

Minutes
Control Protocols Working Group
Thursday, 14 February 2002
Hyatt Regency New Orleans
New Orleans, LA

Chairs: Steve Terry; Electronic Theatre Controls; alternate; producer
Steve Carlson; High Speed Design, Inc.; principal; producer

Recording secretary: Karl G. Ruling, ESTA

Members attending: Arnold Tang; Arnold Tang Productions; principal; user
Wayne David Howell; Artistic Licence (UK) Ltd.; principal; producer
Tobin Neis; Barbizon Companies; principal; user
Doug Fleenor; Doug Fleenor Design, Inc.; principal; producer
Ed Jones; Edwin Jones Co., Inc.; principal; producer
Daniel W. Antonuk; Electronic Theatre Controls, Inc.; principal; producer
Tracy Underhill; Electronics Diversified Inc.; principal; producer
Philip Nye; Engineering Arts; principal; general interest
Robert Goddard; Goddard Design Co.; principal; producer
Peter Willis; Howard Eaton Lighting Ltd.; principal; producer
Edwin S. Kramer; IATSE, Local 1; principal; user
Roger Lattin; IATSE Local 728; principal; user
Richard Thornton Brown; Zero 88 Ltd. (i Light Group PLC); principal; producer
Tim Bachman; Leviton/Colortran (Leviton Manufacturing Co., Inc.); alternate;
producer
Gary Douglas; Pathway Connectivity Inc.; alternate; producer
Steve Unwin; Pulsar Ltd.; alternate; producer
Scott M. Blair; individual; general interest
David George; Spectrum Manufacturing Inc.; principal; producer
Michael Lay; Strand Lighting (Strand Lighting Ltd.); alternate; producer
Brian Dowd; TMB; principal; user
Mitch Hefter; Entertainment Technology (Genlyte Thomas Group) representing
USITT; principal; user
Charles Reese; Vari-Lite, Inc.; principal; producer

Visitors: Ralph Weber, ENDL Texas

1 Opening remarks

The meeting was called to order by Steve Carlson at 09:04. He welcomed all to CPWG meeting. He introduced himself, and then his co-chair, Steve Terry.

2 Attendance and membership

2.1 Introductions of those present and taking attendance

Carlson asked those present to introduce themselves. Karl Ruling explained the attendance form and asked those present to sign in.

2.2 Determination of quorum

Steve Terry asked for the principals present to raise their hands. He determined from the number of hands raised that a quorum was present.

2.3 Recognition of alternate voting members

Terry determined that there are no companies with alternates voting in place of principals who were also present.

2.4 Requirements for membership

Terry stated that the membership is open to all who are effected by the work of the group. However, voting members must attend meetings and must vote on letter ballots. Failure to fulfill these obligations will result in a change of voting status to observer.

2.5 Processing of new membership requests

Steve Terry stated that the following applications had been received:

- Helge Hoffmann; JB Lighting; observer; producer
- Gian Carlo C. Bortolotti; Ibeam SP/Banco de Eventos; observer; user
- Steven Bickford, T. Kondos Associates, observer, user
- Bob Toms; Design Advantage LLC; observer; general interest
- Michael Gonzales; Wrightson, Johnson, Haddon & Williams, Inc.; individual; user

Steve Carlson noted that none of the applicants were present. He suggested that they all be voted in as observers. He asked for a show of hands in support of allowing these applicants to be accepted as observer members. The approval was unanimous.

The complete consensus body during the meeting, including those absent, was:

