

**Unconfirmed Minutes  
IEEE 802.3 CSMA/CD PLENARY  
Kauai, HI  
November 11 -15, 2002**

**MONDAY, NOVEMBER 11, 2002**

**ADMINISTRATIVE MATTERS**

Mr. Robert Grow, Chair of 802.3 CSMA/CD Working Group called the meeting to order at 1:08PM. Mr. Grow introduced Mr. David Law, Vice Chair of 802.3, and Mr. Steve Carlson, Secretary of 802.3, and Task Force Chair of 802.3af. Mr. Howard Frazier, Chair of the 802.3ah Task Force was also introduced. Mr. Grow explained about Kukui nuts, the symbol of the love and respect their subject bestowed upon them.

Mr. Grow apologized for the loss of the Thursday potential voters list from Vancouver. He explained that anyone who felt that they had not been recognized should speak to him.

Mr. Grow then had the attendees stand and introduce themselves to the group.

Mr. Grow asked if there were any additions or corrections to the agenda.

**MOTION**

Approve the agenda (opening\_agenda.pdf).

Moved: Done Pennell

Seconded: Brad Booth

Agenda was passed by acclimation voice vote.

Maintenance #7 will be going to Working Group Ballot at the end of the week. D3.3 is the current draft of 802.3af DTE Power project, and D1.1 is the current draft of 802.3ah. Minutes of Vancouver are posted on the Web, as are the CFI for 10GBASE-T and CX4.

IEEE 802.3-2002 is now freely downloadable, and 802.3ae will be available by the March 2003 Plenary meeting.

Mr. Grow explained that your registration as a voter includes the 802.3-2002 CD-ROM, which includes 802.3ae. Mr. Grow forcefully explained that registration and the fee is mandatory. "We know who you are."

The 802.3 Voter list was displayed to the group. Mr. Grow indicated to the group that they should check and insure that they are on the list if they are a voter. He also indicated that people who are not voters SHOULD NOT vote when votes are taken within the group.

The voter in peril list was then displayed. Mr. Grow warned those on the list that they are in danger of losing their voting rights if they do not attend at least 75% of the meetings this week.

The list of potential voters was displayed and read off.

Mr. Carlson explained the operation of the Attendance books for new voters and established voters.

All members are subscribed to the 802.3 voter's list. You CAN unsubscribe yourself from the list, but do so at your own risk! This is the only way that 802.3 announcements are made.

Mr. Grow explained about the 802.3 financial situation due to the debt from Vancouver. He explained that 802.3 might have to impose a surcharge for members who stay at non-conference hotels. The meeting fee will increase from \$300 to \$350 to cover ongoing expenses.

Mr. Grow explained to the group about the plenary meeting survey and posted the Web site: <http://ieee802.org/16/meetings/mtg22/survey.html>.

Mr. Grow asked if there were any changes to the minutes from Vancouver. No response was given. Mr. Grow asked for a motion to approve the minutes.

#### MOTION

Move to approve the minutes from Vancouver

Moved: Dan Pennell

Seconded: Scott Simon

Passed by acclamation (voice vote)

Mr. Grow indicated that 802.3af met in Chelmsford and New Orleans, and that 802.3ah met in New Orleans. Maintenance met in New Orleans and Maint. #7 is expected to go to WG ballot out of this meeting.

Mr. Frazier reported on the Kibibits and Mibibits problem. He reported on the processes that lead to the draft standard SCC14. He indicated that there had been no way to join the SCC14 ballot pool.

Mr. Frazier suggested the following three options:

1. Approve as a 5-year standard
2. Approve as a 2-year trial standard
3. Force formation of a new ballot pool

He asked for a recommendation from 802.3 to be folded into an 802 recommendation. The topic will be revisited on Thursday.

### **Trademarks and Compliance**

Mr. Grow discussed the new IEEE policies on trademarks and compliance. The institute is planning on a compliance policy to avoid the terms “is compliant with” a draft of a standard. DO NOT say either conform or comply.

### **Executive Report**

Rules changes - Membership There is concern that it is too easy to become a voter, and too hard to remove someone from the list. An individual may become a voter in four months, but it can take up to 16 months to age a voter out.

Some options were discussed in the Exec. Maintain the 50% attendance requirement but make it more symmetrical in terms of weighting for Interims. No decision has been made since the ballot failed. Shimon asked why this was a problem. Mr. Grow explained that having a large number of voters makes it difficult to get a quorum, and loads the WG ballot with people who are not really part of the group.

### **Electronic Balloting**

The rules are way out of date regarding balloting, and go back to the days of flipcharts and overheads. At this point document distribution is done by the Web or e-mail, and voting is done via e-mail. Robert’s Rules do not work for an e-mail reflector; some method of allowing this is under consideration. For example, the Regulatory TAG sometimes must respond to government requests in a short time frame (a few days) and must be able to vote via e-mail ballots.

### **Chairs Guidelines for Sharing Documents**

At present, Chairs are forbidden from distributing copies of drafts to outside groups who are not part of the process. This is not true of groups that have liaisons with 802.3.

### **802 Chairs meetings**

See (agenda pdf)

Mr. Grow explained about the changes in Tutorial policy and why it needs to be fixed. For example, Calls For Interest have been schedule on top of tutorials.

### **Future Meetings**

March, DFW; July, San Francisco; November, Albuquerque.

Mr. Grow discussed the March meeting venue for 802.3 at the DFW Hyatt. Several negative comments were made about the choice of venue.

A straw poll was conducted, asking: Who would like to stay at the Hyatt: 22

How many want to find a hotel for 802.3? 46

The vote was roughly to 2 to 1 in favor of an off-site hotel for 802.3 in March.

### **Call for Patents**

Mr. Grow reiterated the patent policy of 802. If you are aware any patents that your corporation or you hold that bear upon a standard under development and that the patent must be used to implement the standard, a letter of assurance is requested.

This should be done as early in the process as possible.

### **PARS**

Twelve PARS are under consideration this week, a new record. Geoff Thompson spoke regarding the two mobility PARS, MBWA ECSG and the 802.16e Mobility Amendment. These two PARS are short on distinct identity and seem to have the same scope and purpose. Input from 802.3 is due by Wednesday noon, and 802.3 must tell Mr. Grow on Thursday what he should do.

Paul Nikolich, 802 Chair, spoke in favor of having both groups come and make a presentation to 802.3. It was pointed out that we have no spare time for this. There will be a free-form discussion Tuesday evening that will probably not be focused.

Rich Brand suggested a straw poll regarding the mobility PARS. Mr. Grow asked the question: Who would like a straw poll regarding the mobility PARS?

Y: 17 N: 11 A: everyone else

Mr. Grow said that an attempt would be made to find a room for presentations by the mobility PAR groups to any interested 802.3 member.

Mr. Grow announced that the CFI for 10GBASE-T is tonight in this room at 6:30PM.

Tuesday evening CFI 10GBASE-CX4, followed by the link security CFI.

Mr. Grow announced the other CFI's (see agenda).

### **State of the Standard**

David Law (1102\_state\_of\_standard.pdf) Mr. Law indicated that 802.3ae was now part of the standard, and that P802.3af was expected to go to Sponsor Ballot at this meeting.

Mr. Grow handed out the plaques for 802.3ae to \_\_\_\_\_ (get list from Bob)

Break for 15 minutes

### **Liaison Reports**

TR-42: Chris DiMinico presented the TR-42 report (tr42.pdf) TIA-568B (NEED BITS)

DTE Power  
Data Centers

SC25 WG3: Alan Flatman presented the SC25 WG3 11801 2<sup>nd</sup>. Edition now in print.  
(sc25wg3.pdf)

802.1 will hold a technical plenary and will coordinate with EFM.

### **Maintenance Report #7**

David Law presented the status 802.3aj (maintenance.pdf)

### **Interpretation Requests**

David Law presented the new Interpretation Requests (interp.pdf)

Mr. Law explained the process and the pointed out the Web page that allows a request to be submitted.

A request from the floor came regarding the references to the new 11801-2 wrt 802 standards. The standard is no longer published but may be referenced. The reliance is on making copies available through the national bodies. Bruce Tolley asked about the changes that remove CAT5 from the spec. Howard Frazier commented that 11801-1995 had now become the most important standard we reference, yet this standard was no longer “readily available.”

### **P802.3af DTE Power**

Steve Carlson presented the status of DTE Power. The TF has only 9 editorial comments to D3.3, none of them substantive, and is on schedule to request that the 802.3 WG forward D4.0 of the draft to Sponsor Ballot at the closing Plenary. (dte\_power\_open.pdf)

### **P802.3ah EFM**

Howard Frazier passed out CDROMS and flash cards containing all the EFM databases. Mr. Frazier indicated that they have a great deal of work to do. (efm\_opening.pdf) D1.1 has over 1000 comments.

Much debate ensue regarding the timeline problems due to the linecode decision by T1. It was also discussed that the T1 delay should simply be ignored.

Liaison letters were then presented.

Probably want OAM frames (also spanning tree, et al frames) blocked at the subscriber cloud.

ITU-T SG15: (sg15.pdf)

ETSI TM6: (etsitm6.pdf)

ITU-T Question4/15: (ITUq415.pdf)

Mr. Frazier then presented the EFM plan for the week. All sub-task forces will be resolving comments to D1.1.

### **Calls for Interest**

Mr. Grow explained the CFI mechanism, and Mr. Law presented the room assignments.

### **MOTION**

Motion to adjourn at 5:03PM

**Thursday, 14 November, 2002**

### **ADMINISTRATIVE MATTERS**

Mr. Grow opened the meeting at 1:17PM and introduced the officers of 802.3. Mr. Grow asked for any questions, comments or changes to the agenda. None were forthcoming and the agenda was approved by acclamation.

Mr. Grow then explained the rules regarding attendance and voting rights. (grow\_closing.pdf) The attendance books rules were explained and the books circulated through the room. Mr. Carlson yelled at the idiots who were crowding around the book. (remove before final publication)

Mr. Grow displayed the list of 802.3 voters. A number of people asked about their voting status. Mr. Grow recorded the new voters. Jim Tatum, Sterling Vaden.

### **Executive Meeting Report**

Mr. Grow asked if anyone had comments or inputs on the PARS. Rich Brand (brand.pdf) made a presentation regard the two mobile wireless PARS. Mr. Brand had some difficulties with his computer and asked for time to repair it. Mr. Brand fixed his problem and continued after the Call for Patents.

### **MOTION 1**

Move that the 802.3 Working Group direct the 802.3 Chair to reject the MBWA ECGS PAR and the 802.16e PAR.

M: Rich Brand            S: Linder

Technical 75%  
Date: 14-Nov-2002  
Time: 1:53PM

Y:51

N:0

A: 17

Mr. Thompson asked if Mr. Brand would allow the 802.16 PAR on mobility to go forward. Pat Thaler indicated that the MBWA PAR would not in fact be a matter strictly for the IETF. Ms. Thaler also suggested that both PARs have a distinct identity problem, which should be address by the Exec. Mr. Quakenbush made a friendly amendment to the wording to add "ECSG" to the motion. Mr. Thompson again spoke regarding the lack of cooperation between 802.16 and the MBWA ECSG, and felt that the groups needed to work together to explain the total market and how they would be acted upon. Ms. Thaler then suggested that both PARS be rejected due to the various reasons outlined in the discussion.

Mr. Grow asked if anyone else had PAR issues. Geoff Thompson reminded the group that 802.16 is chartered as fixed wireless access, rather than mobility. Their PAR should change. Also, 802.11j requested a PAR change for operation in Japan. Mr. Thompson suggested that region-specific PARS are outside the scope of the IEEE.

### **Call for Patents**

Mr. Grow reiterated the patent policy of 802. If you are aware any patents that your corporation or you hold that bear upon a standard under development and that the patent must be used to implement the standard, a letter if assurance is requested.

This should be done as early in the process as possible.

### **Task Force Reports**

David Law reported on the Interpretation requests received this week.  
(1102\_interp\_closing.pdf)

Mr. Law explained that Interpretations are done to enumerate what the standard SAYS, not what it SHOULD say. Seven requests were addressed.

### **MOTION**

IEEE 802.3 approves the proposed interpretation response to the interpretation requests 1-11/02, 5-11/02, 6-11/02 as presented without the need for a 30 day letter ballot.

