

Minutes
Control Protocols Working Group
Saturday, 23 January 2010
Dallas/Ft Worth Marriott Solana
5 Village Circle
Westlake, TX 76262

Chairman: Michael Lay; Philips Strand Lighting (Royal Philips Electronics); P; MP

Recording secretary: Karl G. Ruling; ESTA

Members attending:

Scott M. Blair; High End Systems Inc. (Barco); P; MP
Paul Kleissler; City Theatrical, Inc.; P; MP
Paul McMaster; Zero 88 (Cooper Controls Ltd.); P; MP
Edward A. (Ted) Paget; Vortek Rigging Division (Daktronics Inc.); P; G
Ulrich Kunkel; E3 Engineering & Education for Entertainment GmbH, representing the DIN, NVBF Committee; P; U
Milton Davis; Doug Fleenor Design, Inc.; A; MP
Daniel W. Antonuk; Electronic Theatre Controls, Inc.; P; MP
Robert Goddard; Goddard Design Co.; P; MP
Jody Williquette; Harting Inc., North America (Harting KGAA); P; G
Ed Garstkiewicz; Harting Inc., North America (Harting KGAA); A; G
Alan Martello; Horizon Control Inc.; P; MP [14:20 late arrival]
Peter Willis; Howard Eaton Lighting Ltd.; P; CP
Edwin S. Kramer; I.A.T.S.E. Local 1; P; U
Roger Lattin; I.A.T.S.E. Local 728; P; U
Hamish Dumbreck; JESE Ltd. (James Embedded Systems Engineering); O; MP
Ken Vannice; Leviton Manufacturing Co., Inc.; P; MP [14:20 late arrival]
Tyrone Mellon Jr.; Lex Products Corp.; P; CP
Michael Karlsson; LumenRadio AB; P; MP
Kevin Loewen; Pathway Connectivity Inc.; P; MP
Ron Bonner; PLASA; P; G
Charles Reese; Production Resource Group; P; DR
Robert Tooker; Production Resource Group; A; DR
Kimberly Corbett; Schuler Shook; P; G
Mitch Heffer; Entertainment Technology (Royal Philips Electronics), representing USITT; P; U

Visitors: Martin Moore
Simon Newton

1 Opening remarks

Mike Lay welcomed those present to the meeting and thanked them for coming—particularly the European attendees, who had traveled a long way to be here.

2 Attendance

2.1 Introductions of those present and circulation of attendance sheet

A salmon-colored attendance sign-in sheet was circulated.

2.2 Determination of a quorum

Michael Lay asked for a show of hands from the voters. He counted them and then announced that quorum was present and business could be conducted.

2.3 Recognition of alternate voting members

Milton Davis was recognized as voting for Doug Fleenor Design. Other alternates who were not voting because their principal was present were also noted.

3 Membership

3.1 Requirements for membership

Mike Lay read the following statement aloud to the assembly:

Membership is open to all who are affected by the work of the group. People and companies that would be in any interest category other than a manufacturer interest category are at this time particularly encouraged to apply for membership. Voting members are required to attend meetings and to vote on letter ballots. Voting members and their alternates may not miss three consecutive meetings without a loss of voting status.

3.2 Changes to observer status due to lack of attendance

Voting members who have missed the previous two meetings and will be moved to observer status if this meeting also is missed: None.

3.3 Processing of new membership requests and reaffirmation of members with new companies

The following applications had been received:

- Storm K. Staley; Stormwerx; O; U
- Larry Zoll; Zoll Design & Consulting, LLC; P; U;
- Hamish Dumbreck; JESE Ltd. (James Embedded Systems Engineering); O; MP;
- Ben Darrington; Wireless Solutions Sweden AB; P; MP
- Nyasho Chigwamba; Rhodes University; O; G
- Andrew Eales; Rhodes University; O; G
- Osedum P. Igumbor; Rhodes University; O; G

None of the people applying for principal voting status were present at the meeting.

Ted Paget moved that all the applications be accepted with observer status, including those who had applied as voters. The motion was seconded and then approved with a show of hands.

3.4 Consensus body during meeting

The full consensus body, including those voters not present, during this meeting was:

Name	Company	Representing (This is the sort field.)	Voting status	Int. cat.
Jean-Francois Canuel	Spectrum Manufacturing Inc.	A.C. Lighting Ltd.	P	CP
Scott M. Blair	High End Systems Inc.	Barco	P	MP
Tom Grimes	High End Systems, Inc.	Barco	A	MP
Paul Kleissler	City Theatrical, Inc.	City Theatrical, Inc.	P	MP
Larry Dunn	City Theatrical, Inc.	City Theatrical, Inc.	A	MP
Paul McMaster	Zero 88	Cooper Controls Ltd.	P	MP
Edward A. (Ted) Paget	Vortek Rigging Division	Daktronics Inc.	P	G
Ulrich Kunkel	E3 Engineering & Education for Entertainment GmbH	DIN, NVBF Committee	P	U
Doug Fleenor	Doug Fleenor Design, Inc.	Doug Fleenor Design, Inc.	P	MP
Milton Davis	Doug Fleenor Design, Inc.	Doug Fleenor Design, Inc.	A	MP
Daniel W. Antonuk	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	P	MP
Steve Terry	Electronic Theatre Controls	Electronic Theatre Controls, Inc.	A	MP
Tracy Underhill	Electronics Diversified LLC	Electronics Diversified LLC	P	MP
Philip Nye	Engineering Arts	Engineering Arts	P	G

