

Minutes
Technical Standards Council
Sunday 08 October 2023
Marriott D/FW Westlake – Westlake, TX

Chairpersons:

Mike Garl; Mike Garl Consulting, LLC; P (presiding)
Alan Rowe; I.A.T.S.E. Local 728; P

Recording secretaries:

Richard Nix, Karl Ruling, Erin Grabe (ESTA)

Attendees:

Keith Sklar; Actors' Equity; P
D. Andrew Gibbs, Ph.D.; Amer. Society of Theatre Consultants; P
R. Duane Wilson; Amer. Society of Theatre Consultants; A
Michael Lay; Candela Controls, Inc.; P
Mike Skinner; Contract Services Administration Trust Fund; A
Steve Terry; Electronic Theatre Controls, Inc.; P
Edwin S. Kramer; I.A.T.S.E. Local 1; P
Mitch Hefter; Mitch Hefter; P
Jerry Gorrell; USITT; P
Justin Bennett; USITT; A
William Gillett; Walt Disney Company; A

Visitors:

Ethan Gilson

1 Opening Remarks

Mike Garl called the meeting to order at 09:03, thanking everyone for being there. He reminded people on-line to mute their microphones when not speaking.

2 Patent and anti-trust statements

2.1 Reading of the anti-trust statement

Mike Garl read the following statement aloud to the assembly:

ESTA and its members take seriously their obligation to comply with all applicable antitrust laws. Therefore, during this meeting and during all ESTA events, all discussions will be limited to those subjects that are permitted by the antitrust laws. All members should refrain from any discussion or mention of competitively sensitive subjects such as the current or future prices charged for any member product or services, current or future marketing plans or strategies, and current or future costs, including employee salaries. There also must be no agreement on the suppliers or customers that members will or will not do business with or the markets in which members will conduct business.

Violations of the antitrust laws can have serious consequences. If you have any questions or concerns about anything that is discussed at an ESTA meeting, please bring your concern to ESTA management. An easy to read pamphlet describing the antitrust laws is available from the ESTA staff.

Richard Nix held up the pamphlet.

2.2 Reading of the call for patents

Mike Garl read the following statement aloud to the assembly:

ESTA intends not to publish any standard that contains protected intellectual property, unless that information can be licensed by anyone for a reasonable fee. ESTA uses a process of open patent and copyright disclosures to implement its intent. ESTA does not conduct patent or copyright searches and does not warrant that its standards contain no protected intellectual property.

In keeping with the open disclosures policy, I ask if anyone present wishes to notify this working group of the existence of a patent, patent application, copyright, or other protected intellectual property that might protect material in a standard being developed by this working group. You need not be the holder of the patent or

copyright to notify this working group of its existence.

Nothing was revealed.

3 Attendance and introductions

Mike Garl said introductions weren't necessary, everyone knows everyone else, and he thanked those who were able to make it to Texas in-person.

3.1 Welcome to visitors

3.2 Determination of a quorum

A quorum is seven voting members.

Mike Garl confirmed a quorum is present.

3.3 Consensus body

The full consensus body during the time of this meeting, including voters not present, is:

Name	Company or representation	Voting status
Keith Sklar	Actors' Equity	P
D. Andrew Gibbs, Ph.D.	Amer. Society of Theatre Consultants	P
R. Duane Wilson	Amer. Society of Theatre Consultants	A
Michael Lay	Candela Controls, Inc.	P
Matthew Antonucci	Contract Services Administration Trust Fund	P
Mike Skinner	Contract Services Administration Trust Fund	A
Steve Terry	Electronic Theatre Controls, Inc.	P
Todd Spencer	ESTA President	P
Edwin S. Kramer	I.A.T.S.E. Local 1	P
Alan M. Rowe	I.A.T.S.E. Local 728	P
Mike Garl	Mike Garl Consulting LLC	P
Mitch Hefter	Mitch Hefter	P
Bill Sapsis	Sapsis Rigging, Inc.	P
Jerry Gorrell	USITT	P
Justin Bennett	USITT	A
David E. Miller	Walt Disney Company	P
William Gillett	Walt Disney Company	A
	Total votes possible	13

4 Approval of minutes from the previous meeting

[See [TSCmin07-2023_DRAFT.pdf](#)]

Mitch Hefter moved to approve the minutes, the motion was seconded, and carried without objection or abstentions.