M: David Law S: Pat Thaler Tech 75% Date: 14 Nov Time 2:06PM

Y: 79 N: 0 A:1 PASSES

Dave Dove presented on request 3-11/02 regarding Auto-Crossover.  
(dove\_3\_11\_02.pdf).

Mr. Law thanked Mr. Dove for his work and pointed out that Interpretations sometimes point out defects in the standard.

## MOTION

IEEE 802.3 approves the proposed interpretation response to the interpretation requests 3-11/02 [1000BASE-T auto-crossover] as presented without the need for a 30-day letter ballot.

M: David Law S: Bill Quackenbush Tech 75% Date: 14-Nov-2002 Time: 2:13PM

Y: 81 N: 0 A: 1

## MOTION

IEEE 802.3 submits the proposed Interpretation response to the Interpretation request 2-11/02 [10Mb/s and 100Mb/s Carrier Detect] for a 30 day Working Group letter ballot. IEEE 802.3 authorizes the IEEE P802.3 Interpretations Ad Hoc to conduct meetings and recirculation ballots as necessary to resolve comments received during the Working Group ballot of the response to Interpretation request 2-11/02 [10Mb/s and 100Mb/s Carrier Detect].

M: David Law S: Tom Mathey Date: 15-Nov-02 Time: 2:22PM

Y: 69 N: 0 A: 2 PASSES

Mr. Law discussed the new IEEE-SA Interpretations amendments

Standards Board Operations Manual  
proposed Interpretations amendments

- Charging
- Discourage Interpretations
- Some point out defects which is very valuable
- May raise expectation of constancy
- Where does the revenue go
- Implicit that there will be a charge
- Short timescale action required to avoid charge
- Timescales
- Do not believe it is compatible with the 802.3 Interpretations process

Pat Thaler suggest that motion to the Exec is needed.

## MOTION

IEEE P802.3 requests that IEEE P802 EC convey the issues listed on the slide to proCom.

M: Thaler S: Flatman Tech 75% Date: 14-Nov-02 Time: 2:31



Y:69 N:0 A:1

### **Maintenance**

Met on Tuesday and reviewed open Maint. Request #7.

#### MOTION

IEEE 802.3 authorises IEEE P802.3aj/D2.0 to be forwarded to Working Group Ballot. IEEE 802.3 authorises the IEEE P802.3aj Task Force to conduct meetings and recirculation ballots as necessary to resolve comments received during the Working Group ballot.

IEEE 802.3 requests that the P802 LMSC Executive Committee requests formation of a LMSC Sponsor Ballot pool for IEEE P802.3aj.

M: David Law S: Tom Dineen Tech 75%  
PASSED Date: 14-Nov-02 Time:2:45PM

Y: 79 N: 1 A: 0

106 Maint. Requests at present. Two have been rejected.

#### MOTION

IEEE P802.3 affirms the resolutions to Maintenance requests 100, 1101, 1102 as proposed by the Maintenance Task Force

M: Law S: Brad Booth Tech 75% Time 2:50PM

Y: 78 N: 0 A:1

### **P1541**

Howard Frazier discussed the kibibit bit issues and read the letter to Judith Gorman at the IEEE-SA. (frazier\_letter.pdf)

#### MOTION

Request that the chairman of the IEEE 802 LMSC transmit the following letter concerning P1541 to the secretary of the IEEE-SA Standards Board

Should 802 not approve this letter it will be appropriately edited and sent as a 802.3 position.

M: Howard Frazier  
S: Steve Carlson

Technical 75%      Date: 11-Nov-2002      Time: 2:55PM

Y: 74      N:0      A:8

Mr. Grow asked the group to return from break at 3:20PM.

### **802.3af DTE Power**

Steve Carlson indicated that the group had successfully resolved the 9 editorial comments, added the OIDS to Annex 30A, and created D4.0. Mr. Carlson thanked the group for all of their work to date.

#### **MOTION**

Move that the IEEE P802.3af task force request IEEE P802.3 Working Group to forward Draft 4.0 to Sponsor Ballot, and authorize meetings and recirculation ballots as required with the goal of pre-submission to RevCom in March.

Moved by Steve Carlson on behalf of P802.3af Task Force

Technical 75%  
Date: 11-Nov-2002  
Time:3:30PM

Y: 90      N:0      A:1

Mr. Carlson presented the Liaison letter to SC25 WG3. Several suggestions from the group were incorporated into the letter. TIA requested a copy also, and Geoff Thimpson indicated it should go to the US TAG. (sc25\_wg3\_response.doc)

### **Vancouver Interim Planning**

Mr. Grow asked the group about each TF's plans for the Vancouver meeting (ask Quakenbush)

Mr. Grow asked the group to raise their hand if they intended on attending the January interim.

DTE Power:20  
Optics: 33  
EPONS: 18  
OAM: 20  
Copper: 32

CX4: 25  
10GBASE-T: 44  
Link Security: 25

Mr. Grow explained about the registration fees of \$275/325 and implored the group to stay at the meeting hotel.

The Plenary Meeting Survey at <http://www.ieee802.org/16/meetings/mtg22/survey.html> was discussed, and the group urged to respond.

## **EFM**

Howard Frazier reported on the EFM TF work. Much technical work was done on FEC. (frazier\_close.pdf)

Optics did great work on comment resolution, however, a key vote on Option D did not pass using 802.3 rules.

## **MOTION**

To adopt Option D regarding burst mode timing parameters for PONS.

M: Howard Frazier S: Vipul Bhatt

Tech 75% Date: 11-Nov-2002 Time: 4:24PM

Y:40 N:27 A:23 FAILS

Mr. Bhatt gave a detailed technical explanation about Option D. Mr. Diab suggested that a RESET line in the PMD would be required. Other members made similar comments in support of Option D. Mr. Brand questioned which parameters would be specified in terms of the start-up numbers. Mr. Thompson spoke against the motion, due to the inability of a consumer to choose the proper EFM device. He further spoke about a lack of compatibility. Several more people spoke against the motion. Mr. Thatcher felt that the TF had clearly supported the Option D.

Ms. Thaler spoke in favor of Option D. Others spoke in favor of increased efficiency.

## **Naming**

Mr. Frazier commented that the names in the draft are “crufty.” Mr. Diab was directed to come up with new names, which Mr. Frazier presented and explained. He likes them. He asked for comments. Mr. Grow indicated that he was not crazy about them, but didn’t have anything better in mind.

## **P2MP**

Adopted resolutions to 249 comments, 5 unresolved. Mr. Thompson asked which were the big ticket items, and was told that the sub-TF simply ran out of time.

## **OAM**

Adopted resolutions to 269 comments, no unresolved.

## **Copper**

Agreed to 152, 21 unresolved comments, 5 TRs, 13 dups, 3 other)

Agreed to produce draft 1.2 based on 1.1 + comments

Have not yet adopted clause 63 (long reach)

shootout in Vancouver

will “publish” draft 1.1a of clause 63 separately from 1.2

No resolution on encapsulation (HDLC vs GFP vs 64/65B)

shootout in Vancouver

Several comments came from the floor.

Vlad Oksman presented the following motion:

### **MOTION**

Adopt HDLC with enhancements as by presentation oksman\_copper\_2\_1102 for baseline EFM over copper.

M: V. Oksman      S: M. Beck

Tech 75%      Date: 11-Nov-2002      Time: 4:4X

Y:23      N:50      A: (not counted, per Bob Grow)

### **FAILS**

Several speakers spoke against the motion.

### **PLANS FOR NEXT DRAFT**

Editors will produce draft 1.2 (and 1.1a) by 27-November,

“Published” on private web site by 2-December

Comment deadline will be 27-December (25 days)

Responses posted by 3-January

Liaison Letters from EFM

See (efm\_liaison\_letters.pdf)

ACTION ITEM:Dot3 secretary to generate generic draft transmittal letter.

MOTION

Adopt the letter to ITU Question 2/15 and forward to the SEC over the EFM TF Chair's signature.

M: Howard Frazier S: Rich Brand

Passed by acclamation.

ITU-T Q4/15 letter accepted.

ETSI TM6 passed unanimously in the TF. No objection from the WG.

T1E1.4 Letter was adopted by acclamation.

Comments from the floor regarding the possible delays and whether it would slow things up.

**CFI CX4**

Dan Dove presented a summary of the CX4 CFI. See (dove\_cx4.pdf)

Straw Poll

Individuals support formation of a 10GBASE-CX4 Study Group

Y\_\_ 75 N\_\_ 0 A\_\_ 9

Companies support formation of a 10GBASE-CX4 Study Group

Y\_\_ 38 N\_\_ 0 A\_\_ 2

802.3 voters support formation of a 10GBASE-CX4 Study Group

Y\_\_ 44 N\_\_ 0 A\_\_ 1

Individuals will attend and contribute to a 10GBASE-CX4 Study Group

Y\_\_ 34

Attend NoCaL Interim in Dec? 32

MOTION

Form a study group to develop a project proposal (PAR, 5, Criteria, and Objectives) for a study group for 10GBASECX4.

- Authorize an interim meeting to be located in the Sacramento, California region for the days of Dec 16th and 17th. Location TBD by 11/29/2002.

- Authorize an interim meeting to be co-located with 802.3 EFM in the Vancouver, BC region for the days of Jan 7th and 8th.

Moved: Dove Second: H Barrass

Y:74 N:0 A: 4 Date: 14-Nov-02 Time:5:21PM Tech 75%

PASSES

MOTION

Assuming that consensus within the 10GBASE-CX4 SG has been achieved by the end of the Vancouver meeting; Authorize the WG Chair to pre-submit a PAR and 5 Criteria to the 802 SEC and to NESCOM for consideration at the March, 2003 meetings, with the understanding that these must be distributed to, reviewed and affirmed by 802.3 and 802 at the March Plenary meeting in order to stay on the NESCOM agenda.

Tech 75% Date: 14-Nov-02 Time: 5:22P

M: Dan Dove S: Bill Quackenbush

Y:61 N:0 A:12

PASSES

MOTION

Authorize 10GBASE-CX4 Study Group to distribute a working paper for review by 802.3 in anticipation of requesting a working group ballot at the March Plenary contingent upon approval of the PAR by the IEEE standards board.

M: Dan Dove S: Don Pannell

Tech 75% Date: 14-Nov-02 Time: 5:24PM

Y:32 N:8 A: 35

**CFI 10GBASE-T**

Brad Booth reorted on the 10GBASE-T CFI.

Call for Interest on 12-Nov-02

- Should we request at this meeting to authorize the formation of a Study Group to develop a standards project proposal (PAR and 5 Criteria) for “10GBASE-T”?

Y: 110 N: 0 A: 15

#### Participation

- I would participate in the “10GBASE-T” Study Group in IEEE 802.3.

Tally: 66

- My company would support participation in the “10GBASE-T” Study Group in IEEE 802.3

Tally: 36

#### SG & TF Overlap

- Of those wanting to participate in 10GBASE-T, how many are participating in EFM?

Tally: 21

- Of those wanting to participate in 10GBASE-T, how many would also participate in 10GBASE-CX4?

Tally: 22

#### MOTION

Move that the IEEE 802.3 Working Group authorize the formation of a Study Group to develop a standards project proposal (PAR and 5 Criteria) for “10GBASE-T” and authorize meeting(s) of the Study Group.

M: B. Booth

S: B. Tolley

Y: 80 N: 0 A: 5 PASS (>50%) Date: 14-Nov-02 Time: 5:32PM

#### **CFI 802 SECURITY**

#### MOTION

Authorize formation of Exec SG on Link Security

M: Dolores Sala S: Dan Romascanu

Tech 50% Time: 5:42PM

Y:54 N:2 A:17

#### PASSES

Tony Jeffree offered 802.1 as the hosting body for this work. Many people became confused as to the motion, and were firmly instructed by Mr. Grow that this was not the motion under consideration.