Name	Company	Representing	Voting status	Int. cat.
John Sellers	AIM Northwest	AIM Northwest	P	G
Tony de Rijk	Amazing Controls! Inc.	Amazing Controls! Inc.	P	P
Arnold Tang	Arnold Tang Productions	Arnold Tang Productions	P	U
Wayne David Howell	Artistic Licence (UK) Ltd.	Artistic Licence (UK) Ltd.	P	P
Tobin Neis	Barbizon Companies	Barbizon Companies	P	U
Doug Fleenor	Doug Fleenor Design, Inc.	Doug Fleenor Design, Inc.	P	P
Milton Davis	Doug Fleenor Design, Inc.	Doug Fleenor Design, Inc.	A	P
Ed Jones	Edwin Jones Co., Inc.	Edwin Jones Co., Inc.	P	P
Daniel W. Antonuk	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	P	P
Steve Terry	Electronic Theatre Controls	Electronic Theatre Controls, Inc.	A	P
Tracy Underhill	Electronics Diversified Inc.	Electronics Diversified Inc.	P	P
Scott Rempel	Electronics Diversified Inc.	Electronics Diversified Inc.	A	P
Philip Nye	Engineering Arts	Engineering Arts	P	G
Jon R. Farley	Entertainment Technology	Genlyte Thomas Group LLC	P	P
Robert Goddard	Goddard Design Co.	Goddard Design Co.	P	P
Steve Carlson	High Speed Design, Inc.	High Speed Design, Inc.	P	P
Peter Willis	Howard Eaton Lighting Ltd.	Howard Eaton Lighting Ltd.	P	P
Richard Thornton Brown	Zero 88 Ltd.	i Light Group PLC	P	P
Peter Brooks	Zero 88 Ltd.	i Light Group PLC	A	P
Edwin S. Kramer	IATSE, Local 1	I.A.T.S.E. Local 1	P	U
John Huntington	IATSE Local 1	I.A.T.S.E. Local 1	A	U
Roger Lattin	IATSE Local 728	I.A.T.S.E. Local 728	P	U
Edward Paget	Jones & Phillips Associates, Inc.	Jones & Phillips Associates, Inc.	P	G
Rick Leinen	NSI Corporation	Leviton Manufacturing Co., Inc.	P	P
Ken Vannice	NSI Corporation	Leviton Manufacturing Co., Inc.	A	P
Tim Bachman	Leviton/Colortran	Leviton Manufacturing Co., Inc.	A	P
Ole Pedersen	Martin Professional A/S	Martin Professional A/S	P	P
Martin Hjort	Martin Professional A/S	Martin Professional A/S	A	P
Dave Higgins	Pathway Connectivity Inc.	Pathway Connectivity Inc.	P	P
Gary Douglas	Pathway Connectivity Inc.	Pathway Connectivity Inc.	A	P
Tim Cox	PLASA	PLASA	P	G
Tony Douglas-Beveridge	PLASA	PLASA	A	G
Robert Barbagallo	Proximo Inc.	Proximo Inc.	P	U
Paul F. Mardon	Pulsar Ltd.	Pulsar Ltd.	P	P
Steve Unwin	Pulsar Ltd.	Pulsar Ltd.	A	P
Scott M. Blair	Scott M. Blair	Scott M. Blair	I	G
George Kindler	SPL Integrated Solutions	Signal Perfection Ltd.	P	U
David George	Spectrum Manufacturing Inc.	Spectrum Manufacturing Inc.	P	P
Richard Lawrence	Strand Lighting Ltd.	Strand Lighting Ltd.	P	P
Michael Lay	Strand Lighting	Strand Lighting Ltd.	A	P
Brian Dowd	TMB Associates (NJ)	TMB Associates	P	U
Mitch Hefter	Entertainment Tech. (Genlyte Thomas)	USITT	P	U
Charles Reese	Vari-Lite, Inc.	Vari-Lite, Inc.	P	P
Alfred Langguth	Vari-Lite, Inc.	Vari-Lite, Inc.	A	P
Eckart Steffens	SOUNDLIGHT	VPLT	P	G
			32	18P, 8U, 6G

3 **Approval of the minutes from the previous meeting**

Peter Willis asked that changes be made to the minutes of the 11/2001 meeting so that 7.1.1.3 reads as follows:

7.1.1.3 **Comments 154 -169, 177 (not all inclusive): Cable Schemes.**

Mitch Hefter reported that there is a desire by some to allow C1 in the wall for new installations, as well as to restore the Cat 5 versions dropped that had been in previous versions of BSR E1.11.

There was also a request to allow the functionality of pin 1, 2, and 3 only wiring to five-pin XLR's in situations where C2 cables are installed. This was discussed.

Ted Paget moved that this issue be resolved by not allowing the use of single-pair connectors or cable for permanently installed wiring. The motion was seconded. By show of hands there were 13 in favor, four opposed, and three abstentions. The motion carried. Some voters originally present had left the room, reducing the voting body. From this point on, several members walked in and out of the room, but a quorum was always present.

Roger Lattin moved that the changed text be accepted. The motion was seconded. By a show of hands: 15 in favor, 3 opposed, and 4 abstentions. The motion was accepted.

Peter Willis moved that the minutes as amended be approved. The motion was seconded. The motion was accepted unanimously by a show of hands.

4 **The call for patents**

The following was read aloud by Steve Carlson:

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

"In keeping with the open disclosure policy, I ask if anyone present wishes to notify the working group of the existence of a patent or copyright that might protect material in a standard being developed by the working group. You need not be the holder of the patent or copyright in order to notify the working group of its existence."

No issues were brought to the attention of the working group.

5 **The anti-trust statement**

The following was read aloud by Steve Carlson:

"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 \$100,000 and imprisoned for up to three years. An easy to read pamphlet describing restraint of trade issues is available from the Technical Standards Manager."

