comments received during the first public review, revisions were made to the model. Because of this a number of values changed. A typo resulting in an incorrect value for audience seating area-performance arts theater was corrected and the space type, audience seating area-convention center was removed as it was deemed to be unused.

Single copy price: \$35.00

Obtain an electronic copy from: standards.section@ashrae.org

Comment at: http://www.ashrae.org/standards-research--technology/public-review-drafts

BSR/NECA 331-201x, Standard for Installing Building and Service Entrance Grounding (new standard)

This standard describes installation procedures for building and service entrance grounding as well as building interior bonding and grounding. The information provided in this standard is intended to define what is meant by installing equipment in a "neat and workmanlike manner."

Single copy price: \$25.00 (NECA members); \$50.00 (non-members)

Order from and send comments to: Aga Golriz, (301) 215-4549, Aga.golriz@necanet.org

Due 7 January 2019

BSR/APCO 2.106.1-201X, Public Safety Grade Site Hardening Requirements (new standard)

This effort documents public safety requirements regarding various characteristics to make mission critical communications wireless networks sufficiently robust to meet the service availability requirements of public safety. The effort will standardize what is required to make wireless network sites "public safety grade" or to the extent to which they are hardened. This effort specifically addresses hardening for wireless communications sites with both transmission and/or reception capabilities.

Single copy price: Free

Order from: apcostandards@apcointl.org

Send comments to: https://workspace.apcointl.org/higherlogic/ws/public/document?

document id=1846&wg id=technical

BSR/ASSP A10.8-201x, **Scaffolding Safety Requirements** (revision and redesignation of ANSI ASSE A10.8-2011)

This standard establishes safety requirements for the construction, operation, maintenance and use of scaffolds used in the construction, alteration, demolition, and maintenance of buildings and structures.

Single copy price: \$110.00

Order from and send comments to: Lauren Bauerschmidt, LBauerschmidt@assp.org

BSR/NASPO BC-201x, Minimum Security Requirements for United States Birth Certification Documents (new standard)

The scope of this standard is to define minimum security requirements for the design, production, supply chain, and recommendations for issuance of government birth certificates used for official purposes.

Single copy price: Free

Order from and send comments to: mikeo@naspo.info

BSR/UL 1310-201x, Standard for Safety for Class 2 Power Units (revision of ANSI/UL 1310-2017)

The following is proposed: Revision of background color requirements for markings.

Single copy price: Free

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 19 January 2019

C22.1, Amendment - Canadian Electrical Code, Part I, Subject No. 4375, Revisions to Table 44: Three-phase ac motors. (amendment)

Request for proposal: Delete the 208V column from Table 44.

Due 20 January 2019

CSA A460, Bird-friendly building design (new standard)

This standard covers bird-friendly building design in both new construction and existing buildings. It establishes performance measures for glazing for overall building and site design. This standard aims to reduce bird collisions with buildings. Performance requirements are used in this when possible, and prescriptive requirements are used when necessary. Certification procedures are not part of this standard.

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/ASABE AD22000-201x MONYEAR, Food safety management systems - Requirements for any organization in the food chain (national adoption with modifications of ISO 22000:2018)

Food safety is related to the presence of food safety hazards at the time of consumption (intake by the consumer). Food safety hazards can occur at any stage of the food chain. Therefore, adequate control throughout the food chain is essential. Food safety is ensured through the combined efforts of all the parties in the food chain. This document specifies the requirements for a FSMS that combines the following generally recognized key elements: interactive communication, system management, prerequisite programs, hazard analysis, and critical control point (HACCP) principles. The project is to provide for a national standard for food safety management, improve the readability of the ISO standard for American users and correct mistakes and inconsistencies presented in the original international version. (It's a drag to have to throw out all the romaine lettuce right before Thanksgiving, but with no effective food safety management system and a multi-state outbreak of Shiga toxin-producing Escherichia coli spread via romaine lettuce, that's what you do.) Contact: Jean Walsh, walsh@asabe.org

BSR/ASSP Z359.1-201x, The Fall Protection Code (revision of ANSI/ASSE Z359.1-2016)

The Fall Protection Code is a set of standards that covers program management; system design; training; qualification and testing; and equipment, component, and system specifications for the processes used to protect workers at height in a managed fall protection program. This standard identifies those requirements and establishes their role in the Code and their interdependence.