Name	Company	Representing (This is the sort field.)	Voting status	Int. cat.
Robert Goddard	Goddard Design Co.	Goddard Design Co.	P	MP
Jody Williquette	Harting Inc., North America	Harting KGAA	P	G
Ed Garstkiewicz	Harting Inc., North America	Harting KGAA	A	G
Alan Martello	Horizon Control Inc.	Horizon Control Inc.	P	MP
Robert Bell	Horizon Control Inc.	Horizon Control Inc.	A	MP
Gary Douglas	Horizon Control Inc.	Horizon Control Inc.	A	MP
Peter Willis	Howard Eaton Lighting Ltd.	Howard Eaton Lighting Ltd.	P	CP
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	P	U
John Huntington	City Tech, Ent Tech Department	I.A.T.S.E. Local 1	A	U
Roger Lattin	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	P	U
Dennis Grow	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	A	U
Alan M. Rowe	IATSE Local 728	I.A.T.S.E. Local 728	A	U
Ken Vannice	Leviton Manufacturing	Leviton Manufacturing Co., Inc.	P	MP
Tyrone Mellon Jr.	Lex Products Corp.	Lex Products Corp.	P	CP
David Yellin	LightMinded Industries, Inc.	LightMinded Industries, Inc.	P	MP
Michael Karlsson	LumenRadio AB	LumenRadio AB	P	MP
Marcus Bengtsson	LumenRadio AB	LumenRadio AB	A	MP
Stuart Cotts	Oregon Shakespeare Festival	Oregon Shakespeare Festival	P	U
Kevin Loewen	Pathway Connectivity Inc.	Pathway Connectivity Inc.	P	MP
Dave Higgins	Pathway Connectivity Inc.	Pathway Connectivity Inc.	A	MP
Robert Armstrong	Pathway Connectivity Inc.	Pathway Connectivity Inc.	A	MP
Ron Bonner	PLASA	PLASA	P	G
Charles Reese	Production Resource Group	Production Resource Group	P	DR
Robert Tooker	Production Resource Group	Production Resource Group	A	DR
Michael Lay	Philips Strand Lighting	Royal Philips Electronics	P	MP
Hans Lau	Sand Network Systems, Inc.	Sand Network Systems, Inc.	P	MP
Yngve Sandboe	Sand Network Systems, Inc.	Sand Network Systems, Inc.	A	MP
Kimberly Corbett	Schuler Shook	Schuler Shook	P	G
Mitch Hefter	Entertainment Technology (Royal Philips Electronics)	USITT	P	U
		Total	28	
			3	CP
			14	MP
		Subtotals by interest categories	1	DR
			5	U
			5	G

4 Approval of the minutes from the November 2009 meeting

See CPmin11-2009.pdf.

Scott Blair moved that the draft minutes be accepted as written. The motion was seconded and than approved with a show of hands.

5 Reading of the call for patents

Mike Lay 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 or copyright or other 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."

No protected intellectual property was revealed at this meeting.

6 Reading of the anti-trust statement

Mike Lay read the following statement aloud to the assembly:

"The ESTA Board of Directors, the Technical Standards Committee, and the leadership of this working group will reject or nullify any actions that unlawfully restrain trade. Anyone who feels that such an action is being or has been taken is requested to bring that matter to the attention of the chair immediately. Anyone who feels that actions in restraint of trade have been taken and not properly annulled is requested to notify the TSC chair or ESTA president immediately.

"ESTA legal counsel has informed us that violations of the anti-trust laws can have serious consequences. Individuals engaged in certain unlawful conduct can be found criminally liable. An individual convicted of a criminal violation of the Sherman Act may be fined as much as \$1,000,000 and imprisoned for up to ten years. An easy to read pamphlet describing restraint of trade issues is available from the Technical Standards Manager."

Technical Standards Manager Karl Ruling held up one of the easy-to-read pamphlets to show that copies were available. No restraint of trade issues were called to the attention of the assembly.

7 Approval of agenda

Mike Lay added an item 10.2, visitors at meetings, and an item 10.3, Peter Willis comments on the Connectivity Pavilion.

Ted Paget moved that the amended agenda be approved. The motion was seconded and then accepted with a show of hands.

8 Old business

8.1 Standards Maintenance

Any news or action needed on any of these standards? This is a placeholder in the agenda, so we don't forget to maintain them.

ANSI E1.3 – 2001 (R2006), Entertainment Technology - Lighting Control Systems - 0 to 10V Analog Control Specification. Revision, reaffirmation or withdraw in 2011.

ANSI E1.11 – 2008, Entertainment Technology - USITT DMX512-A, Asynchronous Serial Digital Data Transmission Standard for Controlling Lighting Equipment and Accessories. Revision, reaffirmation or withdraw in 2013.

ANSI E1.27-1 – 2006 , Entertainment Technology - Standard for Portable Control Cables for Use with USITT DMX512/1990 and E1.11 (DMX512-A) Products. Revision, reaffirmation or withdraw in 2011.

ANSI E1.27-2 – 2009, Entertainment Technology - Recommended Practice for Permanently Installed Control Cables for Use with ANSI E1.11 (DMX512-A) and USITT DMX512/1990 Products. Revision, reaffirmation or withdraw in 2014.

ANSI E1.30-3 – 2009, EPI 25, Time Reference in ACN Systems Using SNTP and NTP. Revision, reaffirmation or withdraw in 2014.

ANSI E1.30-7 – 2009, EPI 29, Allocation of Internet Protocol Version 4 Addresses to ACN Hosts. Revision, reaffirmation or withdraw in 2014.

ANSI E1.30-10 – 2009, EPI 32, Identification of Draft Device Description Language Modules. Revision, reaffirmation or withdraw in 2014.

ANSI E1.31 – 2009, Entertainment Technology – Lightweight streaming protocol for transport of DMX512 using can. Revision, reaffirmation or withdraw in 2014.