Mr. Grow adjourned the meeting at 5:44PM



# IEEE 802.3 CSMA/CD WORKING GROUP Draft AGENDA

See our web site: <http://www.ieee802.org/3>

14 November 2002, Kauai, Hawaii

Start at 1:00 PM

Meeting Survey: <http://ieee802.org/16/meetings/mtg22/survey.html>

1300, Thursday, 14 November

**Administrative Matters**..... Bob Grow

- Welcome and General Announcements
- Agenda, review and revise as needed
- Attendance, address list/e-mail list maintenance
- Review of Voting Membership
- Executive Committee Report & Action Items
- Call for Patents

**Liaison Actions**

- External Liaisons: T1E1.4

**Task Force Reports**

- Interpretation requests..... David Law
  - Progress this week
  - Disposition of requests (accept, reject, send to WG Ballot)
- P802.3aj, Maintenance #7..... David Law
  - Progress this week
  - Motions

**1500-1520 BREAK**

- P802.3af, Task Force (DTE Power via MDI)..... Steve Carlson
  - Progress this week
  - Motions
- P802.3ah Task Force (Ethernet in the First Mile)..... Howard Frazier
  - Progress this week
  - Motions
- 10GBASE-CX4 Call for Interest..... Dan Dove
  - Results of CFI
  - Motions
- 10GBASE-T Call for Interest..... Brad Booth
  - Results of CFI
  - Motions
- Link Security Call for Interest..... Dolores Sala
  - Results of CFI
  - Motions

IEEE 802.3  
Interpretations Report

November 14th, 2002

Kauai, HI

David Law

# IEEE Standards Companion Interpretations

“Interpretations are a unique form of commentary on the standard. They are not explanations of what the standard should have done or meant to say. Interpretations cannot change the meaning of a standard as it currently stands. Even if the request points out an error in the standard, the interpretation cannot fix that error. The interpretation can suggest that this will be brought up for consideration in a revision or supplement (or, depending on the nature of the error, an errata sheet might be issued). However, an interpretation has no authority to do any of this.”

<http://standards.ieee.org/guides/companion/part6.html#interpret>

# IEEE Standards Companion Interpretations

“Interpretations are a unique form of commentary on the standard. They are not explanations of what the standard should have done or meant to say. Interpretations cannot We can only interpret what the standard does say, not what it should say. An interpretation cannot fix that error. The interpretation can suggest that this will be brought up for consideration in a revision or supplement (or, depending on the nature of the error, an errata sheet might be issued). However, an interpretation has no authority to do any of this.”

<http://standards.ieee.org/guides/companion/part6.html#interpret>

# Interpretations Status

- 6 Interpretations received
  - 1-11/02 - 1000BASE-X Auto-negotiation
  - 2-11/02 - 10Mb/s and 100Mb/s Carrier Detect
  - 3-11/02 - 1000BASE-T Auto-crossover
  - 4-11/02 - Link Aggregation Control Protocol
  - 5-11/02 - Clause 43 SNMP MIB
  - 6-11/02 - 10BASE-T isolation requirements
- Available on Interpretations area of web site  
<http://www.ieee802.org/3/interp/index.html>

**Interpretation Number:** 1-11/02 (1000BASE-X Auto-negotiation)  
**Topic:** 1000BASE-X Auto-negotiation  
**Relevant Clause:** 37  
**Classification:**

## **Interpretation Request**

We have a query regarding autonegotiation (clause 37) on IEEE 802.3 compliant 1000BASE-X interfaces. We are looking at the 2002 revision of the Standard.

We would like to know the expected Standards compliant behaviour of an entity (A) that supports clause 37, and is connected to another peer entity (B) that does not support clause 37 or has auto-negotiation disabled. Will the entity (A) in the above example, fall back to half duplex (HD) operation, if supported.

**Interpretation Number:** 1-11/02 (1000BASE-X Auto-negotiation)  
**Topic:** 1000BASE-X Auto-negotiation  
**Relevant Clause:** 37  
**Classification:** Unambiguous

## **Interpretation Request**

We have a query regarding autonegotiation (clause 37) on IEEE 802.3 compliant 1000BASE-X interfaces. We are looking at the 2002 revision of the Standard.

We would like to know the expected Standards compliant behaviour of an entity (A) that supports clause 37, and is connected to another peer entity (B) that does not support clause 37 or has auto-negotiation disabled. Will the entity (A) in the above example, fall back to half duplex (HD) operation, if supported.

### **37.2.5.1.1 Control register (Register 0)**

IEEE Std 802.3-2002<sup>®</sup>,

This register provides the mechanism to enable or disable Auto-Negotiation, restart Auto-Negotiation, and allow for manual configuration when Auto-Negotiation is not enabled. The definition for this register is provided in Clause 22.

When manual configuration is in effect at a local device, manual configuration should also be effected for the link partner to ensure predictable configuration. When manual configuration is in effect, values for the PAUSE bits (PS1, PS2) should result in a valid operational mode between the local device and the link partner.

**Interpretation Number:** 1-11/02 (1000BASE-X Auto-negotiation)  
**Topic:** 1000BASE-X Auto-negotiation  
**Relevant Clause:** 37  
**Classification:** Unambiguous

## **Interpretation Request**

We have a query regarding autonegotiation (clause 37) on IEEE 802.3 compliant 1000BASE-X interfaces. We are looking at the 2002 revision of the Standard.

We would like to know the expected Standards compliant behaviour of an entity (A) that supports clause 37, and is connected to another peer entity (B) that does not support clause 37 or has auto-negotiation disabled. Will the entity (A) in the above example, fall back to half duplex (HD) operation, if supported.

---

## **Interpretation for IEEE std 802.3-2002**

The standard clearly states in the second paragraph of subclause 37.2.5.1.1 Control register (Register 0), "When manual configuration is in effect at a local device, manual configuration should also be effected for the link partner to ensure predictable configuration."

Hence, if this recommendation is not followed and a link has manual configuration in effect at a local device but not at the link partner, or the reverse, the resultant link configuration can not be predicted.



**Interpretation Number:** 5-11/02 – Item 1 (Clause 43 SNMP MIB)  
**Topic:** dot3adAggPortActorSystemPriority,  
dot3adAggPortPartnerAdminSystemPriority, &  
dot3adAggPortPartnerAdminSystemPriority  
**Relevant Clause:** 30C.6  
**Classification:**

### **Interpretation Request**

dot3adAggPortActorSystemPriority, dot3adAggPortPartnerAdminSystemPriority, and dot3adAggPortPartnerAdminSystemPriority are listed as INTEGER (0..255), but the DESCRIPTION states that it is 2-octets. dot3adAggActorSystemPriority is INTEGER (0..65535), as expected. Since the system priority makes up part of the system ID, the above values are likely to cause the aggregators and ports to be in different systems. I believe this is a mistake and that the values for the ports should match that of the aggregators. (IEEE Std 802.3ad-2000, 43.3.2, p.109).

## 30C.6 Definitions for Link Aggregation MIB

In the MIB definition<sup>21</sup> below, should there be any discrepancy between the DESCRIPTION text and the BEHAVIOUR DEFINED AS in the corresponding definition in Clause 30, the definition in Clause 30 shall take precedence.

### NOTES

1—The ASCII for 30C.6 is available from <http://www.ieee802.org/3/publication/index.html>.<sup>22</sup>

```
IEEE8023-LAG-MIB DEFINITIONS ::= BEGIN
```

```
dot3adAggPortPartnerAdminSystemPriority OBJECT-TYPE
```

```
SYNTAX      INTEGER (0..65535)
```

```
MAX-ACCESS  read-write
```

```
STATUS      current
```

```
dot3adAggPortPartnerAdminSystemPriority OBJECT-TYPE
```

```
SYNTAX      INTEGER (0..65535)
```

```
MAX-ACCESS  read-write
```

```
STATUS      current
```

```
dot3adAggPortActorSystemPriority OBJECT-TYPE
```

```
SYNTAX      INTEGER (0..65535)
```

```
MAX-ACCESS  read-write
```

```
STATUS      current
```

+-----+  
| 8802-3/802.3 REVISION REQUEST |  
+-----+

DATE: July 12, 2000  
NAME: Les Bell  
COMPANY/AFFILIATION: 3Com  
E-MAIL: Les\_Bell@3Com.com

REQUESTED REVISION:  
STANDARD: IEEE Std 802.3ad-2000  
CLAUSE NUMBER: 30C  
CLAUSE TITLE: SNMP MIB definitions for Link Aggregation

PROPOSED REVISION TEXT:

In the MIB objects:

dot3adAggPortActorSystemPriority  
dot3adAggPortPartnerAdminSystemPriority  
dot3adAggPortPartnerOperSystemPriority  
dot3adAggPortActorPortPriority  
dot3adAggPortPartnerAdminPortPriority  
dot3adAggPortPartnerOperPortPriority

the line  
SYNTAX INTEGER (0..255)  
should be replaced with  
SYNTAX INTEGER (0..65535)

RATIONALE FOR REVISION:

Some objects in the 802.3ad MIB, have been defined with an incorrect range of possible values. These changes are required in order to match the definitions in the MIB with the definitions of the managed objects from the referenced subclauses.

+-----+  
| Please attach supporting material, if any  
| Submit to:- Geoffrey O. Thompson, Chair IEEE 802.3  
| E-Mail: gthompso@nortelnetworks.com  
|  
| +----- For official 802.3 use -----+  
| REV REQ NUMBER: 1051  
| DATE RECEIVED: 12th July 2000  
| ~~EDITORIAL/TECHNICAL~~  
| ACCEPTED/~~DENIED~~  
| BALLOT REQ'D YES/~~NO~~  
| COMMENTS: Published IEEE Std 802.3-2002  
|  
+-----+

+-----+  
| For information about this Revision Request see -  
| [http://www.ieee802.org/3/maint/requests/revision\\_history.html#REQ1051](http://www.ieee802.org/3/maint/requests/revision_history.html#REQ1051)  
+-----+

**Interpretation Number:** 5-11/02 – Item 1 (Clause 43 SNMP MIB)  
**Topic:** dot3adAggPortActorSystemPriority,  
dot3adAggPortPartnerAdminSystemPriority, &  
dot3adAggPortPartnerAdminSystemPriority  
**Relevant Clause:** 30C.6  
**Classification:** Unambiguous

### **Interpretation Request**

dot3adAggPortActorSystemPriority, dot3adAggPortPartnerAdminSystemPriority, and dot3adAggPortPartnerAdminSystemPriority are listed as INTEGER (0..255), but the DESCRIPTION states that it is 2-octets. dot3adAggPortActorSystemPriority is INTEGER (0..65535), as expected. Since the system priority makes up part of the system ID, the above values are likely to cause the aggregators and ports to be in different systems. I believe this is a mistake and that the values for the ports should match that of the aggregators. (IEEE Std 802.3ad-2000, 43.3.2, p.109).

---

### **Interpretation for IEEE std 802.3-2002**

The IEEE P802.3 Maintenance process has addressed this issue in IEEE Std 802.3ad-2000. In the current edition of the standard, IEEE Std 802.3-2002, dot3adAggPortActorSystemPriority, dot3adAggPortPartnerAdminSystemPriority, and dot3adAggPortPartnerAdminSystemPriority are listed as INTEGER (0..65535).

**Interpretation Number:** 5-11/02 – Item 2 (Clause 43 SNMP MIB)  
**Topic:** dot3adAggActorSystemID  
**Relevant Clause:** 30C.6  
**Classification:**

### **Interpretation Request**

dot3adAggActorSystemID has MAX-ACCESS of read-only, but the text DESCRIPTION says "read-write". Which is correct? I believe it should be read-only, but it is not entirely clear from the spec. The spec does seem to imply read-write in the note listed in 30.7.1.1.4, but it is possible this is out of sync. It does not make sense to be able to edit a MAC address value for a system.

## 30C.6 Definitions for Link Aggregation MIB

In the MIB definition<sup>21</sup> below, should there be any discrepancy between the DESCRIPTION text and the BEHAVIOUR DEFINED AS in the corresponding definition in Clause 30, the definition in Clause 30 shall take precedence.

dot3adAggActorSystemID OBJECT-TYPE

SYNTAX MacAddress

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"A 6-octet read-write MAC address value used as a unique identifier for the System that contains this Aggregator.

NOTE-From the perspective of the Link Aggregation

### 30.7.1.1.4 aAggActorSystemID

ATTRIBUTE

APPROPRIATE SYNTAX:

MACAddress

BEHAVIOUR DEFINED AS:

A 6-octet read-write MAC address value used as a unique identifier for the System that contains this Aggregator.