Peter Willis stated that he believes that we may have inadvertently headed down this path by some actions taken by the E1.11 task group. He read from his notes the following:

"The minutes of the March 2000 meeting recorded a discussion relating to the use of pins 4 and 5 for power. It was argued that manufacturers that had used pins 4 and 5 for data would have reason to make an anti-trust complaint if the standard were changed to support the use of pins 4 and 5 for supply of power. It was stated at this meeting that this would be a legal problem, and this contributed to the DMX task group abandoning proposals to include auxiliary power as part of the revised standard.

"It could be argued that manufacturers that choose not to implement pins 4 and 5 would have reason to complain if the revised standard requires them to now do so, since the original document stated that the use of the second pair was optional.

"It could also be argued that the current text that requires all five pins of the XLR to be wired disadvantages manufacturers of product whose wall plates wire only pins 1-2-3 of a five-pin XLR, and that this is a comparable disadvantage to those affected by the power/pin 4-5 issue.

"It could also be argued that the current text that prohibits the use of the term DMX or DMX512 on the marking of wall plates that wire only pins 1-2-3 unfairly disadvantages manufacturers of such a product, since such products are still presumably compliant with the original standard.

"It could also be argued that by mandating the need to wire all five pins, the standard could be interpreted as favoring manufacturers of product using what is optional functionality (now known as enhanced functionality) to the exclusion of manufacturers of product that does not provide these optional facilities.

"It could be argued that manufacturers of passive DMX data distribution product are being unfairly disadvantaged relative to those manufacturing active data distribution product, for whom there is no mandatory requirement to provide functionality on pins 4-5."

The chairs stated that this concern would be referred to legal counsel and that the meeting should be adjourned for that purpose. Michael Lay moved that the meeting adjourn until 2:00 p.m. to allow time to consult with legal counsel. The motion was seconded. There was discussion. By a show of hands, 18 voted in favor, 2 voted against, and 3 abstained. The motion passed, and Steve Carlson called a recess until 2:00 p.m.

Steve Terry reconvened the meeting at 14:01. Terry asked for a show of hands to determine if there was still a quorum. He determined that there was, although fewer people were present in the room than at the beginning of the meeting in the morning.

Terry thanked Peter Willis for bringing these anti-trust issues to the attention of the working group. He said that ESTA legal counsel will address Peter Willis's concerns.

6 Approval of agenda

Terry asked to move the letter from Bob Goddard which would be in new business to the beginning of the meeting. E1.11 would be handled at the end of the old business. Wayne asked for a new business item of discussing better ways of communicating among and within task groups. Lattin asked for a new business item about an information repository. Terry said that we have a statement of direction from the TSC relevant to RDM and ACN. That should be handled after the RDM and ACN reports.

Tim Bachman moved that the agenda with these modifications be approved. The motion was seconded. The motion was approved unanimously by a show of hands.

7 New business

7.1 Goddard letter

Steve Terry read aloud Bob Goddard's letter to Bill Groener, the Chairman of the Technical Standards Committee. [The text of this letter is Appendix 1 of these minutes.]

In response to the letter, Steve Terry reminded all present that the task group meetings are open. Speaking in the task groups by non-members may be limited, but being able to observe what is going on is always possible. Goddard stated that this may be true, but it is hard to gain an understanding from these visits. He also reported that there is the perception in the market that there is insider information within the ACN task group.

Steve Carlson, in response to the letter, stated that ACN is software. The hardware required to run the software is standard (Ethernet interface, CPU, memory), so any computer with the correct hardware could be labeled "ACN Ready."

Indicating readiness for a future standard is common in the tech industry, noted Carlson. PCs had USB hardware ports before there was any software to support them. Manufacturers and vendors want to assure the customer that the product is upgradeable and future-proof. Carlson said his laptop was advertised as "Windows XP Ready" months before XP was available, and that it could be made to run Windows XP because all that was needed was the installation of new software. Hardware may also be upgraded by the addition of expansion cards or external devices. Many networking companies are advertising "802.3af" (Power over Ethernet) compliant products, even though the standard won't be published for months. Cisco's switches put all of the power supply electronics on daughter cards. Any Cisco switch that uses their proprietary powering scheme will be upgradeable to 802.3af power simply by a card swap, said Carlson.

Carlson added that there is nothing that can be done to stop a company from making such claims of readiness. This sort of thing comes up all the time in the IEEE.

Carlson said that he reads in Goddard's letter the sense that there is some kind of collusion within the task group. He says this is absolutely contrary to what the task group has been trying to do and has done. If anyone has any questions, the task group has always been willing, and continues to be willing, to answer them.

Karl Ruling asked if the task group can make any statement about the computer power that would be necessary to run ACN. Carlson said this was not possible because ACN devices can range from the absurdly simple, such as a device designed to scan a single push button, to the very complex, such as some kind of machine capable of controlling a universe of devices. The horsepower requirements for the tasks vary widely. Any statement of resource guidelines would be very broad because the tasks that will use ACN will vary widely.