8.2 BSR E1.20-20xx, Remote Device Management (revision of ANSI E1.20 - 2006)

A motion had been made at the last meeting to accept BSR E1.20 as an American National Standard. This final vote has to be done by letter ballot. Karl Ruling explained that the proposed standard had been sent to the TSC editorial committee for editing, and the edited version would come back to the CPWG for a the letter ballot approval vote.

Scott Blair reported that E1.37 task has found a limitation with RDM in that there is no way for a device to clear an error report, to say, "Oh, my problem is gone." This can be fixed in E1.37, but not elegantly. It can be better dealt with in E1.20, so Blair suggested that E1.20 should be changed, and another public review offered, rather than pressing ahead with the E1.20 publication.

Scott Blair moved that the motion to accept BSR E1.20 as an ANS be withdrawn and that the document be offered for a third public review with revised text to address this problem. The motion was seconded. The motion was approved with a roll call vote, with 20 out of a voting body of 28 voting Yes, and no objections. Two voters who later attended the meeting were not yet present.

Name	Company	Representing (This is the sort field.)	Voting status	Int. cat.	Vote
Jean-Francois Canuel	Spectrum Manufacturing Inc.	A.C. Lighting Ltd.	P	CP	
Scott M. Blair	High End Systems Inc.	Barco	P	MP	Yes
Tom Grimes	High End Systems, Inc.	Barco	A	MP	
Paul Kleissler	City Theatrical, Inc.	City Theatrical, Inc.	P	MP	Yes
Larry Dunn	City Theatrical, Inc.	City Theatrical, Inc.	A	MP	
Paul McMaster	Zero 88	Cooper Controls Ltd.	P	MP	Yes
Edward A. (Ted) Paget	Vortek Rigging Division	Daktronics Inc.	P	G	Yes
Ulrich Kunkel	E3 Engineering & Education for Entertainment GmbH	DIN, NVBF Committee	P	U	Yes
Doug Fleenor	Doug Fleenor Design, Inc.	Doug Fleenor Design, Inc.	P	MP	
Milton Davis	Doug Fleenor Design, Inc.	Doug Fleenor Design, Inc.	A	MP	Yes
Daniel W. Antonuk	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	P	MP	Yes
Steve Terry	Electronic Theatre Controls	Electronic Theatre Controls, Inc.	A	MP	
Tracy Underhill	Electronics Diversified LLC	Electronics Diversified LLC	P	MP	
Philip Nye	Engineering Arts	Engineering Arts	P	G	
Robert Goddard	Goddard Design Co.	Goddard Design Co.	P	MP	Yes
Jody Williquette	Harting Inc., North America	Harting KGAA	P	G	Yes
Ed Garstkiewicz	Harting Inc., North America	Harting KGAA	A	G	
Alan Martello	Horizon Control Inc.	Horizon Control Inc.	P	MP	Absent
Robert Bell	Horizon Control Inc.	Horizon Control Inc.	A	MP	
Gary Douglas	Horizon Control Inc.	Horizon Control Inc.	A	MP	
Peter Willis	Howard Eaton Lighting Ltd.	Howard Eaton Lighting Ltd.	P	CP	Yes
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	P	U	Yes

Name	Company	Representing (This is the sort field.)	Voting status	Int. cat.	Vote
John Huntington	City Tech, Ent Tech Department	I.A.T.S.E. Local 1	A	U	
Roger Lattin	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	P	U	Yes
Dennis Grow	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	A	U	
Alan M. Rowe	IATSE Local 728	I.A.T.S.E. Local 728	A	U	
Ken Vannice	Leviton Manufacturing	Leviton Manufacturing Co., Inc.	P	MP	Absent
Tyrone Mellon Jr.	Lex Products Corp.	Lex Products Corp.	P	CP	Yes
David Yellin	LightMinded Industries, Inc.	LightMinded Industries, Inc.	P	MP	
Michael Karlsson	LumenRadio AB	LumenRadio AB	P	MP	Yes
Marcus Bengtsson	LumenRadio AB	LumenRadio AB	A	MP	
Stuart Cotts	Oregon Shakespeare Festival	Oregon Shakespeare Festival	P	U	
Kevin Loewen	Pathway Connectivity Inc.	Pathway Connectivity Inc.	P	MP	Yes
Dave Higgins	Pathway Connectivity Inc.	Pathway Connectivity Inc.	A	MP	
Robert Armstrong	Pathway Connectivity Inc.	Pathway Connectivity Inc.	A	MP	
Ron Bonner	PLASA	PLASA	P	G	Yes
Charles Reese	Production Resource Group	Production Resource Group	P	DR	Yes
Robert Tooker	Production Resource Group	Production Resource Group	A	DR	
Michael Lay	Philips Strand Lighting	Royal Philips Electronics	P	MP	Yes
Hans Lau	Sand Network Systems, Inc.	Sand Network Systems, Inc.	P	MP	
Yngve Sandboe	Sand Network Systems, Inc.	Sand Network Systems, Inc.	A	MP	
Kimberly Corbett	Schuler Shook	Schuler Shook	P	G	Yes
Mitch Hefter	Entertainment Technology (Royal Philips Electronics)	USITT	P	U	Yes

	Yes	No	Abstain	Absent	Total
CP	2	0	0	1	3
MP	9	0	0	5	14
DR	1	0	0	0	1
U	4	0	0	1	5
G	4	0	0	1	5
Total	20	0	0	8	28

8.3 BSR E1.37, Additional Message Sets for ANSI E1.20, Remote Device Management

Report on progress. Task Group was optimistic in November that we would have a document for this meeting. See E1-37-1 Messages-5.pdf

Scott Blair moved that the document sent to the CPWG be offered for public review with the changes that section 3.7 shall be removed and Table 8-1 modified. The motion was seconded. The motion for a first review must be decided by letter ballot.