<b>Interpretation Number:</b>	5-11/02 – Item 2 (Clause 43 SNMP MIB)
Topic:	dot3adAggActorSystemID
Relevant Clause:	30C.6
Classification:	Defect

## **Interpretation Request**

dot3adAggActorSystemID has MAX-ACCESS of read-only, but the text DESCRIPTION says "read-write". Which is correct? I believe it should be read-only, but it is not entirely clear from the spec. The spec does seem to imply read-write in the note listed in 30.7.1.1.4, but it is possible this is out of sync. It does not make sense to be able to edit a MAC address value for a system.

---

## **Interpretation for IEEE std 802.3-2002**

This represents a conflict within the standard.

A change request will be generated to resolve the conflict.

**Interpretation Number:** 6-11/02 – (10BASE-T isolation requirements)  
**Topic:** 10BASE-T isolation requirements  
**Relevant Clause:** 14.3.1  
**Classification:**

## **Interpretation Request**

I'm writing to you with regards to IEEE 802.3-2002 Clause 14.3.1.1 which deals with 10Base-T isolation requirements. The isolation requirement is specified at 1500V RMS at 50 to 60Hz for 60s, and makes a reference to IEC 60950: 1991, section 5.3.2. Looking at IEC 60950: 1991, section 5.3.2, the table indicates a working voltage of 130 V to 250V corresponding to a 1500V RMS test voltage for dielectric strength test. Now, there is a newer version of the IEC 60950: 2001 (3rd edition). In this 3rd edition, the working voltage table is different, with the following ranges:

=> 0V to 184V with an isolation test of 1000V RMS

=> 185V to 354V with an isolation test of 1500V RMS.

The issue/question that I have is the following. Given the information in the newer edition of the IEC 60950 standard, would the necessary isolation voltage for a 10Base-T Ethernet connection, per IEEE 802.3-2002 Clause 14.3.1.1 be adjusted?



## 14.3.1 MAU-to-MDI interface characteristics

### 14.3.1.1 Isolation requirement

The MAU shall provide isolation between the DTE Physical Layer circuits including frame ground and all MDI leads including those not used by 10BASE-T. This electrical separation shall withstand at least one of the following electrical strength tests.

- a) 1500 V rms at 50 Hz to 60 Hz for 60 s, applied as specified in Section 5.3.2 of IEC 60950: 1991.
- b) 2250 Vdc for 60 s, applied as specified in Section 5.3.2 of IEC 60950: 1991.
- c) A sequence of ten 2400 V impulses of alternating polarity, applied at intervals of not less than 1 s. The shape of the impulses shall be 1.2/50  $\mu$ s (1.2  $\mu$ s virtual front time, 50  $\mu$ s virtual time of half value), as defined in IEC 60060.

There shall be no insulation breakdown, as defined in Section 5.3.2 of IEC 60950: 1991, during the test. The resistance after the test shall be at least 2 M $\Omega$ , measured at 500 Vdc.

**Interpretation Number:** 6-11/02 – (10BASE-T isolation requirements)  
**Topic:** 10BASE-T isolation requirements  
**Relevant Clause:** 14.3.1  
**Classification:** Unambiguous

### **Interpretation Request**

I'm writing to you with regards to IEEE 802.3-2002 Clause 14.3.1.1 which deals with 10Base-T isolation requirements. The isolation requirement is specified at 1500V RMS at 50 to 60Hz for 60s, and makes a reference to IEC 60950: 1991, section 5.3.2. Looking at IEC 60950: 1991, section 5.3.2, the table indicates a working voltage of 130 V to 250V corresponding to a 1500V RMS test voltage for dielectric strength test. Now, there is a newer version of the IEC 60950: 2001 (3rd edition). In this 3rd edition, the working voltage table is different, with the following ranges:

=> 0V to 184V with an isolation test of 1000V RMS

=> 185V to 354V with an isolation test of 1500V RMS.

The issue/question that I have is the following. Given the information in the newer edition of the IEC 60950 standard, would the necessary isolation voltage for a 10Base-T Ethernet connection, per IEEE 802.3-2002 Clause 14.3.1.1 be adjusted?

---

### **Interpretation for IEEE std 802.3-2002**

The standard clearly states in item a) of subclause 14.3.1.1 '1500 V rms at 50 Hz to 60 Hz for 60 s, applied as specified in Section 5.3.2 of IEC 60950:1991.'. Since this subclause specifies a voltage and duration followed by the text 'applied as specified in Section 5.3.2 of IEC 60950' it is only the methodology specified in Section 5.3.2 of IEC 60950 that is being referenced, not the values. Hence a change in the isolation voltage specified in IEC 60950 has no effect on this particular voltage specification within IEEE Std 802.3.

# IEEE 802.3 Motion

IEEE 802.3 approves the proposed Interpretation response to the Interpretation requests 1-11/02, 5-11/02 and 6-11/02 as presented without the need for a 30 day letter ballot.

M: David Law

S: Pat Thaler

Tech 75%/Proc ~~50%~~

~~PASSED/FAILED~~

Date: 15th Nov 2001

Y: 79

N: 0

A: 1

Time: 2:06PM

**Interpretation Number:** 3-11/02 (1000BASE-T Auto-crossover)  
**Topic:** 1000BASE-T Auto-crossover  
**Relevant Clause:** 40.4.4  
**Classification:**

## **Interpretation Request**

I went through the Auto-Crossover state Machine (MDI/MDIX) of the IEEE std 802.3ab-1999 in page 62.

I found that nothing prevent the switching form MDI to MDIX or vice-versa when the link becomes up (Pass).

This is due to the fact that T\_pulse becomes false when the link is up (AN stop transmitting FLPs) and Link\_det becomes false as well because the link\_status is equal to OK (not READY). In order to lock the MDI/MDIX to the state defined before the link is UP, I believe that Link\_Det variable should be redefined to include link\_status = OK which as follow:

Link\_Det : This variable indicates linkpulse = true or Link\_status = READY or OK (OK not stated in the specs) has occurred at the receiver since the last time sample\_timer has been started.

**Interpretation Number:** 3-11/02 (1000BASE-T Auto-crossover)  
**Topic:** 1000BASE-T Auto-crossover  
**Relevant Clause:** 40.4.4  
**Classification:** Defect

## **Interpretation Request**

I went through the Auto-Crossover state Machine (MDI/MDIX) of the IEEE std 802.3ab-1999 in page 62.

I found that nothing prevent the switching form MDI to MDIX or vice-versa when the link becomes up (Pass).

This is due to the fact that T\_pulse becomes false when the link is up (AN stop transmitting FLPs) and Link\_det becomes false as well because the link\_status is equal to OK (not READY). In order to lock the MDI/MDIX to the state defined before the link is UP, I believe that Link\_Det variable should be redefined to include link\_status = OK which as follow:

Link\_Det : This variable indicates linkpulse = true or Link\_status = READY or OK (OK not stated in the specs) has occurred at the receiver since the last time sample\_timer has been started.

---

## **Interpretation for IEEE std 802.3-2002**

This represents a conflict within the standard.

A change request will be generated to resolve the conflict.

# IEEE 802.3 Motion

IEEE 802.3 approves the proposed Interpretation response to the Interpretation requests 3-11/02, [1000BASE-T Auto-crossover] as presented without the need for a 30 day letter ballot.

M: David Law

PASSED/FAILED

Y: 81

N: 0

S: B. Quackenbush Tech 75% / ~~Proc 50%~~

Date: 15th Nov 2001

A: 1

Time: 2:13PM

**Interpretation Number:** 2-11/02 (10 & 100Mb/s Carrier Detect)  
**Topic:** 10Mb/s and 100Mb/s Carrier Detect  
**Relevant Clause:** Figure 7-6 and Figure 24-14.  
**Classification:**

## **Interpretation Request**

Standard : IEEE802.3, 2000 Edition, CSMA/CD (ISO/IEC 8802-3:2000[E])

Clause: 7. Physical Signaling (PLS) and Attachment Unit Interface (AUI) specifications

Specific subsection: Figure 7-6 -PLS Input and Data\_Valid function

In the above mentioned figure,

1. In most of the states `DATA_VALID_STATUS` takes value `DATA_NOT_VALID` only and no where it takes `DATA_VALID` value. Please clarify in which states it has to be assigned to `DATA_NOT_VALID` and in which states `DATA_VALID` value.
2. In `DISCARD TRASH` state the action mentioned is to " Discard the first 15 bits received ". Is this 15 bits corresponds to Preamble bits?? How MAC will interpret about this discarding. Please clarify why it is so?

Standard : IEEE802.3, 2000 Edition, CSMA/CD (ISO/IEC 8802-3:2000[E])

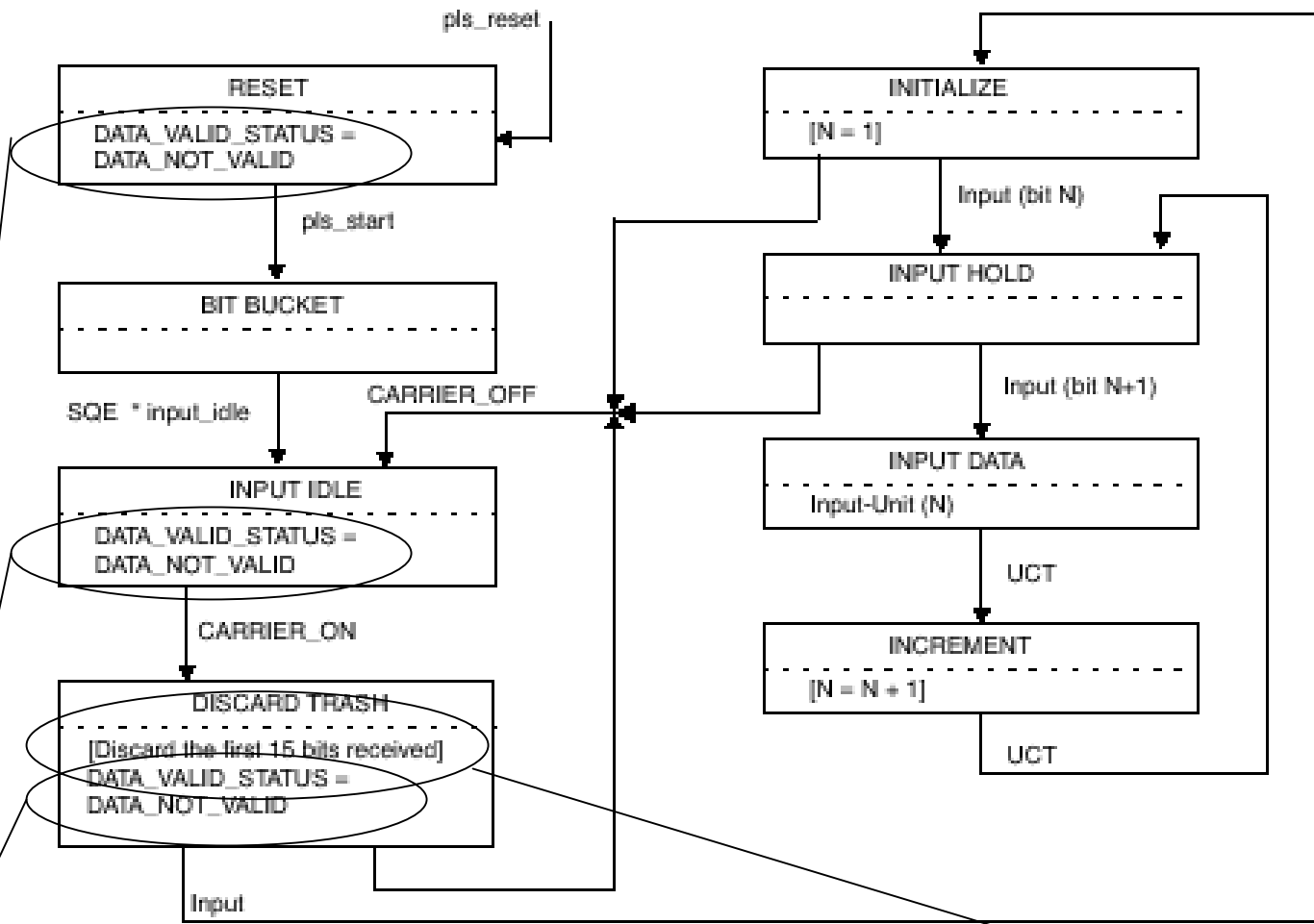


Figure 7-6 – PLS Input and Data\_Valid function

Discard Trash

DATA\_VALID\_STATUS



#### **7.2.2.1.6 DATA\_VALID\_STATUS**

The PLS sublayer sends the MAC sublayer DATA\_VALID\_STATUS whenever the PLS sublayer detects a change in receive data status. The PLS sublayer sends DATA\_VALID when it receives an *input* message from the PMA and the previous DATA\_VALID\_STATUS that the PLS sublayer sent to the MAC sublayer was DATA\_NOT\_VALID. The PLS sublayer sends DATA\_NOT\_VALID when it is not receiving an input message from the PMA and the previous DATA\_VALID\_STATUS that the PLS sublayer sent to the MAC sublayer was DATA\_VALID.