Wayne Howell said that it's not good for ESTA as an organization if people say that a protocol is ready to roll when it hits RFC. Carlson said that this is a misunderstanding. He said that whenever a standard is made available for public review, it should be good enough that it would not be absurd to adopt it as it is; there is no point in offering a partial standard or an unworkable standard to public review.

Doug Fleenor asked what the minimal power would be needed to scan the pushbutton. Carlson said that he's done some very simple tasks on networks with small 8-bit processors. It can be done, with very clever and careful programming, but the ability of people to do clever and careful programming varies. Carlson says he cannot predict whether any one person has these skills.

Phillip Nye noted that the information from which one can determine what resources will be necessary is posted publicly on the ESTA website. It's the developer's tutorial.

Dan Antonuk said that the ACN task group is always considering how features of the protocol will have an impact on lightweight devices.

Goddard suggested that the request for comment tool might be used to solicit input from the wider user community. Carlson said that the RFC tool has been used to get comments from people in the protocol community for help in making the protocol slimmer.

Bob Goddard asked that ESTA provide proper perspective in the world on as to what ACN-ready means. He applauded the article that Karl Ruling said he had been charged to write by the TSC, which will explain what ACN-ready or RDM-ready means by addressing the common practice of marketing features that do not yet exist.

Peter Willis said that DMX has been easy to understand by those outside of the task group, but that ACN seems to have a churn of documents, which makes outsiders feel that they do not have a sense of where the project is going. Carlson stated that the complexity of the project has resulted in radical changes to the direction of the project, and hence, the perceived churn of documents.

Ruling asked if some documents exist that would represent proof that there is work being done. Carlson said he does not have documents ready for release at this time, but that they would be available when the documents are ready for this working group.

Phillip Nye agreed to send the ACN report he writes for PLASA as its representative on the ACN task group to Karl Ruling so that he can distribute it to those with questions as to what components of ACN are stable and what are not.

7.2 Other ways of communicating within the task group

Wayne Howell suggested that we have an on-line discussion forum for task groups. His company, Artistic Licence, can provide this service. The server is owned by a third party, but Artistic Licence supplies the software and would control the forum.

Carlson suggested that this is a very generous offer and that any task groups who think this might be of benefit should take up this matter.

No vote was taken on the matter as none was felt to be required.

7.3 Clearinghouse of problem reports

Roger Lattin asked if there is or could be a repository of information, a database, on what DMX products have problems. He suggested that this would be a good service for ESTA to provide.

Carlson stated that this is not something that ESTA could offer without significant liability. Karl Ruling concurred, as did guest Ralph Weber.

8 Old business

8.1 E1.11

8.1.1 Public review comment resolution

Mitch Hefter moved that we accept the BSR E1.11 Public Review #1 Comment Resolution document (CP/2001-1008r1) and associated text in the draft standards, document CP/1998-1031r4, except those resolutions and text that deal with comments 229 and 230, resolutions that touch on the anti-trust concerns raised by Peter Willis at the beginning of the meeting. The motion was seconded.

Willis stated that he also objected to the resolutions to comments 151, 152, 153, 158, 162, 163, 169, 177, and 178, as well as 229 and 230.

Bob Goddard pointed out that the resolutions to comments 262, 263, and 264 might affect the work of the RDM task group. He urged that these clauses be looked at again and before another public review takes place.

Hefter modified his motion to include 262, 263, and 264. The seconder of the motion agreed to this amendment. The question was decided by a roll call ballot.

Question: Shall BSR E1.11 Public Review #1 Comment Resolution document (CP/2001-1008r1) and associated text in CP/1998-1031r4, except those resolutions and text that deal with comments 229, 230, 262, 263, and 264, be accepted?