People complained about the three-week additional delay in issuing a letter ballot because of the insertion of the editorial committee into the process. Antonuk suggested that we vote in parallel with the editing. Mike Lay said that he would take this up with the Technical Standards Committee.

8.4 BSR E1.17, Architecture for Control Networks revision project

Report on progress of letter ballot for public review of the errata documents: Ruling reported that the suite of documents had been sent to the editorial committee for their vetting for the letter ballot.

8.5 BSR E1.30, Application level equipment interoperability for control of commonly encountered entertainment technology devices using E1.17

8.5.1 BSR E1.30-1, EPI 23 Device Identification Subdevice

Report on progress. Task Group was optimistic in November that we would have a document for this meeting. See E1-30-1_FrstResols.zip

Dan Antonuk explained the proposed resolutions and then moved that the be accepted. The motion was seconded and then approved with a show of hands, with 17 voting Yes and three abstentions. With a voting body of 28, this constituted a supermajority.

Dan Antonuk then moved that the revised EPI 23 be offered for another public review. The motion was seconded and then approved with a roll call vote, with 19 voting Yes and one abstention in a total voting body of 28. Two voters who later attended the meeting were not yet present.

Name	Company	Representing (This is the sort field.)	Voting status	Int. cat.	Vote
Jean-Francois Canuel	Spectrum Manufacturing Inc.	A.C. Lighting Ltd.	P	CP	
Scott M. Blair	High End Systems Inc.	Barco	P	MP	Yes
Tom Grimes	High End Systems, Inc.	Barco	A	MP	
Paul Kleissler	City Theatrical, Inc.	City Theatrical, Inc.	P	MP	Yes
Larry Dunn	City Theatrical, Inc.	City Theatrical, Inc.	A	MP	
Paul McMaster	Zero 88	Cooper Controls Ltd.	P	MP	Yes
Edward A. (Ted) Paget	Vortek Rigging Division	Daktronics Inc.	P	G	Yes
Ulrich Kunkel	E3 Engineering & Education for Entertainment GmbH	DIN, NVBF Committee	P	U	Yes
Doug Fleenor	Doug Fleenor Design, Inc.	Doug Fleenor Design, Inc.	P	MP	
Milton Davis	Doug Fleenor Design, Inc.	Doug Fleenor Design, Inc.	A	MP	Yes
Daniel W. Antonuk	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	P	MP	Yes
Steve Terry	Electronic Theatre Controls	Electronic Theatre Controls, Inc.	A	MP	
Tracy Underhill	Electronics Diversified LLC	Electronics Diversified LLC	P	MP	
Philip Nye	Engineering Arts	Engineering Arts	P	G	
Robert Goddard	Goddard Design Co.	Goddard Design Co.	P	MP	Yes
Jody Williquette	Harting Inc., North America	Harting KGAA	P	G	Yes
Ed Garstkiewicz	Harting Inc., North America	Harting KGAA	A	G	
Alan Martello	Horizon Control Inc.	Horizon Control Inc.	P	MP	Absent
Robert Bell	Horizon Control Inc.	Horizon Control Inc.	A	MP	
Gary Douglas	Horizon Control Inc.	Horizon Control Inc.	A	MP	
Peter Willis	Howard Eaton Lighting Ltd.	Howard Eaton Lighting Ltd.	P	CP	Abstain
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	P	U	Yes
John Huntington	City Tech, Ent Tech Department	I.A.T.S.E. Local 1	A	U	
Roger Lattin	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	P	U	Yes
Dennis Grow	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	A	U	
Alan M. Rowe	IATSE Local 728	I.A.T.S.E. Local 728	A	U	
Ken Vannice	Leviton Manufacturing	Leviton Manufacturing Co., Inc.	P	MP	Absent
Tyrone Mellon Jr.	Lex Products Corp.	Lex Products Corp.	P	CP	Yes
David Yellin	LightMinded Industries, Inc.	LightMinded Industries, Inc.	P	MP	

Name	Company	Representing (This is the sort field.)	Voting status	Int. cat.	Vote
Michael Karlsson	LumenRadio AB	LumenRadio AB	P	MP	Yes
Marcus Bengtsson	LumenRadio AB	LumenRadio AB	A	MP	
Stuart Cotts	Oregon Shakespeare Festival	Oregon Shakespeare Festival	P	U	
Kevin Loewen	Pathway Connectivity Inc.	Pathway Connectivity Inc.	P	MP	Yes
Dave Higgins	Pathway Connectivity Inc.	Pathway Connectivity Inc.	A	MP	
Robert Armstrong	Pathway Connectivity Inc.	Pathway Connectivity Inc.	A	MP	
Ron Bonner	PLASA	PLASA	P	G	Yes
Charles Reese	Production Resource Group	Production Resource Group	P	DR	Yes
Robert Tooker	Production Resource Group	Production Resource Group	A	DR	
Michael Lay	Philips Strand Lighting	Royal Philips Electronics	P	MP	Yes
Hans Lau	Sand Network Systems, Inc.	Sand Network Systems, Inc.	P	MP	
Yngve Sandboe	Sand Network Systems, Inc.	Sand Network Systems, Inc.	A	MP	
Kimberly Corbett	Schuler Shook	Schuler Shook	P	G	Yes
Mitch Hefter	Entertainment Technology (Royal Philips Electronics)	USITT	P	U	Yes

	Yes	No	Abstain	Absent	Total
CP	1	0	1	1	3
MP	9	0	0	5	14
DR	1	0	0	0	1
U	4	0	0	1	5
G	4	0	0	1	5
Total	19	0	1	8	28

8.5.2 BSR E1.30-2, EPI 24 Internet Protocol Properties Subdevice

Report on progress. Task Group was optimistic in November that we would have a document for the April 1st meeting at USITT.