#### **4.1.2.1.2 Reception without contention**

At each receiving station, the arrival of a frame is first detected by the Physical Layer, which responds by synchronizing with the incoming preamble, and by turning on the receiveDataValid signal. As the encoded bits arrive from the medium, they are decoded and translated back into binary data. The Physical Layer passes subsequent bits up to the MAC sublayer, where the leading bits are discarded, up to and including the end of the preamble and Start Frame Delimiter.

**Interpretation Number:** 2-11/02 (10 & 100Mb/s Carrier Detect)  
**Topic:** 10Mb/s and 100Mb/s Carrier Detect  
**Relevant Clause:** Figure 7-6 and Figure 24-14.  
**Classification:** Unambiguous

The standard clearly states in subclause 7.2.2.1.6 DATA\_VALID\_STATUS ‘The PLS sublayer sends the MAC sublayer DATA\_VALID\_STATUS whenever the PLS sublayer detects a change in receive data status. The PLS sublayer sends DATA\_VALID when it receives an *input* message from the PMA and the previous DATA\_VALID\_STATUS that the PLS sublayer sent to the MAC sublayer was DATA\_NOT\_VALID. The PLS sublayer sends DATA\_NOT\_VALID when it is not receiving an input message from the PMA and the previous DATA\_VALID\_STATUS that the PLS sublayer sent to the MAC sublayer was DATA\_VALID.’ This text provides the description of where DATA\_NOT\_VALID takes the DATA\_VALID value.

The standard clearly states in subclause 3.2.1 Preamble field ‘The preamble field is a 7-octet field that is used to allow the PLS circuitry to reach its steady-state synchronization with the received frame’s timing (see 4.2.5). The standard further states in subclause 4.1.2.1.2 Reception without contention ‘At each receiving station, the arrival of a frame is first detected by the Physical Layer, which responds by synchronizing with the incoming preamble, and by turning on the receiveDataValid signal. As the encoded bits arrive from the medium, they are decoded and translated back into binary data. The Physical Layer passes subsequent bits up to the MAC sublayer, where the leading bits are discarded, up to and including the end of the preamble and Start Frame Delimiter.

**Interpretation Number:** 2-11/02 (10 & 100Mb/s Carrier Detect)  
**Topic:** 10Mb/s and 100Mb/s Carrier Detect  
**Relevant Clause:** Figure 7-6 and Figure 24-14.  
**Classification:**

Clause: 24. Physical Coding Sublayer (PCS) and Physical Medium Attachment (PMA) sublayer, type 100BASE-X Specific subsection: Figure 24-14 - Carrier Detect state diagram, Entry condition for CARRIER DETECT state

The condition specified in the above standard for entering into CARRIER DETECT state is given below

$$(\text{carrier\_status} = \text{OFF}) * (\text{r\_bits}[0] = 0) * (\text{r\_bits}[9:2] \neq 11111111)$$

Bec'z of this condition  $(\text{r\_bits}[9:2] \neq 11111111)$  check, the entry to the CARRIER DETECT state is not possible . In real time the symbol sequence is I-I-I-I-J-K i.e. when the node starts receiving symbol, the condition  $(\text{r\_bits}[9:2] = 11111111)$  only allows the entry to the CARRIER DETECT state.

Among the condition checks for  $\text{r\_bits}[9:2] = "11111111"$ ,  $\text{r\_bits}[9:2] \neq "11111111"$  which one is correct ??? Please clarify.

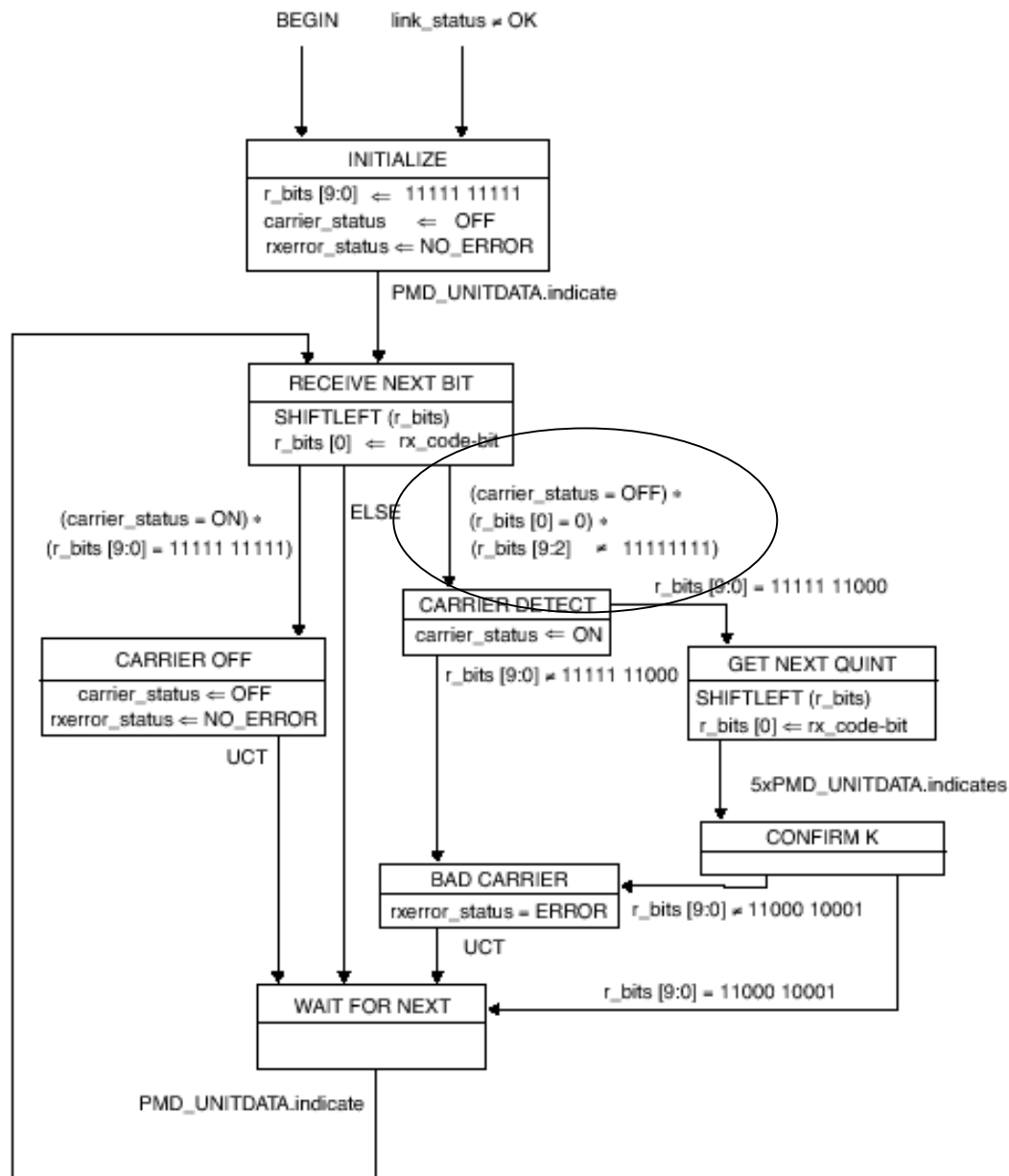


Figure 24-14—Carrier Detect state diagram

	1 1 1 0 1	F	1 1 1 1	Data F
	1 1 1 1 1	I	undefined	IDLE; used as inter-stream fill code
C O N T R O	1 1 0 0 0	J	0 1 0 1	Start-of-Stream Delimiter, Part 1 of 2; always used in pairs with K
	1 0 0 0 1	K	0 1 0 1	Start-of-Stream Delimiter, Part 2 of 2; always used in pairs with J
	0 1 1 0 1	T	undefined	End-of-Stream Delimiter, Part 1 of 2;

Hence /I/I/J/K/ = 11111 11111 11000 10001

**Interpretation Number:** 2-11/02 (10 & 100Mb/s Carrier Detect)  
**Topic:** 10Mb/s and 100Mb/s Carrier Detect  
**Relevant Clause:** Figure 7-6 and Figure 24-14.  
**Classification:** Unambiguous

This has been reviewed and there is no error present.

# IEEE 802.3 Motion

IEEE 802.3 submits the proposed Interpretation response to the Interpretation request 2-11/02 [10Mb/s and 100Mb/s Carrier Detect] for a 30 day Working Group letter ballot.

IEEE 802.3 authorises the IEEE P802.3 Interpretations Ad Hoc to conduct meetings and recirculation ballots as necessary to resolve comments received during the Working Group ballot of the response to Interpretation request 2-11/02 [10Mb/s and 100Mb/s Carrier Detect].

M: David Law

S: Tom Mathey

Tech 75%/~~Proc 50%~~

~~PASSED/FAILED~~

Date: 14th Nov 2002

Y: 69

N: 0

A: 2

Time: 2:22PM

# Request 4-11/02

**Interpretation Number:** 4-11/02 (Link Aggregation Control Protocol)  
**Topic:** Link Aggregation Control Protocol  
**Relevant Clause:** 43  
**Classification:**

## **Interpretation Request**

My request for interpretation pertains to Clause 43 (Link Aggregation) of IEEE 802.3-2002, more specifically to the PICS of the aforementioned section. After having read Clause 43 and its PICS, a doubt subsists in my mind as to whether a vendor **MUST** implement LACP in order to claim conformance with Clause 43 of IEEE 802.3-2002. For instance, if only "manual" aggregation is implemented as suggested in 43.2.1 paragraph e on page 285 of Section 3, can the vendor still claim conformance? The PICS seem to leave no room for not checking LACP as a requirement.

I would appreciate your authoritative answer on the subject.

# New request 7-11/02

I would like the TF to interpret this statement:

## 52.9.10.2 VECP

The test signal includes vertical eye closure and high probability jitter components. For his test, these two components are defined by peak values that include all but 0.1% for VECP and all but 1% for jitter of their histograms. I believe that the statement 'include all but x%' can be understood in several ways, at least three of them perfectly logical, and leading to different results.

To wit:

Reading(1): exclude the x% (of the samples in the histogram) from the histogram of the eye, removing in such a way that you maximize the PkPk value

Reading(2): as in (1) but also keep the count of samples removed from the proximal\* trace equal to the count of samples removed from the distal\* trace



Reading(3): exclude  $x\%$  (of the samples in the histogram) from the histogram of the proximal\* trace, symmetrically (equal nr from high and from low extreme); then do likewise for the distal\* trace, then measure the opening.

(\*distal, proximal are generalized terms for the left and right in horizontal sense or bottom and top in vertical sense.)

The difference is important, for example if only the high level has significant spurious noise (laser oscillation, whatever) Reading(1) will lead to an possibly much better (depends on distribution) VECP result.

Reading(3) is the same as Reading(2) if the proximal and distal traces have the same nr of hits, if they don't Reading(2) is mathematically shaky. (e.g. crashes for extreme inequality, e.g. if one trace is sparse).

I don't particularly care which reading is selected; perhaps I would recommend Reading(3) as most prudent, it also is easy to implement with two histograms.

I do care, however, that we picks one ; this doesn't limit the design freedom, which would not be desirable, it only limits the specmanship freedom, which is why we have the standard.

# Standards Board Operations Manual proposed Interpretations amendments

- Charging
  - Discourage Interpretations
    - Some point out defects which is very valuable
  - May raise expectation of constancy
  - Where does the revenue go
  - Implicit that there will be a charge
    - Short timescale action required to avoid charge
- Timescales
  - Do not believe it is compatible with the 802.3 Interpretations process

# IEEE 802.3 Motion

IEEE P802.3 requests that IEEE P802 EC convey the issues listed on the slide to proCom.