Contact: Ovidiu Munteanu, OMunteanu@ASSP.org

BSR/NFPA 30B-201x, Code for the Manufacture and Storage of Aerosol Products (revision of ANSI/NFPA 30B-2019)

This code shall apply to the manufacture, storage, and display of aerosol products as defined in this standard. Contact: Dawn Michele Bellis, dbellis@nfpa.org

BSR/NFPA 40-201x, Standard for the Storage and Handling of Cellulose Nitrate Film (revision of ANSI/NFPA 40-2019)

This standard shall apply to all facilities that store and handle cellulose-nitrate-based film.

Contact: Dawn Michele Bellis, dbellis@nfpa.org

BSR/NFPA 51B-201x, Standard for Fire Prevention during Welding, Cutting, and Other Hot Work (revision of ANSI/NFPA 51B-2019)

This standard shall cover provisions to prevent injury, loss of life, and loss of property from fire or explosion as a result of hot work.

Contact: Dawn Michele Bellis, dbellis@nfpa.org

BSR/NFPA 72-201x, National Fire Alarm and Signaling Code (revision of ANSI/NFPA 72-2019)

NFPA 72 covers the application, installation, location, performance, inspection, testing, and maintenance of fire alarm systems, supervising station alarm systems, public emergency alarm reporting systems, fire and carbon monoxide detection and warning equipment, and emergency communications systems (ECS), and their components. The provisions of this chapter apply throughout the Code unless otherwise noted. For the purposes of carbon-monoxide detection, this standard is primarily concerned with life safety, not property protection. Contact: Dawn Michele Bellis, dbellis@nfpa.org

BSR/NFPA 80-201x, Standard for Fire Doors and Other Opening Protectives (revision of ANSI/NFPA 80-2019)

This standard regulates the installation and maintenance of assemblies and devices used to protect openings in walls, floors, and ceilings against the spread of fire and smoke within, into, or out of buildings. With the exception of fabric fire safety curtain assemblies, this standard addresses assemblies that have been subjected to standardized fire tests. (See Chapter 20.) Incinerator doors, record room doors, and vault doors are not covered in this standard. Requirements for horizontally sliding, vertically sliding, and swinging doors as used in this standard do not apply to hoistway doors for elevators and dumbwaiters.

Contact: Dawn Michele Bellis, dbellis@nfpa.org

BSR/NFPA 101A-201x, Guide on Alternative Approaches to Life Safety (revision of ANSI/NFPA 101A-2019) This guide consists of a number of alternative approaches to life safety. Each chapter is a different system independent of the others and is to be used in conjunction with the 2015 edition of NFPA 101. This edition of NFPA 101A contains alternative approaches that are tied to NFPA 101. Each of these systems is recognized by the Life Safety Code, in its Annex A, as a method that can be used to assist the authority having jurisdiction in determining equivalent compliance with various chapters of the Code. The method described in this guide is an index method. Index methods are a type of qualitative risk assessment. Quantitative risk assessments can also be used to evaluate designs that are proposed as alternative approaches to life safety.

BSR/NFPA 105-201x, Standard for Smoke Door Assemblies and Other Opening Protectives (revision of ANSI/NFPA 105-2019)

This standard shall prescribe minimum requirements for smoke door assemblies for use in providing safety to life and protection of property from smoke.