Dan Antonuk reported no progress on this project yet. The problem it is trying to address is multi-homing, which is having more than one IP address assigned to a device. The task group is discussing several possible solutions.

8.5.3 BSR E1.30-4, EPI 26, (DDL) Extensions for DMX512 and E1.31 Devices

Task Group was optimistic in November that we would have a draft resolution document for this meeting. See E1-30-4Resols.pdf

Dan Antonuk moved that the draft comment resolution document be accepted. The motion was seconded and then approved with a show of hands, with 19 voting Yes and the chairman abstaining. With a voting body of 28, this constituted a supermajority.

Dan Antonuk moved that the document be sent to the editorial committee for vetting in preparation for a final approval as an American National Standard. The motion was seconded and then approved with a unanimous show of hands. With a voting body of 28, this constituted a supermajority.

8.5.4 BSR E1.30-5, EPI 27 Operation of SDT on Wireless Networks

Discussion on the status of the project. It received one comment in the first public review, which has not been resolved. Dan Antonuk reported at the November meeting that this EPI may not be needed because of changes to SDT.

Dan Antonuk reiterated that this project would not be needed if the ACN errata are approved. Thus, it needs to stay listed as a project in case the other changes aren't made as expected.

8.5.5 BSR E1.30-6, EPI 28 Independent Device Location Properties

Discussion on the status of this project. It received one comment in the first public review, which has not been resolved. Dan Antonuk had reported at the last meeting that the problem that this EPI is meant to address might be solved with other changes.

Antonuk reported that there is discussion in the task group on how to do this. There is another EPI for metadata that is being developed, and that might obviate the need for this EPI. The task group should be able to make a recommendation to go forward or to abandon this EPI at the next meeting (USITT 2010).

8.5.6 BSR E1.30-8, EPI 30 Time Code Properties

Task Group was optimistic in November that we would have a draft resolution document for this meeting.

Dan Antonuk reported that this probably wouldn't be ready until July.

8.5.7 BSR E1.30-9, EPI 31 MIDI System Exclusive Properties

Task Group was optimistic in November that we would have a draft resolution document for this meeting.

Antonuk reported that this probably wouldn't be ready until March..

8.5.8 Other BSR E1.30-x documents

There was a discussion of other E1.30 documents that may be developed.

Antonuk reported that the task group is working on one for triggering macros on control consoles. Paul McMaster said that this could already be done through MIDI, but Antonuk said that some people don't want to have to implement MIDI in addition to the other protocols and would like to only support ACN.

Ulrich Kunkel proposed an EPI for synchronizing DMX512 universes.

Mike Lay, the Chairman, directed that the "other BSR E1.30-x documents" need to be formally registered and publically announced before any task group work could be undertaken. Any further EPI initial standards creation needs to be approved by the CPWG and TSC before the task group work can begin.

8.6 BSR E1.33, Extensions to E1.31 for Transport of ANSI E1.20 (RDM)

Task Group was optimistic in November that we would have a draft document for the July meeting.

Antonuk said that a lot of the task group's effort has been going into the EPI comment resolutions.

Scott Blair said that they have worked out a way to do discovery that "mere mortals" will be able to understand.

Antonuk reiterated that the goal is to have a solid document for the review by July, but that the document probably won't be ready to be considered for a first public review until the LDI meeting in October.

8.7 Ethernet recommended practice

Confirmation that this document be removed from the ESTA web site.

Ruling said that he'd put withdrawing the document for sale on the TSC agenda; he was loath to reduce ESTA's sales stock without TSC approval.

There was a discussion of perhaps having it on the website but noting that it is not current. We don't want to recommend it for new installations, but it is useful for much that is in the field.

Ted Paget moved that we keep the Ethernet recommended practice on the website clearly described as being obsolete and watermark as such. The motion was seconded and then approved with a unanimous show of hands.

The consensus of the working group was that the TSC should decide if the price should be changed.

8.8 CPWG standard marketing efforts

8.8.1 Consultant Boilerplate document

See CPWG_Blrplate_Fr_Spcifrs_r4.pdf

Mike Lay reported on the genesis of this boiler plate document. The idea was that it would be offered to the public as a text file for people to paste into their project specifications.

Eddie Kramer moved that the boiler plate document be put on the website for free download by the public. The motion was seconded and then approved with a show hands.

8.8.2 Discussion of standards marketing efforts for 2010

There was an open discussion of what we can do to promote standards. What follows are some jotted notes. No motions were offered and no votes were taken.

LDI 2010?

Scott Blair said that his task group members are thinking of new sessions. We've been kind of repetitive. Perhaps we can do a session that is a demonstration of gear in action--essentially put the Connectivity Pavilion into a presentation. We could have multiple sessions in one room with one setup. Perhaps we could do "12 cool things you can do with ACN, RDM, etc."

Roger Lattin said his people liked the networking sessions that built on each other, but they had a problem with attending all of them. Could they be on more days or be repeated?

Scott Blair asked to be able to see the session feedback forms.

It was suggested that we could do sessions on the show floor at the Connectivity Pavilion.

Ulrich Kunkel suggested we have a session or sessions in which we present projects showing the protocols in use.

The concern was expressed that a lot of decision makers don't go to the sessions and only do the show floor. We need to have things on the show floor, but we also need more light there. The ambient lighting at LDI 2009 in Orlando was quite dim.

Dan Antonuk argued that a session is better so you can get people engaged, but perhaps we should set it up like a high school science fair with self-explanatory, table-top exhibits.