Name	Company	Representing	Voting status	Int. cat.	Accept	Accept in principle	Accept in part	Reject	Abstain
John Sellers	AIM Northwest	AIM Northwest	P	G					
Tony de Rijk	Amazing Controls! Inc.	Amazing Controls! Inc.	P	P					
Arnold Tang	Arnold Tang Productions	Arnold Tang Productions	P	U	X				
Wayne David Howell	Artistic Licence (UK) Ltd.	Artistic Licence (UK) Ltd.	P	P				X	
Tobin Neis	Barbizon Companies	Barbizon Companies	P	U	X				
Doug Fleenor	Doug Fleenor Design	Doug Fleenor Design	P	P				X	
Milton Davis	Doug Fleenor Design	Doug Fleenor Design	A	P					
Ed Jones	Edwin Jones Co., Inc.	Edwin Jones Co., Inc.	P	P					
Daniel W. Antonuk	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	P	P	X				
Steve Terry	Electronic Theatre Controls	Electronic Theatre Controls, Inc.	A	P					
Tracy Underhill	Electronics Diversified Inc.	Electronics Diversified Inc.	P	P	X				
Scott Rempel	Electronics Diversified Inc.	Electronics Diversified Inc.	A	P					
Phillip Nye	Engineering Arts	Engineering Arts	P	G				X	
Jon R. Farley	Entertainment Technology	Genlyte Thomas Group LLC	P	P					
Robert Goddard	Goddard Design Co.	Goddard Design Co.	P	P	X				
Steve Carlson	High Speed Design, Inc.	High Speed Design, Inc.	P	P				X	
Peter Willis	Howard Eaton Lighting Ltd.	Howard Eaton Lighting Ltd.	P	P				X	
Richard Thornton Brown	Zero 88 Ltd.	i Light Group PLC	P	P				X	
Peter Brooks	Zero 88 Ltd.	i Light Group PLC	A	P					
Edwin S. Kramer	IATSE, Local 1	I.A.T.S.E. Local 1	P	U					
John Huntington	IATSE Local 1	I.A.T.S.E. Local 1	A	U					
Roger Lattin	IATSE Local 728	I.A.T.S.E. Local 728	P	U				X	
Edward Paget	Jones & Phillips Associates, Inc.	Jones & Phillips Associates, Inc.	P	G					
Rick Leinen	NSI Corporation	Leviton Manufacturing Co., Inc.	P	P					
Ken Vannice	NSI Corporation	Leviton Manufacturing Co., Inc.	A	P					
Tim Bachman	Leviton/Colortran	Leviton Manufacturing Co., Inc.	A	P	X				
Ole Pedersen	Martin Professional A/S	Martin Professional A/S	P	P					
Martin Hjort	Martin Professional A/S	Martin Professional A/S	A	P					
Dave Higgins	Pathway Connectivity Inc.	Pathway Connectivity Inc.	P	P					
Gary Douglas	Pathway Connectivity Inc.	Pathway Connectivity Inc.	A	P	X				
Tim Cox	PLASA	PLASA	P	G					
Tony Douglas-Beveridge	PLASA	PLASA	A	G					
Robert Barbagallo	Proximo Inc.	Proximo Inc.	P	U					
Paul F. Mardon	Pulsar Ltd.	Pulsar Ltd.	P	P					
Steve Unwin	Pulsar Ltd.	Pulsar Ltd.	A	P				X	
Scott M. Blair	Scott M. Blair	Scott M. Blair	I	G	X				
George Kindler	SPL Integrated Solutions	Signal Perfection Ltd.	P	U					
David George	Spectrum Manufacturing Inc.	Spectrum Manufacturing Inc.	P	P					
Richard Lawrence	Strand Lighting Ltd.	Strand Lighting Ltd.	P	P					
Michael Lay	Strand Lighting	Strand Lighting Ltd.	A	P				X	
Brian Dowd	TMB Associates (NJ)	TMB Associates	P	U				X	
Mitch Hefter	Entertainment Technology (Genlyte Thomas Group)	USITT	P	U	X				
Charles Reese	Vari-Lite, Inc.	Vari-Lite, Inc.	P	P				X	
Alfred Langguth	Vari-Lite, Inc.	Vari-Lite, Inc.	A	P					
Eckart Steffens	SOUNDLIGHT	VPLT	P	G					
			32	18 P 8 U 6 G	9			11	

The motion was rejected.

Wayne Howell stated for the minutes that he voted against the motion because he wanted to leave the document open to make sure it doesn't interfere with RDM, and since the document cannot move forward because we are waiting for the advice of legal counsel in regard to Peter Willis's anti-trust concerns, that no time would be lost in the delay.

8.1.2 Recommended practice document for E1.11

The project is on hold, reported Wayne Howell. Peter Willis reported that there has been discussion about how one might represent the RDM capabilities of products.

8.1.3 Accessory power

Doug Fleenor reported that several manufacturers are interested in working on a standard for accessory power. Fleenor was directed by the chairs to draft with his interested parties a document that states a scope and objectives. He was directed to make sure that his interested parties are in agreement.

8.2 E1.20 Remote Device Management with DMX512

Scott Blair reported on a task group meeting after LDI. The group went through the technical details and there was a very high degree of consensus. A draft document giving the technical details has been prepared and a reference platform has been identified. Scott said that he hopes to have a draft ready for an RFC by the next meeting. They will then start working on writing example software.

8.3 E1.17 Task Group report

Carlson reported that the ACN TG is working on simplifying the Device Management Protocol and is examining the use of SLP (Service Locator Protocol) to provide the discover and service identification function in ACN. SLP is an IETF standards-track protocol and it would be very helpful if this could be used for ACN. The task group had a conference call to discuss investigations on multicasting vs. unicasting done after the November meetings. The group feels that the conference call is a viable way to move forwards between meetings and is considering using NetMeeting for future conferences. He forecasted substantial progress this year, and documents in people's hands by LDI and sample code shortly thereafter.