5 Approval of agenda

Mike Garl thanked Richard Nix for sending everything out and keeping things up to date. He asked if there were any additions or corrections to the agenda. Steve Terry moved to approve the agenda, the motion was seconded and carried without objection or abstention.

6 Old Business and standing reports

6.1 Financial reports

Erin Grabe reported on both items. The TSC is working on a large deficit. They had some plans that fell through,

but are working on alternate plans. The long-term pledges have now ended, so we need replacement pledges.

6.1.1 Treasurer's Report and Status of Contributions and Pledges

6.1.2 TSP Fundraising

Erin Grabe reported. All the long-term pledges have timed out, so we do not have that revenue stream, although some companies continue to make regular donations. The fundraising committee has floundered. A new fundraising committee is being formed.

6.1.3 Accounting of TSP documents sold and downloaded

[See [SalesReportforTSC_10-2023.pdf](#)]

Downloads increased by 2% from July's report.

6.2 Old Business

6.2.1 Technical Standards Program project report

[See [TSP Project Status Summary_10-2023.pdf](#)]

6.2.2 Working group documents for possible action by the TSC

6.2.2.1 First public reviews

6.2.2.1.1 BSR E1.73-1 UDR Base

[See [BSR_E1-73-1_CP2023-1007.pdf](#)]

The CPWG may approve first public review.

Mike Lay reported, and requested to combine the next three items together in a single motion to approve all four for first public review. The motion was seconded. The motion carried without objection or abstention.

6.2.2.1.2 BSR E1.73-2 UDR Core Definitions

[See [BSR_E1-73-2_CP2023-1008.pdf](#)]

The CPWG may approve first public review.

6.2.2.1.3 BSR E1.73-3 UDR Intensity/Color Definitions

[See [BSR_E1-73-3_CP2023-1009.pdf](#)]

The CPWG may approve first public review.

6.2.2.1.4 BSR E1.73-4 UDR Motion Definitions

[See [BSR_E1-73-4_CP2023-1010.pdf](#)]

The CPWG may approve first public review.

6.2.2.1.5 BSR E1.11 USITT DMX512-A

[See [BSR E1-11_202x_CP2023-1011r1a.pdf](#)]

The CPWG may approve first public review.

Michael Lay moved to approve first public review. The motion was seconded and carried without objection or abstention.

6.2.2.1.6 ANSI E1.21 reopened for limited revision

The RWG approved a new project to open ANSI E1.21 for limited revision, to fix some erroneous IBC references arising from the recent IBC approval adding an unanticipated section, which in turn shifted the E1.21 references to the IBC off of the correct subclause numbering. They also approved a first public review to commence immediately upon completion of the 30-day mandatory PINS filing wait period. The TSC will receive a letter ballot to approve the first public review, so it can begin on 01 December 2023.

6.2.2.2 Reaffirmations

6.2.2.3 Accept as ANS

6.2.2.4 Withdrawals or abandonments

6.2.2.5 New project requests

6.2.2.5.1 Additional E1.73 project extensions

[see *TSP_ProjectRequest-Gobo-5.pdf* and *TSP_ProjectRequest-Shape-6.pdf*]

The CPWG will consider these two new project requests, submitted by the E1.73 task group.

Mike Lay gave an overview of reasons for approving, then moved to approve the new project requests. The motion was seconded and carried without objection or abstention.

6.2.2.5.2 Per-slot priority extension for E1.31

[see *PerSlot_TSP_ProjectRequest_mn.pdf*]

The CPWG will consider this new project request, submitted by Maya Nigrosh.

Mike Lay explained this is an add on to streaming ACN. ETC does this internally, everyone else likes it so agree it would be better as a standard. He moved to approve the new project. The motion was seconded and carried without objection or abstention.

6.2.2.5.3 Rigging system signage requirements

[see *TSP_ProjectRequest - Entertainment Technology - Rigging System Signage.pdf*]

The RWG will consider this new project request, submitted by Chris Kaiser, Pete Svitavsky, and Peter Scheu.

Richard Nix reported that the RWG approved the project last night. Steve Terry moved to approve the project, the motion was seconded and carried without objection or abstentions.

6.2.2.5.4 Material Handling

[see *Event Safety - Material Handling - TSP Project Request.pdf*]

The ESWG will consider this new project request, submitted by Mike Weston, Alyxzander Bear, and Dominic Housiaux.