Contact: Dawn Michele Bellis, dbellis@nfpa.org

Contact: Dawn Michele Bellis, dbellis@nfpa.org

BSR/NFPA 110-201x, Standard for Emergency and Standby Power Systems (revision of ANSI/NFPA 110-2019)

This standard contains requirements covering the performance of emergency and standby power systems providing an alternate source of electrical power to loads in buildings and facilities in the event that the primary power source fails. Power systems covered in this standard include power sources, transfer equipment, controls, supervisory equipment, and all related electrical and mechanical auxiliary and accessory equipment needed to supply electrical power to the load terminals of the transfer equipment. This standard covers installation, maintenance, operation, and testing requirements as they pertain to the performance of the emergency power supply system (EPSS).

Contact: Dawn Michele Bellis, dbellis@nfpa.org

BSR/SERI R2-V3-201x, Responsible Reuse and Recycling (R2) Standard for Used Electronics (new standard)

The R2 Standard establishes responsible practices for the reuse and recycling of used electronics globally. By certifying to this standard through an accredited third-party Certification Body, electronics recyclers can help prospective purchasers of their services (customers) make informed decisions and have increased confidence that used and end-of-life electronic equipment are managed in an environmentally responsible manner, protective of the safety of workers and the public, and that data on media devices is secure until destroyed. Contact: Sharada Rao, sharada@sustainableelectronics.org

BSR/E1.66-201x, Safety Standard for Followspot Positions Erected for Short-Term Use in Entertainment Venues (new standard)

Followspot positions are often erected for short-term use as entertainment show lighting during performance and special events. There is currently no published guidance specific to them that covers construction, power supply, personnel access, fall protection, and the protection of people (e.g., members of the audience) from falling objects below the followspot position. The standard will provide minimum performance and safety requirements for followspot positions erected for short-term use in entertainment venues. These followspot positions provide support for followspot luminaires and their operators. 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.

Contact: Richard Nix, standards@esta.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 ES1.19-2018, Safety Requirements for Special Event Structures (new standard): 6 November 2018

ANSI E1.56-2018, Entertainment Technology - Rigging Support Points (new standard): 6 November 2018

ANSI E1.29-2009 (R2018), 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 (reaffirmation of ANSI E1.29-2009 (R2014)): 6 November 2018

ANSI E1.42-2018, Entertainment Technology - Design, Installation, and Use of Orchestra Pit Lifts (revision of ANSI E1.42-2016): 6 November 2018

ANSI E1.51-2018, Selection, Installation, and Use of Single-Conductor Portable Power Feeder Cable Systems for Use at 600 Volts Nominal or Less for the Distribution of Electrical Energy in the Television, Film, Live Performance and Event Industries in Canada (new standard): 7 November 2018

ANSI E1.31-2018, Entertainment Technology - Lightweight streaming protocol for transport of DMX512 using ACN (revision of ANSI E1.31-2016): 7 November 2018

ANSI/IES RP-1-2013 Addendum 2-2018, Office Lighting (revision of ANSI/IES RP-1-2013): 6 November 2018

ANSI/ISA 62453-309 (103.00.08)-2018, Field device tool (FDT) interface specification - Part 309: Communication profile integration - IEC 61784 CPF 9 (national adoption of IEC 62453-309 with modifications and revision of ANSI/ISA 62453-309 (103.00.08)-2011): 12 November 2018

ANSI/ISA 62453-315 (103.00.09)-2018, Field device tool (FDT) interface specification - Part 315: Communication profile integration - IEC 61784 CPF 15 (national adoption of IEC 62453-315 with modifications and revision of ANSI/ISA 62453-315 (103.00.09)-2011): 12 November 2018

ANSI/ISA 62453-303-1 (103.00.05)-2018, Field device tool (FDT) interface specification - Part 303-1: Communication profile integration - IEC 61784 CP 3/1 and CP 3/2 (identical national adoption of IEC 62453-303-1 and revision of ANSI/ISA 62453-303-1(103.00.05)-2011): 12 November 2018