M: Pat Thaler

~~PASSED/FAILED~~

Y: 69

N: 0

S: Alan Flatman

A: 1

Tech 75%/~~Proc 50%~~

Date: 14th Nov 2002

Time: 2:31PM

# IEEE P802.3 Maintenance

November 11th, 2002

Kauai, HI

David Law

# Maintenance Requests Status

- 106 Maintenance requests
- 7 new Maintenance requests since July
- Current status -

Awaiting ballot (802.3aj/D1.0)	19
Awaiting clarification	3
Errata	1
To be categorised	7
Review by Technical experts	0
Withdrawn	5
Published	70

# IEEE P802.3aj Maintenance #7

- Met 4th October 2002 in New Orleans
  - Review requests
  - Selected requests to be included in 802.3aj
- Draft D1.0 pre-circulated prior to this meeting
  - Excepting to request Working Group ballot on Thursday
  - Requests added will be presented as textural changes prior to requesting ballot

# Plans for the week

- Maintenance committee meeting this week
  - Requests
    - Review status of existing revision requests
    - Classify new revision requests
  - IEEE P802.3aj
    - Review pre-circulated draft
    - Consider inclusion of new requests

# Maintenance Web Information

- The Maintenance web site is at:

**<http://www.ieee802.org/3/maint/index.html>**

- The Maintenance request form is available at:

**[http://www.ieee802.org/3/private/maint/revision\\_request.html](http://www.ieee802.org/3/private/maint/revision_request.html)**

Username: \*\*\*\*\*

Password: \*\*\*\*\*

Password **i**s case sensitive



# IEEE P802.3 Maintenance

November 14th, 2002

Kauai, HI

David Law

# Activities this week

- Met Tuesday afternoon
  - Reviewed open Maintenance Requests
  - Review IEEE P802.3aj/D1.0
    - Chartered editor to produced D2.0

# IEEE P802.3aj/D2.0

- Changes
  - Spurious copy of state machine in 1078 removed
  - ‘meters’ changes to ‘m’ in 1080
  - Various minor editorials
- Additions
  - 1083 - 1000BASE-T state machine variable clarification
  - 1098 - Note that maintenance no longer performed on deprecated MAUs/PHYs
  - 1099 - Incorrect register bits reference
  - 1103 - Register bit width error in table
  - 1104 - Correction to Auto MDI/MDIX

# IEEE P802.3aj

## Plans for Completion

- Request Working Group Ballot
- Meet at January Interim meeting in Vancouver
  - Review and resolve Working Ballot comments.
- Recirculation Ballot (if required).

# IEEE 802.3 Motion

IEEE 802.3 authorises IEEE P802.3aj/D2.0 to be forwarded to Working Group Ballot.

IEEE 802.3 authorises the IEEE P802.3aj Task Force to conduct meetings and recirculation ballots as necessary to resolve comments received during the Working Group ballot.

IEEE 802.3 requests that the P802 LMSC Executive Committee requests formation of a LMSC Sponsor Ballot pool for IEEE P802.3aj.

M: David Law

S: Tom Dineen

Tech 75%/Proc 50%

~~PASSED/FAILED~~

Date:

Y: 79

N: 1

A: 0

Time:

# Maintenance Requests Status

- 106 Maintenance requests
- 7 new Maintenance requests since July
- Current status -

Awaiting ballot	24
Awaiting clarification	1
Errata	1
To be categorised	0
Review by Technical experts	0
Withdrawn	7
Published	70

# Request 1100/1101

-----+  
| 8802-3/802.3 REVISION REQUEST |  
+-----+

DATE: October 24, 2002  
NAME: Doug Coleman  
COMPANY/AFFILIATION: Corning Cable Systems  
E-MAIL: doug.coleman@corning.com

REQUESTED REVISION: Insert text to allow use of TIA/EIA-568 B.3 as an alternative performance Standard for the media dependent interface connector requirements.

STANDARD: IEEE 802.3

CLAUSE NUMBER: 52.14.14

CLAUSE TITLE: Medium Dependent Interface (MDI) requirements

PROPOSED REVISION TEXT:

When the MDI is a remateable connection it shall meet the interface performance specifications of TIA-568-B.3: Optical fiber cabling component standard or the interface performance specifications of:

- a) IEC 61753-1-1, Fibre optic interconnecting devices and passive component performance standard - Part 1-1: General and guidance - Interconnecting devices (connectors);
- b) IEC 61753-021-2 - Fibre optic passive components performance standard - Part 021-2: Fibre optic connectors terminated on single mode fibre for Category C - Controlled environment;
- c) IEC 61753-022-2 - Fibre optic passive components performance standard - Part 022-2: Fibre optic connectors terminated on multimode fibre for Category C - Controlled environment.

# Request 1100/1101 (con't)

## 52.14.4 Medium Dependent Interface (MDI) requirements

The 10GBASE-R and 10GBASE-W PMD is coupled to the fiber optic cabling at the MDI. The MDI is the interface between the PMD and the “fiber optic cabling” (as shown in Figure 52–14). Examples of an MDI include the following:

- a) Connectorized fiber pigtail;
- b) PMD receptacle.

When the MDI is a connector plug and receptacle connection, it shall meet the interface performance specifications of the following:

- a) IEC 61753-1-1—Fibre optic interconnecting devices and passive component performance standard—Part 1-1: General and guidance—Interconnecting devices (connectors);
- b) IEC 61753-021-2—Fibre optic passive components performance standard—Part 021-2: Fibre optic connectors terminated on single mode fibre for Category C—Controlled environment;
- c) IEC 61753-022-2—Fibre optic passive components performance standard—Part 022-2: Fibre optic connectors terminated on multimode fibre for Category C—Controlled environment.

NOTE—Compliance testing is performed at TP2 and TP3 as defined in 52.4.1, not at the MDI.



# Request 1100/1101 (con't)

- IEEE P802.3ae Changes to 1.3

## 1.3 Normative references

*Insert the following references in alphabetic order into the reference list in 1.3:*

IEC 61753-022-2, Performance standard—Part 022-2: Fibre optic connectors terminated on multimode fibre for Category C—Controlled environment.<sup>2</sup>

---

<sup>1</sup>EIA publications are available from Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado 80112, USA (<http://global.ihs.com/>). JEDEC publications are available from JEDEC, 2001 I Street NW, Washington, DC 20006, USA.

<sup>2</sup>IEC 61753-022-2 is under development and not available at this time. Its anticipated publication date is April 2003. Until the IEC standard is available, users are encouraged to reference ANSI/TIA/EIA-568-B.3-2000 in its place.

<sup>3</sup>INCITS publications are available from <http://www.incits.org>.

- Requested text is already present in standards
  - A note but policy is to reference International standards
- Maintenance Task Force decided to reject the requests

# Request 1102

```
+-----+
|               8802-3/802.3 REVISION REQUEST               |
+-----+
```

DATE: 25 Oct 2002  
NAME: Thomas K Joergensen  
COMPANY/AFFILIATION: Vitesse Semiconductor Corporation A/S  
E-MAIL: tkj@vitesse.com

REQUESTED REVISION:  
STANDARD: IEEE Std. 802.3ae-2002  
CLAUSE NUMBER: 46.4  
CLAUSE TITLE: XGMII electrical characteristics

PROPOSED REVISION TEXT:

It is stated in 46.4, page 293, line 18-19 (P802.3ae/D5.0), that the XGMII timing measurements should be measured at the XGMII driver output. Should the measured timing not be done with reference to the VOH(ac) and VOL(ac) signal levels?

RATIONALE FOR REVISION:

The JEDEC HSTL standard defines a VOH(ac) and VOL(ac). These are not used for timing reference in either the HSTL nor the XGMII standard (uses VIN(ac)).

IMPACT ON EXISTING NETWORKS:

- Originally just an e-mail question
  - Decided this should be re-submitted as an Interpretations

# IEEE 802.3 Motion

IEEE P802.3 affirms the resolutions to  
Maintenance requests 1100, 1101 and 1102 as  
proposed by the Maintenance Task Force.

M:David Law

S:Brad Booth

Tech 75%/Proc ~~50%~~

PASSED/FAILED

Date:

Y: 78

N: 0

A: 1

Time:

# Maintenance Web Information

- The Maintenance web site is at:

**<http://www.ieee802.org/3/maint/index.html>**

- The Maintenance request form is available at:

**[http://www.ieee802.org/3/private/maint/revision\\_request.html](http://www.ieee802.org/3/private/maint/revision_request.html)**

Username: \*\*\*\*\*

Password: \*\*\*\*\*

Password is case sensitive

IEEE 802.3  
Interpretations Report

November 11th, 2002

Kauai, HI

David Law

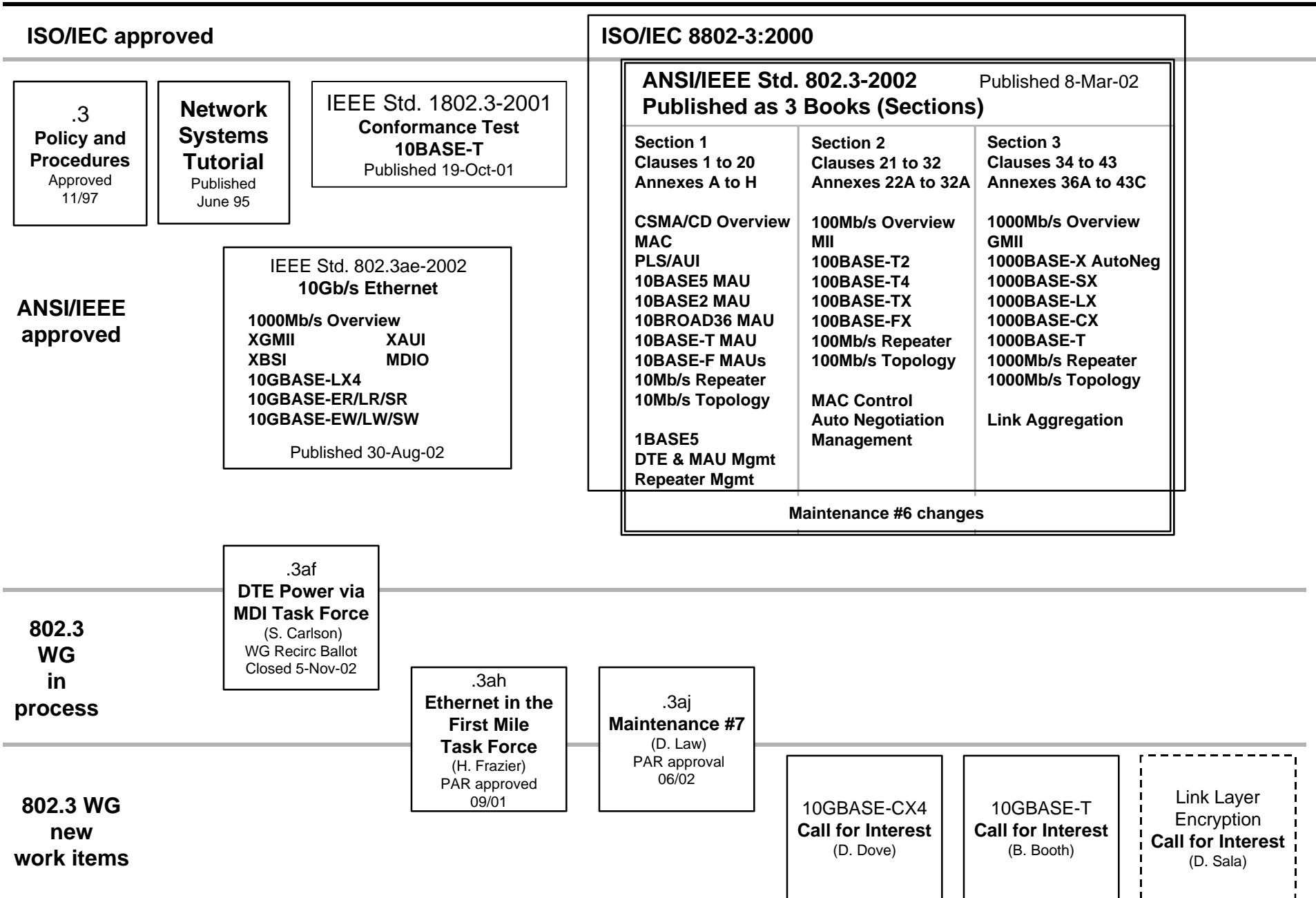
# Interpretations Status

- 6 new Interpretations received
  - 1-11/02 - 1000BASE-X Auto-negotiation
  - 2-11/02 - 10Mb/s and 100Mb/s Carrier Detect
  - 3-11/02 - 1000BASE-T Auto-crossover
  - 4-11/02 - Link Aggregation Control Protocol
  - 5-11/02 - Clause 43 SNMP MIB
  - 6-11/02 - 10BASE-T isolation requirements
- Available on Interpretations area of web site
  - Announced 1-11/02 to 4-11/02 on reflector
  - Hard copies for those interested