Dan Antonuk suggested we could set up a haunted house of networking protocols

Paul McMaster said we should have a short brochure on the protocols we do, what they do for the users, and where to get more information.

Jody Williquette suggested we have automated mini-topic kiosks at the trade show. These don't have to be manned, and can be implemented with little digital recorders.

Kimberly Corbett suggested that offering people simple line diagrams of systems would be good.

Jody Williquette offered as many Harting Ethernet switches as we might need for whatever we want to do at LDI to promote our Ethernet-based protocols.

Alan Martello suggested business card handouts to promote the sessions.

Peter Willis reminded us to consider our intended markets.

Mike Lay said he'd put together a one-page document drawing from the above.

People were reminded that we need Protocol articles. Kimberly Corbett said that she can help get articles into TD&T, too.

8.8.3 Report on January Control Protocols Plug Fest

Scott Blair said that the Plug Fest was going well, and that he was particularly pleased with the amount of time Jules Lauve (theatre consultant and new ESTA Board member) spent visiting the suite and looking at the equipment. He also treated the Plug Fest participants to dinner at Diego's Tex-Mex Kitchen.

Mike Lay urged Scott Blair to write something about the Plug Fest for publication.

Should we repeat the Plug Fest in July? The consensus was Yes.

9 New business

9.1 CPWG Reflector (cpwg@esta.org) Update

Mike Lay said that he'd updated the working group's email reflector and it works. He urged people to use it.

9.2 DMX & RDM over USB

Paul McMaster wrote:

If it's not too late, please can you add an item to the agenda for the next meeting, to discuss a standard for DMX/RDM over USB? We're standardising DMX/RDM over Ethernet, so why not USB as well? I'm not sure whether we want to standardise or not, but I'd like to discuss it. There are an expanding number of USB to DMX/RDM interfaces appearing on the market, but all with different USB protocols.

The proposal was discussed. It was noted that many of the business models require a dongle that doesn't work with other software; the dongle is the key that you have to buy to do something useful with the software that is distributed for free. Also, the USB drivers are so specific to the hardware that standardizing the USB interface would force the use of particular hardware. Bob Goddard felt that the tie to the hardware will doom the project; about the time we have standard written for the hardware, the hardware will have changed.

The consensus was that there is not enough interest in this working group to pursue a project to standardize DMX/RDM over USB.

10 Other business

10.1 Open ACN

Update from Dan Antonuk: SDT and DMP support are now available, as are open SLP code and open E1.31. The community-supported software in support of ACN is making good progress.

10.2 Visitors at meetings

Don't tell visitors to leave, said Michael Lay. Our meetings are open to all who are affected by the work of the group. However, Mitch Hefter noted that visitors may not speak without permission from the chairman/chairwoman. They can watch, but they aren't free to get involved or to disrupt.

10.3 Connectivity Pavilion at LDI 2009

Peter Willis thanked the companies that participated, and read aloud a list of those that had. He thanked Mitch Hefter, Mike Lay, Kimberly Corbett, and Ted Paget for inviting consultants to visit the booth.

11 Schedule for future meetings

Mike Lay announced that the next working group meeting is scheduled for Thursday, 1 April 2010, from 9:00 a.m. to 11:00 a.m. during the USITT Conference. The meeting will be held at the Marriott Kansas City Downtown located at 200 West 12th Street Kansas City, Missouri 64105.

12 Adjournment

Bob Goddard moved that the meeting adjourn. The motion was seconded and then approved with a show of hands. Mike Lay declared the meeting adjourned at 15:53.

Working Group Membership and Contact Information as of 12 February 2010

Name	Company	Representing (Primary sort field.)	Voting status	Int. cat.
Jean-Francois Canuel	Spectrum Manufacturing Inc.	A.C. Lighting Ltd.	P	CP
Tim Bachman	A.C.T Lighting, Inc.	A.C.T Lighting, Inc.	O	DR
Larry Busch	ADB Lighting Technologies	ADB Lighting Technologies	O	MP
John Sellers	AIM Northwest	AIM Northwest	O	G
André Broucke	André Broucke	André Broucke	O	G
Jon Lenard	Applied Electronics	Applied Electronics	O	MP
Arnold Tang	Arnold Tang Productions	Arnold Tang Productions	O	U
Wayne David Howell	Artistic Licence (UK) Ltd.	Artistic Licence (UK) Ltd.	O	CP
Simon Hobday	Artistic Licence (UK) Ltd.	Artistic Licence (UK) Ltd.	O	CP
Steve Friedlander	Auerbach Pollock Friedlander	Auerbach Pollock Friedlander	O	U
J. B. Toby	Avolites Ltd.	Avolites Ltd.	O	MP
Shahid Anwar	Avolites Ltd.	Avolites Ltd.	O	MP
Richard Salzedo	Avolites Ltd.	Avolites Ltd.	O	MP
Barbara Wohlsen	Barbara Wohlsen	Barbara Wohlsen	O	U
Tobin Neis	Barbizon Companies	Barbizon Companies	O	DR
Scott M. Blair	High End Systems Inc.	Barco	P	MP
Tom Grimes	High End Systems, Inc.	Barco	A	MP
Jiantong Wu	Beijing Special Engineering Design & Research Institute	Beijing Special Engineering Design & Research Institute	O	G
Bernardo Benito Rico	Ben-Ri Electronica S.A.	Ben-Ri Electronica S.A.	O	MP
Lee J. Bloch	Bloch Design Group, Inc.	Bloch Design Group, Inc.	O	G
Soo-Myong Chung	Bloch Design Group, Inc.	Bloch Design Group, Inc.	O	G
Bill Ellis	Candela Controls, Inc.	Candela Controls, Inc.	O	U
Will Wagner	Carallon Ltd.	Carallon Ltd.	O	MP