Dan Antonuk said that the task group is developing what project managers call a "work breakdown structure." He also expressed concern that the bad economy may have the effect of limiting the effort that can be applied to this project .

Terry reported the TSC directive to the CPWG in regard to RDM and ACN. The CPWG is to work to make RDM function as a gateway between ACN and DMX devices. Thus, there has to be a coordination between the two protocols. Scott Blair stated that that has been his goal all along.

8.4 IEEE Report

Carlson reported that 700+ comments had been receive on the power over Ethernet document. About 500 of those were editorial. The technical comments from outside the task group were quite helpful. The task group is doing comment resolution and a recirculation ballot on draft 3.1 now. Only the text that has been changed is voted on in a recirculation ballot. If the project stays on track, the standard may be published by IEEE at the end of this year.

Carlson reported that 10 gigabit Ethernet is winding towards completion.

Carlson reported that the "Ethernet in the First Mile" project has divided into optical and copper tracks. He doesn't care about the optical track but has great hopes for the copper track. We might see transmissions of a mile at 20 mbits/sec over regular telephone wire.

Carlson reported that Geoff Thompson is retiring as chair of 802.3 and is moving up to 802. Carlson has been asked to chair 802.3, and he's thinking about it.

9 Other business

9.1 Philip Nye reported that the AES control working group has been dissolved and its task adopted by the networking working group. Nye was vice chair of the control group and an officer in the ESTA/AES liaison group. The ESTA/AES project is still technically active. The control projects now within the networking working group are moribund.

9.2 Carlson reported that there is no such thing as Cat 5 cable anymore. The minimum is now 5E. He said that this will have no effect on anyone's work in the entertainment industry because higher categories are fine for our work. Carlson reported that the electrostatic discharge problem with high-dielectric cable has been largely unresolved. Who should resolve it – hardware guys, semiconductor guys, or wire guys – has not been resolved. People should simply be careful to short and ground cables that have been left extended and unterminated. Electrostatic charges may build up and in some situations may do damage if the cable is connected directly to equipment.

10 Schedule for future meetings

Karl Ruling announced that the next meeting will be at the Marriott South in Ft. Worth Texas, Saturday, 4 May 2002, from 09:00 to 18:00. The following meeting also will be at the Marriott South in Ft. Worth Texas, but on Saturday, 27 July 2002, from 09:00 to 18:00. He cautioned people that this hotel is not the one we have used in the past, and that attendees should make sure that the board the correct shuttle.

11 Adjournment

Roger Lattin moved that the meeting adjourn. The motion was seconded. The motion was approved unanimously on a voice vote. Carlson declared the meeting adjourned at 16:20.

Date: February 4, 2002
To: Bill Groener
ESTA Technical Standards Committee
c/o Fourth Phase New Jersey
bgroener@fourthphase.com

From: Bob Goddard/ Goddard Design Company
718 599 0170
goddard@goddarddesign.com

RE: ACN "ready" claims

Dear Bill,

We are one of the firms marketing products that transmit DMX512 data via TCP/IP In the new Lighting Dimensions Industry Resources Guide, Pathway Connectivity and Strand Lighting have chosen to advertise their TCP/IP DMX nodes as "ACN Ready." They are not the only manufacturers to make such claims.

We are not comfortable advertising any of our products as "ACN Ready." We are perfectly willing to grant that our definition of "ACN Ready" may be different from some of our fellow manufacturers. In some cases maybe we should look at these claims as the standard advertizing exaggeration describing any product with an unwired RJ45 as "ACN ready." While we are not a member of the task group drafting the new standard, as members of the CPWG we are in a position to know that the standard ain't exactly finished yet. So it is a little hard to know what will be required to support it. We have found that there is considerable confusion about what ACN ready means. Potential customers at our booth at LDI2001 were under the impression that "ACN Ready" means plug and play; when the standard is implemented, the equipment they purchase now will simply "work"

It is possible that individuals drafting the standard know for certain that the equipment they are designing contains sufficient computer power and memory to handle the new standard. They may have a very accurate estimate of the time and NRE needed to develop the software to support this protocol.

This information if it exists is only available to people on the task group or people who have close working relationship with people on the task group. Using this information commercially is trading upon insider information.

Those engaged in writing the standard are in a position to manipulate the final form of the standard to suit equipment already sold, while possibly manipulating it to exclude equipment already sold by others. This raises serious anti-trust questions.

Normally the open standards policy of ESTA should lessen this. Any member of the DMX512 task group who relied on an early draft would not have gained much advantage. However there is an attitude held by some members of the task group that the standard as they submit it to the rest of the industry will be accepted as written, without comment or substantive change. I have heard a comment attributed to a member of the task group that when the protocol is sent to first public review, it's ready for manufacturers to design to. My experience as a member of the DMX512 task group leads me to feel that this sentiment is an expression of wishful thinking or extreme arrogance.