# Plans for the week

- Meet this week
  - Review new requests and draft responses
  - Also review Standards Board Operations Manual proposed Interpretations amendments
    - Issues with new timescale requirements, optional ability to charge
- Present responses to Closing 802.3 Plenary
  - Three way vote
    - Approve proposed response
    - Reject proposed response
    - Send proposed response out for Working Group Ballot

# IEEE Project 802.3 Working Group Standards Status November 11th, 2002





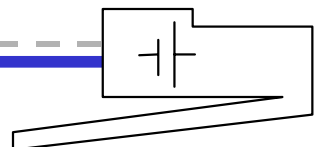
# **DTE Power via MDI**

## **802.3af Task Force Opening Plenary Meeting Report November 11, 2002 Kauai, HI**

Steve Carlson, TF Chair  
scarlson@esta.org

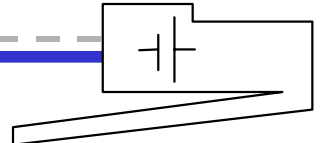
**November 11 – 15, 2002**

**DTE Power via MDI  
Task Force**



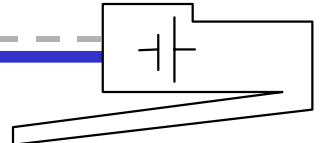
# November Plenary Meeting

- Interim meeting in Chelmsford, MA
  - August 21 – 23, 2002
  - Hosted by CDT/Mohawk
  - Finished comment resolution to D3.1
  - Posted comment database to the Web
  - Created D3.2 and did 20 day recirc



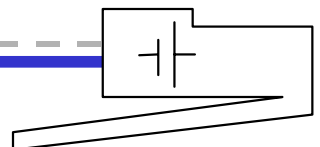
# November Plenary Meeting

- Interim meeting in New Orleans, LA
  - October 1 – 3, 2003
  - Hosted by EFMA
  - Received 207 comments, 100 E, 80 T, 27 TR to D3.2
  - All comments resolved
  - Posted comment database to the Web
  - Created D3.3, 15-day recirc



# November Plenary Meeting

- D3.3 recirc closed 5 November with 9 editorial comments
- No open TRs
- Other work
  - Presentation to IEEE1394 on 10/17/02 by Geoff Thompson



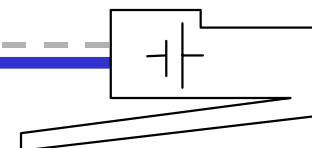
# Plans for the Week

The DTE Power via MDI TF will meet on Tuesday and Wednesday from 8:30AM to 5:30PM, and Thursday 8:30AM to noon in Koloa III at the Sheraton.

Goals for the week:

- Presentations/Comment Resolution
  - Finish comment resolution to D3.3 (9 editorial comments)
  - Prepare for Sponsor Ballot
  - Work on response to Liaison Letter from SC25 WG3 on infrastructure requirements for wireless access node and other device requiring remote power.
  - Create D4.0 draft for Sponsor Ballot
  - Request 802.3 WG to go to Sponsor Ballot at 802.3

Closing Plenary



# Plans for the Week

## Future Meetings

January Interim – Hotel Vancouver, Vancouver, BC

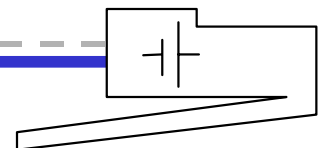
January 7 - 9, 2003

Co-locate with 802.3ah, 802.1

March Plenary – DFW Hyatt, Irvine, TX

March 10 – 14, 2003

<http://grouper.ieee.org/groups/802/meeting/future.pdf>



# Task Force Info

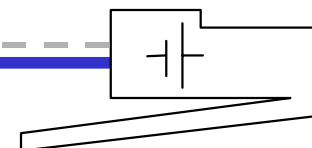
The DTE Power via MDI Task Force maintains up-to-date information at:

<http://www.ieee802.org/3/af/index.html>

All archive information from earlier meetings are available. Information on subscribing to the e-mail reflector, proper usage thereof, and presentation guidelines are here. Drafts may be found in the private area.

login: 802.3af

password: no\_warT



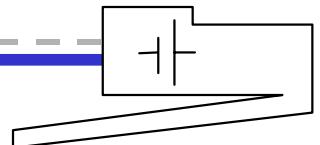
# **DTE Power via MDI**

## **802.3af Task Force Closing Plenary Meeting Report November 14, 2002 Kauai, HI**

Steve Carlson, TF Chair  
scarlson@esta.org

**November 11 – 15, 2002**

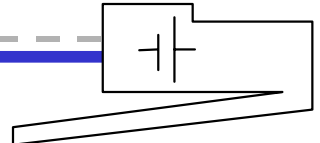
**DTE Power via MDI  
Task Force**





# November Plenary Meeting

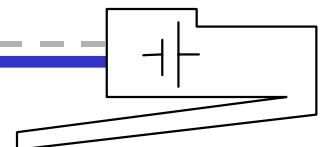
- Resolved 9 editorial comments
- Added OIDs to Annex 30A
- Created D4.0 for Sponsor Ballot
- Draft response to SC25 WG liaison letter



# Plans for the Week

Goals for the week:

- Presentations/Comment Resolution
  - Finish comment resolution to D3.3 (9 editorial comments) DONE!
  - Prepare for Sponsor Ballot DONE!
  - Work on response to Liaison Letter from SC25 WG3 on infrastructure requirements for wireless access node and other devices requiring remote power. DONE!
  - Create D4.0 draft for Sponsor Ballot DONE!
  - Request 802.3 WG to go to Sponsor Ballot at 802.3 Closing Plenary



# November Plenary Meeting

Move that the IEEE P802.3af task force request IEEE P802.3 Working Group to forward Draft 4.0 to Sponsor Ballot, and authorize meetings and recirculation ballots as required with the goal of pre-submission to RevCom in March.

Moved by Steve Carlson on behalf of P802.3af Task Force

Technical 75%  
Date: 11-Nov-2002  
Time:

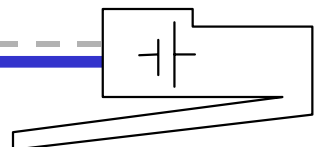
Y: 90

N:0

A:1

November 11 – 15, 2002

**DTE Power via MDI  
Task Force**

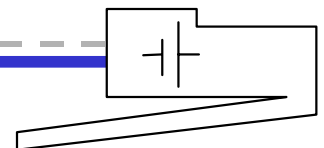


# November Plenary Meeting

SC25 WG Liaison letter on “infrastructure requirements for wireless access nodes and devices requiring power” response

November 11 – 15, 2002

**DTE Power via MDI  
Task Force**



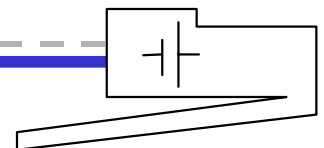
# November Plenary Meeting

## Future Meetings

January Interim – Hotel Vancouver, Vancouver, BC  
January 7 - 9, 2003  
Co-locate with 802.3ah, 802.1

March Plenary – DFW Hyatt, Irvine, TX  
March 10 – 14, 2003

<http://grouper.ieee.org/groups/802/meeting/future.pdf>



# Task Force Info

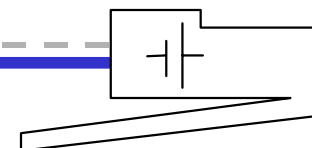
The DTE Power via MDI Task Force maintains up-to-date information at:

<http://www.ieee802.org/3/af/index.html>

All archive information from earlier meetings are available. Information on subscribing to the e-mail reflector, proper usage thereof, and presentation guidelines are here. Drafts may be found in the private area.

login: 802.3af

password: no\_warT

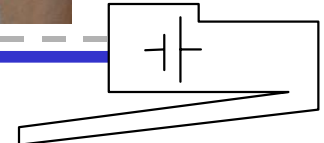


# Task Force Info



November 11 – 15, 2002

**DTE Power via MDI  
Task Force**



---

**IEEE 802.3ah**  
**Ethernet in the First Mile**  
**Task Force**  
Report to 802.3

Sheraton Kauai Resort  
14-November-2002

**Ethernet in the First Mile**  
**IEEE 802.3ah Task Force**



# Agenda

---

- **Report of activities this week**
  - FEC
  - Optics
  - P2MP
  - OAM
  - Copper
- **Liaison letters**
  - ITU-T Q12/15
  - ITU-T Q2/15
  - ITU-T Q4/15
  - ETSI TM6
  - T1E1.4
- **Vancouver meeting announcement**

# FEC

---

- Reviewed results of MPN testing done at Zonu and CDR lock time IOL
- Approved motion to add an FEC option to the 1 Gig P2MP PMD Phys based on the following presentations:  
khermosh\_general\_1\_0702.pdf as further elaborated in  
khermosh\_fec\_1\_0902.pdf.

**Rennie/Bartur 64/3/24 Approved**

- methods to improve efficiency require further study.

# Optics

---

- **Adopted resolutions to 334 comments (!)**
- **Agreed to produce draft 1.2 based on 1.1 + comments**
- **Considered timing parameters for burst mode PMDs for PON. Straw poll to decide between**
  - A) Tight parameters (a la FSAN) 22**
  - B) Loose parameters (a la 802.3z) 7**
  - C) Tight in ONU Tx, Loose in OLT Rx 2**
  - D) Specify parameters for startup, let operational parameters be “discovered” 35**
- **Motion to choose option D - 50/15/30 (ah) 41/15/20 (.3)**
- **Adopted much improved naming convention 74/0/10**

# Naming

- 100M    Dual Fiber: 100BASE-LX10    100BASE-LX10  
          BiDi: 100BASE-BX10            100BASE-BX10-U  
          BiDi: 100BASE-BX10            100BASE-BX10-D
- 1G      Dual Fiber: 1000BASE-LX10    1000BASE-LX10  
          BiDi: 1000BASE-BX10        1000BASE-BX10-U  
          BiDi: 1000BASE-BX10        1000BASE-BX10-D
- EPON    10km: 1000BASE-PX10            1000BASE-PX10-U  
          10km: 1000BASE-PX10        1000BASE-PX10-D  
          20km: 1000BASE-PX20        1000BASE-PX20-U  
          20km: 1000BASE-PX20        1000BASE-PX20-D

# P2MP

---

- **Adopted resolutions to 249 comments**
- **5 unresolved**
- **Agreed to produce draft 1.2 based on 1.1 + comments**
- **Will reproduce unresolved comments in draft 1.2**

# OAM

---

- **Adopted resolutions to 269 comments (!)**
- **Agreed to produce draft 1.2 based on 1.1 + comments**

# Copper

---

- **Agreed to resolutions for 152 comments**
- **21 unresolved comments (5 TRs, 13 dups, 3 other)**
- **Agreed to produce draft 1.2 based on 1.1 + comments**
- **Have not yet adopted clause 63 (long reach)**
  - **shootout in Vancouver**
  - **will “publish” draft 1.1a of clause 63 separately from 1.2**
- **No resolution on encapsulation (HDLC vs GFP vs 64/65B)**
  - **shootout in Vancouver**

# Plan for next draft

---

- **Editors will produce draft 1.2 (and 1.1a) by 27-November,**
- **“Published” on private web site by 2-December**
- **Comment deadline will be 27-December (25 days)**
- **Responses posted by 3-January**



# Liaison letters

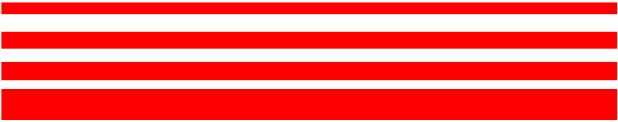
---

- ITU-T Q12/15
- ITU-T Q2/15
- ITU-T Q4/15
- ETSI TM6
- T1E1.4

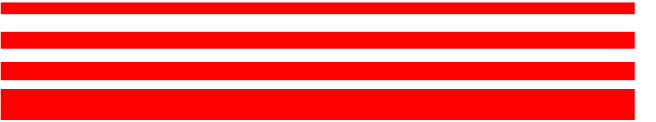
# Future meetings

---

- **6-9 Jan, 2003, Vancouver, BC - Fairmont Hotel Vancouver**  
*hosted by the IEEE 802 LAN/MAN Standards Committee*
- **10-13 March, 2003, Dallas, TX - IEEE 802 Plenary meeting**
- **12-16 May, 2003, Seoul, South Korea, Hosted by Infineon**
- **7-10 July, 2003, San Francisco, CA - IEEE 802 Plenary meeting**
- **??-?? September, 2003, Italy (city t.b.d.) - Hosted by Aethra**



**Ethernet in the First Mile**  
**IEEE 802.3ah Task Force**



DATE: 2002- Nov-14  
TO: ISO/IEC JTC 1/SC 25/WG3  
FROM: IEEE 802.3

Subject: Liaison Report from IEEE 802.3 to ISO/IEC JTC 1/SC 25/WG3 on infrastructure requirements fore wireless access nodes and devices requiring remote power

The members of the IEEE 802.3af DTE Power Task force and the 802.3 Working Group are pleased that SC25 WG3 are considering a project to address the issues raised by new and non-traditional powered network devices. The cabling must be as specified in 802.3 Ethernet (and have an IEC 60603-7 connector.)