Richard Nix reported the working group approved the project at yesterday's meeting. Bill Gillett moved to approve the project. The motion was seconded, and carried without objection or abstention.

6.2.3 Working group documents for TSC review

[In conformance with the 04-2023 TSC directive, all drafts considered for public review will be sent to the TSC at the time they are distributed to the working group for PR consideration.]

6.2.3.1 BSR ES1.17, Event Safety Electrical Safety

[See *BSR_ES1-17_ES2018-20001r1b.pdf*]

The ESWG may approve draft resolutions and move the revised draft to second public review.

Richard Nix reported that a second review was approved by the working group. The TSC does not need to vote on it, but here it is for their perusal, since the TSC asked to be informed of anything going to public review.

6.2.3.2 BSR E1.20, Remote Device Management

[See *BSR_E1-20_201x-6 rev5.pdf*]

The CPWG may approve draft resolutions and move the revised draft to fifth public review.

Michael Lay reported that the working group did not approve the draft resolutions, so it is not moving forward to a fifth public review now.

6.2.3.3 BSR E1.37-5, General Purpose Messages for E1.20 RDM

[See E1-37-5 General Purpose PIDs r33 2023-09-09.pdf]

The CPWG may approve draft resolutions and move the revised draft to sixth public review.

Michael Lay reported that the resolutions were approved and the document was moved for public review.

6.2.3.4 BSR E1.68 Recommended Practice to address DMX512 compliance and interoperability

[see BSRE1-68_CP2021-1003r2]

The CPWG may approve draft resolutions and move the revised draft to second public review.

Michael Lay reported that the resolutions were approved and the document was moved for public review.

6.2.5 CEN collaboration

The TC 433 voted to approve Richard Nix's application. The final approval will come after the main "Boss" committee convenes on 19 October.

Nix reported that they are having a plenary meeting to which he has been invited. He can attend remotely and plans to do so.

6.2.6 UL and NFPA representation

Any news or updates?

Jerry reported on NFPA 80 - last meeting had considerable problems which at this point has no effect on us, but there could be repercussions from the meeting.

Karl Ruling is on Special Effects, Larry Schoeneman is the alternate. Erin Grabe has a binary explosives license in the state of Illinois, so she would be a good candidate as an Alternate since Larry is retired.

Mitch Hefter moved to approve Erin Grabe as Karl's Alternate to 1126 Special Effects. The motion was seconded and carried without objection or abstention.

7 New business

Jerry Gorrell said he will step down as USITT's Principal representative to the TSC, handing primary responsibility over to Justin Bennett.

8 Optional reports

8.1 Optional reports by working and task group leaders on active projects

8.1.1 Control Protocols

Michael Lay reported. The CPWG met yesterday, adding 5 new members, for a total of 25 new members this year. They held 7 task group meetings this cycle, and there were 22 standards documents to consider this cycle. He spoke about E1.73 fixture libraries, and the crossover into other working groups, because the libraries contain rigging, and other machine parameters. He will send an email to the other working group chairpersons asking them to consider reviewing it.

8.1.2 Electrical Power

Mitch Hefter reported. They added three new members, and the E1.61 revisions are moving forward.

8.1.3 Floors

Jerry said there's nothing new happening there.

8.1.4 Fog and Smoke

Karl Ruling reported. No movement except E1.23 is moving forward, but no problems otherwise.

8.1.5 Followspot Positions

Richard Nix reported. They had a short pro-forma meeting, and will meet again in July 2024 to decide if they want to take action on one published standard that will come up for action in early 2025.

8.1.6 Photometrics

Jerry Gorrell reported. Karl has a summary.

8.1.7 Rigging

Richard Nix reported. The meeting was lengthy, with discussion about welding criteria in ANSI E1.2, and discussion of E1.21 clause harmonization with IBC. Two final approvals are coming, and there are two active drafts in progress.

8.1.8 Stage machinery

Nix reported that a couple of letter ballots for final approval of two standards should be coming to the TSC soon.

8.1.9 Event Safety

Good progress, said Richard, one document going back for public review.

8.1.10 Weapons Safety

Short meeting, said Richard; Primary members couldn't make it, or have been busy working. No significant progress, so nothing to report.

8.2 Reports of affiliated organizations

8.2.1 ASTC

Nothing to report.

8.2.2 Event Safety Alliance

Erin reported Event Safety Summit in Houston.