So what am I asking you to do? I feel strongly that ESTA must make clear to its members and to the industry as a whole that ACN or whatever standard is eventually derived, is a work in progress. ESTA also needs to monitor the behavior of its members, reminding us all of the potential for ethical conflicts arising from standards writing and implementation.

Sincerely
Bob Goddard

Working Group Membership and Contact Information as of 03/27/2002

Name	Company	Representing	Voting status	Int. cat.
John Sellers	AIM Northwest	AIM Northwest	P	G
Arnold Tang	Arnold Tang Productions	Arnold Tang Productions	P	U
Wayne David Howell	Artistic Licence (UK) Ltd.	Artistic Licence (UK) Ltd.	P	P
Steve Friedlander	Auerbach & Associates, Inc.	Auerbach & Associates, Inc.	O	U
Sierk Janszen	Avenger Showcontrol	Avenger Showcontrol	O	P
J. B. Toby	Avolites Ltd.	Avolites Ltd.	O	P
Shahid Anwar	Avolites Ltd.	Avolites Ltd.	O	P
Richard Salzedo	Avolites Ltd.	Avolites Ltd.	O	P
Barbara Wohlsen	Barbara Wohlsen	Barbara Wohlsen	O	U
Tobin Neis	Barbizon Companies	Barbizon Companies	P	U
Bernardo Benito Rico	Ben-Ri Electronica S.A.	Ben-Ri Electronica S.A.	O	P
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
Bradley Klinkrad	Bradley Klinkrad	Bradley Klinkrad	O	G
Ted Fregon	Bytecraft Pty. Ltd.	Bytecraft Pty. Ltd.	O	P
Bill Ellis	Candela Controls, Inc.	Candela Controls, Inc.	O	U
Marty Lazarus	Chicago Spotlight, Inc.	Chicago Spotlight, Inc.	O	G
Jason Friedman	Creative Realities, Inc.	Creative Realities, Inc.	O	G
David Bertenshaw	David Bertenshaw	David Bertenshaw	O	P
Bob Toms	Design Advantage LLC	Design Advantage LLC	O	G
Doug Fleenor	Doug Fleenor Design, Inc.	Doug Fleenor Design, Inc.	P	P
Milton Davis	Doug Fleenor Design, Inc.	Doug Fleenor Design, Inc.	A	P
Gary Dove	Dove Systems	Dove Systems	O	P
Jussi Kallioinen	Eastway Sound & Lighting	Eastway Sound & Lighting	O	U
Ed Jones	Edwin Jones Co., Inc.	Edwin Jones Co., Inc.	P	P
Bill Fehrmann	Electrol Engineering, Inc.	Electrol Engineering, Inc.	O	P
Daniel W. Antonuk	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	P	P
Adam Bennette	Electronic Theatre Controls Ltd.	Electronic Theatre Controls, Inc.	O	P
Steve Terry	Electronic Theatre Controls	Electronic Theatre Controls, Inc.	A	P
Tracy Underhill	Electronics Diversified Inc.	Electronics Diversified Inc.	P	P
Paul Bennett	Electronics Diversified Inc.	Electronics Diversified Inc.	O	P
Scott Rempel	Electronics Diversified Inc.	Electronics Diversified Inc.	A	P
Philip Nye	Engineering Arts	Engineering Arts	P	G
Robert Goddard	Goddard Design Co.	Goddard Design Co.	P	P
Alan P. Symonds	Harvard College	Harvard University	O	U
Trevor Forrest	Helvar Lighting Control	Helvar Lighting Control	O	P