ANSI/ISA 62453-303-2 (103.00.06)-2018, Field device tool (FDT) interface specification - Part 303-2: Communication profile integration - IEC 61784 CP 3/4, CP 3/5 and CP 3/6 (identical national adoption of IEC 62453-303-2 and revision of ANSI/ISA 62453-303-2 (103.00.06)-2011): 12 November 2018

ANSI MH28.3-2018, Design, Testing and Utilization of Industrial Steel Work Platforms (revision of ANSI MH28.3-2009): 12 November 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 a 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 and Karen Hughes at isot@ansi.org respectively. Any prices, if shown, are for purchases through ANSI. The sort order is by due date then alphanumeric.

34/577/FDIS, IEC 62386-220 ED1: Digital addressable lighting interface - Part 220: Particular requirements for control gear -Centrally supplied emergency operation (device type 19), 2 December 2018

21A/689/CD, IEC 63115-2 ED1: Secondary cells and batteries containing alkaline or other non-acid electrolytes - Sealed nickel metal hydride rechargeable cells and modules for use in industrial applications - Part 2: Safety, 11 January 2019

34/580/CD, IEC TS 63105 ED1: Lighting systems and related equipment - Vocabulary, 1 February 2019

34C/1410/CD, **IEC 61347-2-7/AMD2/FRAG3 ED3:** Lamp controlgear -Part 2-7: Particular requirements for battery supplied electronic controlgear for emergency lighting (self-contained), 1 February 2019

34D/1435/CD, IEC 60598-1/AMD2/FRAG30 ED8: Luminaires - Part 1: General requirements and tests, 1 February 2019

34D/1436/CD, IEC 60598-1/AMD2/FRAG31 ED8: Luminaires - Part 1: General requirements and tests, 1 February 2019

34D/1437/CD, IEC 60598-1/AMD2/FRAG32 ED8: Luminaires - Part 1: General requirements and tests, 1 February 2019

34D/1438/CD, IEC 60598-1/AMD2/FRAG33 ED8: Luminaires - Part 1: General requirements and tests, 1 February 2019

34D/1439/CD, IEC 60598-1/AMD2/FRAG34 ED8: Luminaires - Part 1: General requirements and tests, 1 February 2019

34D/1440/CD, IEC 60598-1/AMD2/FRAG35 ED8: Luminaires - Part 1: General requirements and tests, 1 February 2019

34D/1441/CD, IEC 60598-1/AMD2/FRAG36 ED8: Luminaires - Part 1: General requirements and tests, 1 February 2019

34D/1442/CD, IEC 60598-1/AMD2/FRAG37 ED8: Luminaires - Part 1: General requirements and tests, 1 February 2019

34D/1443/CD, IEC 60598-1/AMD2/FRAG38 ED8: Luminaires - Part 1: General requirements and tests, 1 February 2019

JTC1-SC25/2847/NP, PNW JTC1-SC25-2847: 15045-3-1: Information technology - Home Electronic System (HES) gateway - Part 3-1: Introduction to privacy, security, and safety, 8 February 2019

21A/687/CD, IEC 62619 ED2: Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for secondary lithium cells and batteries, for use in industrial applications, 8 February 2019

65E/631/CDV, IEC 61804-3 ED4: Function Blocks (FB) for process control and Electronic Device Description Language (EDDL) – Part 3: EDDL syntax and semantics, 8 February 2019

65E/633/CDV, IEC 61804-4 ED2: Function blocks (FB) for process control and electronic device description language (EDDL) - Part 4: EDD interpretation, 8 February 2019

65E/634/CDV, IEC 61804-5 ED2: Function blocks (FB) for process control and electronic device description language (EDDL) - Part 5: EDDL Builtin library, 8 February 2019

Recently Published IEC & ISO Documents

Listed here are documents recently approved by the IEC or ISO. Prices are if bought from ANSI.