Name	Company	Representing (Primary sort field.)	Voting status	Int. cat.
Steve Roberts	Carr & Angier	Carr & Angier	O	G
Bob Toms	Catalyst Microsystems LLC	Catalyst Microsystems LLC	O	G
Chuck Seifried	Phoenix Civic Plaza	City of Phoenix	O	U
Paul Kleissler	City Theatrical, Inc.	City Theatrical, Inc.	P	MP
Larry Dunn	City Theatrical, Inc.	City Theatrical, Inc.	A	MP
Fabiano Pina	Clay Paky S.P.A.	Clay Paky S.P.A.	O	MP
Yehuda Shukram	Compulite Systems	Compulite Systems	O	MP
Dietmar Rottinghaus	Connex GmbH	Connex GmbH	O	G
Paul Kenneth McEwan	Zero 88	Cooper Controls Ltd.	O	MP
Edward A. (Ted) Paget	Vortek Rigging Division	Daktronics Inc.	P	MP
David Bertenshaw	David Bertenshaw	David Bertenshaw	O	G
Larry Schoeneman	Designlab Chicago, Inc.	Designlab Chicago, Inc.	O	DR
Ulrich Kunkel	E3 Engineering & Education for Entertainment GmbH	DIN, NVBF Committee	P	U
Doug Fleenor	Doug Fleenor Design, Inc.	Doug Fleenor Design, Inc.	P	MP
Milton Davis	Doug Fleenor Design, Inc.	Doug Fleenor Design, Inc.	A	MP
Gary Dove	Dove Systems	Dove Systems	O	MP
Jerry Durand	Durand Interstellar, Inc.	Durand Interstellar, Inc.	O	CP
Jussi Kallioinen	Eastway Sound & Lighting	Eastway Sound & Lighting	O	U
Edward R. Condit	Edward R. Condit	Edward R. Condit	O	G
Ed Jones	Edwin Jones Co., Inc.	Edwin Jones Co., Inc.	O	CP
Joost van Eenbergen	ELC Lighting	ELC Lighting	O	MP
Daniel W. Antonuk	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	P	MP
Adam Bennette	Electronic Theatre Controls Ltd.	Electronic Theatre Controls, Inc.	O	MP
Hans Leiter	ETC GmbH	Electronic Theatre Controls, Inc.	O	MP
Steve Terry	Electronic Theatre Controls	Electronic Theatre Controls, Inc.	A	MP

Name	Company	Representing (Primary sort field.)	Voting status	Int. cat.
Tracy Underhill	Electronics Diversified LLC	Electronics Diversified LLC	P	MP
Ralph Weber	ENDL Texas	ENDL Texas	O	G
Philip Nye	Engineering Arts	Engineering Arts	P	G
Eric Johnson	Eric Johnson	Eric Johnson	O	MP
Eric Proce	Eric Proce	Eric Proce	O	U
Erwin Rol	Erwin Rol Software Engineering	Erwin Rol	O	G
Robert Goddard	Goddard Design Co.	Goddard Design Co.	P	MP
Sierk Janszen	Kiss Box	Ground Zero	O	U
Jody Williquette	Harting Inc., North America	Harting KGAA	P	G
Ed Garstkiewicz	Harting Inc., North America	Harting KGAA	A	G
Trevor Forrest	Helvar Lighting Control	Helvar Lighting Control	O	MP
Bill Hewlett	Hewlett Electronics	Hewlett Electronics	O	CP
Steve Carlson	High Speed Design, Inc.	High Speed Design, Inc.	O	MP
Kirk D. Keen	Hollywood Lighting Services, Inc.	Hollywood Lighting, Inc.	O	DR
Alan Martello	Horizon Control Inc.	Horizon Control Inc.	P	MP
Robert Bell	Horizon Control Inc.	Horizon Control Inc.	A	MP
Gary Douglas	Horizon Control Inc.	Horizon Control Inc.	A	MP
Peter Willis	Howard Eaton Lighting Ltd.	Howard Eaton Lighting Ltd.	P	CP
Paul J. Clark	HxDx	HxDx	O	CP
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	P	U
John Huntington	City Tech, Ent Tech Department	I.A.T.S.E. Local 1	A	U
Roger Lattin	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	P	U
Dennis Grow	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	A	U
Alan M. Rowe	IATSE Local 728	I.A.T.S.E. Local 728	A	U
Geoffrey O. Thompson	Nortel Networks, Inc.	IEEE 802.3/Nortel Networks	O	G