Name	Company	Representing	Voting status	Int. cat.
Bill Hewlett	Hewlett Electronics	Hewlett Electronics	O	P
Steve Carlson	High Speed Design, Inc.	High Speed Design, Inc.	P	P
Peter Willis	Howard Eaton Lighting Ltd.	Howard Eaton Lighting Ltd.	P	P
Edwin S. Kramer	IATSE, Local 1	I.A.T.S.E. Local 1	P	U
John Huntington	IATSE Local 1	I.A.T.S.E. Local 1	A	U
Roger Lattin	IATSE Local 728	I.A.T.S.E. Local 728	P	U
Richard Thornton Brown	Zero 88 Ltd.	i Light Group PLC	P	P
Peter Brooks	Zero 88 Ltd.	i Light Group PLC	A	P
Gian Carlo C. Bartolotti	Ibeam SP / Banco de Eventos	Ibeam SP / Banco de Eventos	O	U
Geoffrey O. Thompson	Nortel Networks, Inc.	IEEE 802.3/Nortel Networks	O	G
Rob Johnston	Interactive Technologies, Inc.	Interactive Technologies, Inc.	O	P
Larry Schoeneman	Interesting Products, Inc.	Interesting Products, Inc.	O	G
David Timmins	Jands Electronics	Jands Electronics	O	P
Helge Hoffmann	JB Lighting	JB Lighting	O	P
Edward Paget	Jones & Phillips Associates, Inc.	Jones & Phillips Associates, Inc.	P	G
John Mehlretter	Lehigh Electric Products Co.	Lehigh Electric Products Co.	O	P
Mark T. Kraft	Lehigh Electric Products Co.	Lehigh Electric Products Co.	O	P
Rick Leinen	Colortran	Leviton Manufacturing Co., Inc.	P	P
Ken Vannice	Colortran	Leviton Manufacturing Co., Inc.	A	P
Tim Bachman	Leviton/Colortran	Leviton Manufacturing Co., Inc.	A	P
Andrew Sherar	Lightmoves PLC	Lightmoves PLC	O	P
Gary Pritchard	LSC Lighting Systems PTY Ltd	LSC Lighting Systems PTY Ltd	O	P
J. P. Steiner	Lutron Electronics	Lutron Electronics	O	P
Jim Holladay	Luxence	Luxence	O	G
Ole Pedersen	Martin Professional A/S	Martin Professional A/S	P	P
Hiroshi Kita	Marumo Electric Co., Ltd.	Marumo Electric Co., Ltd.	O	P
David A. Boller	Organic Machines LLC	Organic Machines LLC	O	P
William Benner	Pangolin Laser Systems	Pangolin Laser Systems	O	P
Dave Higgins	Pathway Connectivity Inc.	Pathway Connectivity Inc.	P	P
Gary Douglas	Pathway Connectivity Inc.	Pathway Connectivity Inc.	A	P
Tim Cox	PLASA	PLASA	P	G
Tony Douglas-Beveridge	PLASA	PLASA	A	G
Mac Perkins	PNTA	PNTA Inc.	O	G
Robert Barbagallo	Proximo Inc.	Proximo Inc.	P	U
Paul F. Mardon	Pulsar Ltd.	Pulsar Ltd.	P	P
Steve Unwin	Pulsar Ltd.	Pulsar Ltd.	A	P
Stephen J. Tyrrell	Quantum Logic	Quantum Logic	O	P
Douglas Franz	QVC Network	QVC Network	O	U

Name	Company	Representing	Voting status	Int. cat.
Charlie Richmond	Richmond Sound Design Ltd.	Richmond Sound Design Ltd.	O	P
Kenneth Mockler	Sceno Plus	Sceno Plus	O	U
Scott M. Blair	Scott M. Blair	Scott M. Blair	I	G
Mick Martin	Showcad Control Systems	Showcad Control Systems	O	P
Andre Broucke	ADB - TTV Technologies	Siemens	O	P
David George	Spectrum Manufacturing Inc.	Spectrum Manufacturing Inc.	P	P
Ujall Kar	Standard Robotics & Lighting	Standard Robotics & Lighting	O	G
John Mitchell	Sterling Technical Services	Sterling Technical Services	O	U
Richard Lawrence	Strand Lighting Ltd.	Strand Lighting Ltd.	P	P
Michael Lay	Strand Lighting	Strand Lighting Ltd.	A	P
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
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	O	G
Brian Dowd	TMB	TMB	P	U
Colin Waters	TMB	TMB	O	U
Hans Leiter	Transtechnik GmbH	Transtechnik GmbH	O	P
Anders Ekvall	AVAB Scandinavia	Transtechnik GmbH	O	P
Mitch Hefter	Entertainment Technology (Genlyte Thomas Group)	USITT	P	U
Charles Reese	Vari-Lite, Inc.	Vari-Lite, Inc.	P	P
Alfred Langguth	Vari-Lite, Inc.	Vari-Lite, Inc.	A	P
Eckart Steffens	SOUNDLIGHT	VPLT	P	G
Ken Wagner	Walt Disney Imagineering	Walt Disney	O	U
Eric Cornwell	West Side Systems	West Side Systems	O	U
Michael Gonzales	Wrightson, Johnson, Haddon & Williams, Inc.	Wrightson, Johnson, Haddon & Williams, Inc.	O	U
John Sondericker III	Wybron, Inc.	Wybron, Inc.	O	P
		voting members		16 P 7 U 6 G
		observing member companies or organizations		25 P 15 U 11 G

Voting Status

- P Principal voting representative for a company or organization
- A Alternate voting representative for a company or organization
- I Individual representing no organization other than himself or herself
- O Observer, non-voting

Interest Categories

- P Producer (manufacturer) of control devices or products
- U User of control devices or products
- G General interest in control devices or products