8.2.3 NFPA

8.2.3.1 FDW-AAA committee (NFPA 80 fire doors & fire safety curtains)

Jerry reported NITMAM are due by 24 March 2023, there is a potential for a large number of them due to the controversy from last meeting.

8.2.3.2 SPE-AAA (NFPA 160 & 1126, flame and pyrotechnics)

Karl Ruling said nothing more to add. There's an upcoming meeting; He will inquire about replacing his alternate.

8.2.3.3 SAF-AXM & BLD (assembly occupancies. NFPA 101, 102, & 5000)

Jerry reported. The standard is out, there are no meetings scheduled yet.

8.2.3.4 NEC (NFPA 70)

Mitch Hefter reported. Over 4400 Public Inputs were received for proposed changes to the 2023 edition for 2026. Several are related to multi-pin connectors as an outgrowth of the BSR E1.80 project. Panel Task Groups are being formed and will meet over the next couple of months in preparation for the First Draft meetings in January in Charleston, SC.

Note – NEC CMP-15 2026 First Draft meetings are January 24 – 26, 2024, which overlap with the NAMM dates. This means that several EPWG (TSC) members will be on the east coast which may affect attendance.

8.2.3.5 NFPA 70E

Jerry reported. The new version is out with no new significant changes. He thinks it will remain stable for the near future.

8.2.4 USITT

Mitch said there is a conference coming up in Seattle.

8.2.5 ICC

By today's meeting, BSR E1.21 will have been approved by ANSI, and will have been submitted for FCAC consideration as a new change proposal to Chapter 31 of the 2027 IFC. This facilitates coordination between the IFC and the IBC, because E1.21 has been updated to reflect the latest 2024 IBC code changes.

8.2.6 IES

Nothing to report.

8.2.7 UL

Nothing to report.

8.2.8 ASSP

Nothing to report. New President and new management, seem to be refocusing.

9 Other business and announcements

Erin Grabe announced Karl Ruling will receive the Distinguished Achievement in Engineering Award at USITT in Seattle. There was applause and discussion.

9.1 Above & Beyond Awards

Information on the Above & Beyond Awards may be found at http://tsp.esta.org/tsp/news/award_recipients.html. One nomination has been received.

9.2 Lifetime Technical Achievement Award

No nominations yet.

9.3 Volunteer of the Year Award

9 ETCP trainers who put the MRI together.

9.4 Swan Award

10 Schedule for future meetings

The meeting schedule is posted at <http://www.esta.org/ESTA/meetings.php>.

The Winter meetings will be held in conjunction with the NAMM Show 2023, in Anaheim, CA during the week of 22 January 2024. Spring meetings will be in conjunction with USITT in Seattle, during the week of 18 March 2024, and the Summer meetings will be co-located with NATEAC during the week of 08 July in New York City. Fall meetings will likely return to Westlake, TX.

Richard Nix said that the NATEAC planning committee is actively seeking presentation proposals. Those

interested in submitting a proposal may do so by going to the ESTA home page, and clicking on the NATEAC banner link to be redirected to a proposal submission form.

Steve Terry said that some of the best ITEAC and NATEAC presentations have come from people outside of our usual cadre of people.

11 Adjournment

The agenda being completed, with no further business brought forth, Mike adjourned the meeting at 10:00, thanking everyone again for their hard work keeping our program moving forward successfully.

Technical Standards Council Members as of 08 October 2023

Name	Representing	Status
Matthew Antonucci	Contract Services Administration Trust Fund	A
Justin Bennett	USITT	A
Harry Box	PERG	O
Mike Garl	Mike Garl Consulting LLC	P
William Gillett	Walt Disney Company	A
Jerry Gorrell	USITT	P
Mitch Hefter	Mitch Hefter	P
Edwin S. Kramer	I.A.T.S.E. Local 1	P
Michael Lay	Candela Controls, Inc	P
David E. Miller	Walt Disney Company	P
D. Andrew Gibbs, Ph.D.	Amer. Society of Theatre Consultants	P
Eddie Raymond	IATSE Local 16	O
Alan M. Rowe	I.A.T.S.E. Local 728	P
Bill Sapsis	Sapsis Rigging, Inc.	P
Mike Skinner	Contract Services Administration Trust Fund	P
Keith Sklar	Actors' Equity Association	P
Todd Spencer	ESTA President	P
Steve Terry	Electronic Theatre Controls, Inc.	P
R. Duane Wilson	Amer. Society of Theatre Consultants	A