IEC 62046 Ed. 1.0 b:2018, Safety of machinery - Application of protective equipment to detect the presence of persons, \$375.00

ISO 22320:2018, Security and resilience - Emergency management -Guidelines for incident management, \$138.00

ISO/TR 22165:2018, Pneumatic fluid power - Application notes for the improvement of the energy efficiency of pneumatic systems, \$45.00

ISO/IEC 26553:2018, Information technology - Software and systems engineering - Tools and methods for product line realization, \$209.00

ISO/IEC 26556:2018, Information technology - Software and systems engineering - Tools and methods for product line organizational management, \$209.00

TSP Meeting Schedule

The following meetings will be held at the Sheraton Park Hotel in conjunction with the NAMM conference and trade show in Anaheim, CA. The most up to date version of the meeting schedule sorted by day rather than meeting group is available at http://tsp.esta.org/tsp/meetings/index.php.

Control Protocols Compliance Study Group	19:00 – 23:00	Saturday, 26 January 2019
	13:00 – 17:00	Sunday, 27 January 2019
Control Protocols E1.20 / E1.37-5 TG	14:00 –18:00	Wednesday, 23 January 2019
Control Protocols E1.20 Task Group	19:00 – 23:00	Wednesday, 23 January 2019
Control Protocols E1.33 TG	14:00 –18:00	Thursday, 24 January 2019
	14:00 –18:00	Friday, 25 January 2019
Control Protocols E1.37-4 Firmware Uploads TG	09:00 – 13:00	Thursday, 24 January 2019
Control Protocols NAEP TG	19:00 – 23:00	Friday, 25 January 2019

Control Protocols Working Group	08:00 - 11:00	Friday, 25 January 2019
CP/Rig E1.59 Automation Feedback TG	20:00 – 23:00	Thursday, 24 January 2019
Electrical Power Electrical Inspection TG	10:00 – 13:00	Wednesday, 23 January 2019
Event Safety Fire Safety TG	09:00 - 13:00	Saturday, 26 January 2019
Event Safety Rigging Task Group	14:00 –18:00	Wednesday, 23 January 2019
Event Safety Venue & Site Design Task Group	14:00 –18:00	Friday, 25 January 2019
Event Safety Working Group	14:00 –18:00	Saturday, 26 January 2019
Floors Working Group	09:00 - 13:00	Saturday, 26 January 2019
Fog & Smoke Working Group	11:30 – 14:30	Friday, 25 January 2019
Followspot Position Working Group	09:00 - 13:00	Thursday, 24 January 2019
Rigging E1.6-2 Chain Hoist DIM TG	14:00 –18:00	Saturday, 26 January 2019
Rigging Working Group	19:00 – 23:00	Friday, 25 January 2019
Stage Machinery E1.64 TG	09:00 - 13:00	Saturday, 26 January 2019
Stage Machinery Working Group	15:00 –18:00	Friday, 25 January 2019
Technical Standards Council	09:00 – noon	Sunday, 27 January 2019

The following meetings will be at the Hyatt Regency Louisville, in conjunction with the USITT Conference and Stage Expo:

Floors Working Group	14:00 – 17:00	Wednesday 20 March 2019
Control Protocols Working Group	09:00 – noon	Thursday 21 March 2019
Stage Machinery Working Group	14:00 – 17:00	Thursday 21 March 2019
Stage Machinery E1.64 TG	09:00 – 13:00	Wednesday 20 March 2019
Rigging Working Group	19:00 – 22:00	Thursday 21 March 2019
Electrical Power Working Group	11:00 – 14:00	Friday 22 March 2019
Technical Standards Council	15:00 – 18:00	Friday 22 March 2019
Followspot Position Working Group	19:00 – 22:00	Friday 22 March 2019
Fog & Smoke Working Group	09:00 – 11:00	Saturday 23 March 2019
Event Safety Working Group	11:00 – 15:00	Saturday 23 March 2019

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

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