Name	Company	Representing (Primary sort field.)	Voting status	Int. cat.
John (Javid) D. Butler	Integrated Theatre, Inc.	Integrated Theatre, Inc.	O	CP
Michael (Mike) Whetstone	Integrated Theatre, Inc.	Integrated Theatre, Inc.	O	CP
Rob Johnston	Interactive Technologies, Inc.	Interactive Technologies, Inc.	O	MP
Hamish Dumbreck	JESE Ltd.	James Embedded Systems Engineering	O	MP
David Timmins	Jands Electronics	Jands Electronics	O	MP
Helge Hoffmann	JB Lighting	JB Lighting	O	MP
Josh Gubler	Josh Gubler	Josh Gubler	O	CP
John Mehlretter	Lehigh Electric Products Co.	Lehigh Electric Products Co.	O	MP
Mark T. Kraft	Lehigh Electric Products Co.	Lehigh Electric Products Co.	O	MP
Ken Vannice	Leviton Manufacturing	Leviton Manufacturing Co., Inc.	P	MP
Rick Leinen	Leviton Manufacturing Co., Inc.	Leviton Manufacturing Co., Inc.	O	MP
Lars Wernlund	Lewlight	Lewlight	O	MP
Tyrone Mellon Jr.	Lex Products Corp.	Lex Products Corp.	P	CP
Klaus Amling	Licht-Technik	Licht-Technik	O	MP
David Yellin	LightMinded Industries, Inc.	LightMinded Industries, Inc.	P	MP
Andrew Sherar	Lightmoves PLC	Lightmoves PLC	O	MP
Avraham Mendall Mor "Avi"	Lightswitch	Lightswitch	O	U
Simon Alpert	Lighttech Event Technologies	Lighttech Event Technologies	O	CP
Gary Pritchard	LSC Lighting Systems (Aust) PTY Ltd	LSC Lighting Systems PTY Ltd	O	MP
Michael Karlsson	LumenRadio AB	LumenRadio AB	P	MP
Marcus Bengtsson	LumenRadio AB	LumenRadio AB	A	MP
Bart Swinnen	Luminex LCE	Luminex LCE	O	MP
Jim Holladay	Luxence	Luxence	O	G
Torben Kaas Rasmussen	Martin Professional A/S	Martin Professional A/S	O	G
Hiroshi Kita	Marumo Electric Co., Ltd.	Marumo Electric Co., Ltd.	O	MP

Name	Company	Representing (Primary sort field.)	Voting status	Int. cat.
Stuart Cotts	Oregon Shakespeare Festival	Oregon Shakespeare Festival	P	U
David A. Boller	Organic Machines LLC	Organic Machines LLC	O	CP
William Benner	Pangolin Laser Systems	Pangolin Laser Systems	O	MP
Kevin Loewen	Pathway Connectivity Inc.	Pathway Connectivity Inc.	P	MP
Dave Higgins	Pathway Connectivity Inc.	Pathway Connectivity Inc.	A	MP
Robert Armstrong	Pathway Connectivity Inc.	Pathway Connectivity Inc.	A	MP
Ron Bonner	PLASA	PLASA	P	G
James Eade	PLASA	PLASA	O	G
Charles Reese	Production Resource Group	Production Resource Group	P	DR
Robert Tooker	Production Resource Group	Production Resource Group	A	DR
Paul F. Mardon	Pulsar Ltd.	Pulsar Ltd.	O	MP
Steve Unwin	Pulsar Ltd.	Pulsar Ltd.	O	MP
Stephen J. Tyrrell	Quantum Logic	Quantum Logic	O	MP
Douglas Franz	QVC Network	QVC Network	O	U
Andrew Eales	Wellington Institute of Technology	Rhodes University	O	U
Osedum P. Igumbor	Dept. of Computer Science	Rhodes University	O	U
Nyasha Chigwamba	Dept. of Computer Science	Rhodes University	O	U
Charlie Richmond	Richmond Sound Design Ltd.	Richmond Sound Design Ltd.	O	CP
Martin Farnik	Robe Show Lighting s.r.o.	Robe Show Lighting s.r.o.	O	MP
Michael Lay	Philips Strand Lighting	Royal Philips Electronics	P	MP
Mike Blackwell	Philips/Color Kinetics	Royal Philips Electronics	O	MP
John Warwick	Philips/Color Kinetics	Royal Philips Electronics	O	MP
Hans Lau	Sand Network Systems, Inc.	Sand Network Systems, Inc.	P	MP
Yngve Sandboe	Sand Network Systems, Inc.	Sand Network Systems, Inc.	A	MP
Kimberly Corbett	Schuler Shook	Schuler Shook	P	G

Name	Company	Representing (Primary sort field.)	Voting status	Int. cat.
Lars F. Paape	Scientific Algorithms and Embedded Systems	Scientific Algorithms and Embedded Systems	O	U
Mick Martin	ShowCAD Control Systems	ShowCAD Control Systems	O	MP
Loren Wilton	Showman Systems	Showman Systems	O	CP
Mark Manthei	Shure Inc.	Shure Inc.	O	G
Kehang Wu	Shure Inc.	Shure Inc.	O	G
Jon R. Farley	Sixteenth Avenue Systems	Sixteenth Avenue Systems	O	CP
Robert Barbagallo	Solotech Inc.	Solotech Inc.	O	U
Ujjal Kar	Standard Robotics & Lighting	Standard Robotics & Lighting	O	G
Storm K. Staley	Stormwerx	Stormwerx	O	U
Paul K. Ericson	Syska Hennessy Group Lighting Design	Syska Hennessy Group Lighting Design	O	U
Stephen Bickford	T. Kondos Associates	T. Kondos Associates	O	U
Tad Trylski	Tad Trylski	Tad Trylski	O	U
Klas Dalbjorn	Labgruppen AB	TC Group	O	MP
Dominic Vincenty	TPS	Television Production Service	O	DR
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	O	G
Colin Waters	TMB	TMB	O	DR
Phillip M. Gallo	TMB	TMB	O	DR
Sean Harding	Trinity Repertory Company	Trinity Repertory Company	O	U
Mitch Hefter	Entertainment Technology (Royal Philips Electronics)	USITT	P	U
Torrey Bievenour	Vision Quest Lighting	Vision Quest Lighting	O	G
Eric Cornwell	West Side Systems	West Side Systems	O	U
Ben Darrington	Wireless Solutions Sweden AB	Wireless Solutions Sweden AB	O	MP
John Sondericker III	Wybron, Inc.	Wybron, Inc.	O	MP
Larry Zoll	Zoll Design & Consulting, LLC	Zoll Design & Consulting, LLC	O	U

Key to codes:

P principal voting member
A alternate voting member
I individual voting member
O observer, non-voting

MP mass-market producer interest category
CP custom-market producer interest category
DR dealer or rental company interest category
U user interest category
G general-interest interest category