### **Wireless Access Points**

Wireless access points are usually mounted on the ceiling of a workspace (generally in the center of the room) and will require a telecommunications outlet that will also carry power. In this case, a separate AC power circuit is not required. Wireless access points are generally deployed on 30-meter “grid” spacing, but this is dependant upon many factors.

In some cases, wireless access points are mounted above a drop ceiling and are not visible. In some countries, it may be that plenum cabling guidelines must be followed.

### **Other Remotely Powered Devices**

*Telephones:* IP wall-mounted telephones are typically placed 150 cm. above the floor. In most cases, the telephone covers the telecommunications outlet.

*Lighting Controls:* Lighting control devices are mounted in “back boxes” (metal or plastic electrical boxes) placed within a wall. The telecommunications outlet would be inside this wall box. The control device is then installed in the box by connecting the network cable, and affixing the control to the wall box with fasteners. Lighting controls are generally mounted at similar heights as telephones. The exact mounting positions may vary according to local or national codes.

*Building Controls:* Thermostats and other heating-ventilating and air conditioning (HVAC) controls are usually mounted in a similar fashion to lighting controls.

*Audio:* Audio control panels are usually mounted in a similar fashion to lighting controls. Public address loudspeakers are usually mounted in the drop ceiling and will have requirements similar to wireless access points.

*Security Devices:* Security Web cameras and motion sensors have requirements similar to those of wireless access points. Concealment may be especially important, as well as

providing security for the cabling itself. Security controls (access keypads) are usually mounted in a similar fashion to lighting controls.

*Signage:* Exit signs are mounted on the wall above exit doors. The exact size, shape, and location are generally set by local or national codes. Informative signs may be mounted in various wall locations, or be hung from the ceiling on mounting hardware. Wall-mounted signs will typically cover the telecommunications outlet. Ceiling-mounted signage will be similar to wireless access points. Emergency lighting is usually wall-mounted in a similar fashion to exit signs.

We hope this information has been useful to your group.

Regards,

Robert Grow  
Chair, IEEE 802.3 CSMA/CD Working Group

Steve Carlson  
Chair, IEEE 802.3af DTE Power via MDI Task Force

---

**Source:** IEEE P802.3ah EFM Task Force  
**Title:** Notification Of G.etna Activity

---

**LIAISON STATEMENT**

**To:** ITU-T SG15  
**Approval:** Kauai meeting, November 11-15, 2002  
**For:** Q.12/15 – Action  
**Deadline:** January 2003

---

**Contact:** Howard Frazier, EFM TF chair                      Email: [millardo@dominetsystems.com](mailto:millardo@dominetsystems.com)  
**Contact:** Matt Squire, EFM OAM STF chair                      Email: [msquire@hatterasnetworks.com](mailto:msquire@hatterasnetworks.com)

---

***Introduction***

Thank you for providing the information regarding the G.etna effort. At the time of our meeting, we were able to review the liaison letter but were unable to look at the G.etna draft itself. We look forward to providing feedback in the future.

The Ethernet in the First Mile (EFM) Task Force would like to keep you informed of the work in EFM. To assist you in the review of this work, we have a public website available at <http://www.ieee802.org/3/efm/public>, and are willing make our most recent draft available [1].

***Proposal***

We invite Q.12/15 to review the EFM draft specification and provide us comments. Also, please contact us in the future if specific issues arise during your work on which you would like our input.

***Attachments***

[1] EFM Draft D1.2

---

## 802.3 Response to New Mobility PARs

Both the IEEE 802.16 and the MBWA PARs cover “mobility” in their scope. By their own admission, they admit to having “some overlap” (Roger Marks 11/13).

- 802.16 has received comments that their scope is too broad
- MBWA is targeted to provide an “All IP” network and to help Resolve an IETF deadlock

# Motion # 1

Move that 802.3 Working Group Direct the 802.3 Chair to reject the ECSG MBWA PAR and 802.16e PAR.

Moved: Brand

S: Linder

Y: 51

N: 0

A: 17



Status: approved by IEEE802.3ah

To: Rick Townsend, T1E1 Chair  
Ed Eckert, T1E1 Vice Chair  
Massimo Sorbara, T1E1.4 Chair  
Tom Starr, T1E1.4 Vice Chair  
Members of Working Group T1E1.4

**Subject: Update on the progress of the Ethernet in the First Mile Copper Sub Task Force**

Dear Chairmen, Members of Working Group T1E1.4,

The IEEE 802.3ah "Ethernet in the First Mile" Task Force held its ninth meeting this week (November 11-14) in Po'ipu, HI. The Task Force is continuing the review process for our draft that references the T1E1.4 Trial Use VDSL standard (T1.424/Trial-Use) and ITU-T Recommendation G.993.1.

During this meeting, the IEEE 802.3 Working Group discussed a change to the Task Force timeline. The Working Group did not adopt a new timeline at this time.

The Task Force continues to work towards a timely resolution of our open issues, giving due weight to the linecode selection process in T1E1.4. In order to facilitate the initiation of an 802.3 Working Group ballot on P802.3ah in July, 2003, we respectfully request that T1E1.4 consider accelerating the schedule for the VDSL line code decision prior to July, 2003.

We continue to encourage liaison on this matter and we welcome the cross-membership participation in the process.

Regards,

Howard Frazier, IEEE 802.3ah Chair  
Hugh Barrass, IEEE 802.3ah Copper STF Chair  
Michael Beck, acting liaison IEEE 802.3-T1E1.4

Status: Approved by IEEE802.3ah

To: Manfred Gindel, ETSI TM6 Chairman  
Members of ETSI TM6

**Subject: Update on the progress of the Ethernet in the First Mile Copper Sub Task Force**

Dear Mr. Chairman and Members of ETSI TM6,

The IEEE 802.3ah Ethernet in the First Mile Task Force wishes to thank you for the information provided in your liaison letter of November 8, 2002, and welcomes the proposed cooperation between our two committees.

The work of the Copper Sub Task Force is based on the following objectives:

- [1] PHY for single pair non-loaded voice grade copper, distance  $\geq 750\text{m}$  and speed  $\geq 10\text{Mbps}$  full-duplex
- [2] PHY for single pair non-loaded voice grade copper, distance  $\geq 2700\text{m}$  and speed  $\geq 2\text{Mbps}$  full-duplex
- [3] Include an optional specification for combined operation on multiple copper pairs
- [4] The point-to-point copper PHY shall recognize spectrum management restrictions imposed by operation in public access networks, including:
  - Recommendations from NRIC-V (USA)
  - ANSI T1.417-2001 (for frequencies up to 1.1MHz)
  - Frequency plans approved by ITU-T SG15/Q4, T1E1.4 and ETSI/TM6

The Task Force is currently in the review stage for our draft. The candidate PHY specifications meeting the short-reach objective [1] reference the T1E1.4 Trial Use VDSL standard (T1.424/Trial-Use), [ETSI TS101 270-1/2](#) and ITU-T Recommendation G.993.1. The two candidate PHY specifications for the long-reach objective [2] reference ITU-T Recommendations G.992.3 and G.991.2.

In order to meet your regulatory and compatibility concerns, we will **consider adding** references to relevant ETSI TM6 standards. We would like to ask ETSI TM6 to grant the members of our Task Force access to these documents. If you can provide us with electronic copies, we will make them available to our members through our password-protected website.

Regards,

Howard Frazier, IEEE 802.3ah Chair  
Hugh Barrass, IEEE 802.3ah Copper STF Chair  
Michael Beck, acting liaison IEEE 802.3-T1E1.4

Kauai, HI, 11-14 November 2002

SOURCE: IEEE EFM Task Force  
TITLE: Communication to ITU-T Q4/15 from IEEE P802.3ah Ethernet in the First Mile Task Force  
REFERENCE: Communication Statement sent from ITU-T Q4/15 21-25 October 2002  
Rapporteur meeting to IEEE P802.3ah

---

**COMMUNICATION STATEMENT**

TO: Richard Stuart, Q4/15 Rapporteur, rlstuart@ieee.org

COPY: Bob Grow, IEEE 802.3 Chair, bob.grow@intel.com  
Paul Nikolich, IEEE 802 Chair, p.nikolich@ieee.org  
Howard Frazier, IEEE 802.3ah Task Force Chair; millardo@dominetsystems.com  
Hugh Barrass, IEEE 802.3ah Copper Track Chair, hbarrass@cisco.com  
Frank Effenberger, ITU-T SG15 Representative to IEEE 802.3ah,  
feffenberger@quantumbridge.com

APPROVAL: Agreed to at IEEE 802.3ah EFM plenary meeting, Kauai, 14 November 2002  
FOR: Information  
DEADLINE: N/A  
CONTACT: Barry O'Mahony, 802.3ah representative to ITU-T Q4/15,  
barry.omahony@intel.com

---

The IEEE 802.3ah EFM Task Force has received the Communication Statement from your October 2002 meeting.

We welcome your suggestion that we develop a proposal for a TPS-TC, to be incorporated into revised DSL Recommendations, that fulfill the requirements we enumerated in our previous communication. Tentatively, we intend to forward a proposal to you prior to your July Rapporteur Group meeting.

We look forward to continued communication and cooperation between our two groups.

## **802.3 Motion**

**Request that the chairman of the IEEE 802 LMSC transmit the following letter concerning P1541 to the secretary of the IEEE-SA Standards Board**

**Should 802 not approve this letter it will be appropriately edited and sent as a 802.3 position.**

**M: Frazier**

**S:**

15-November-2002

Judith Gorman  
Secretary, IEEE-SA Standards Board  
445 Hoes Lane  
P.O. Box 1331  
Piscataway, NJ 08855-1331

Dear Ms. Gorman,

The members of the IEEE 802 LAN/MAN Standards Committee are aware of the decision pending at the IEEE-SA Standards Board regarding the approval of IEEE P1541 Draft Standard for Prefixes for Binary Multiples. We have several concerns with this draft standard that we wish to bring to your attention.

Our primary concern is with the breadth of review that has been given to this draft. We understand that the sponsor ballot group for P1541 consisted of 16 individuals, representing the interest categories of User, Academic, General Interest, and Government, with no representation in the Producer interest category. We believe that producers of information technology components and systems are materially interested in the subject matter of P1541, and should have been represented in the sponsor ballot group.

We believe that adoption of P1541 will have wide ranging implications for the information technology industry, and will have a broad effect on information technology standards. There may be unintended and unanticipated effects that are detrimental to a particular standard or a particular segment of the industry.

Furthermore, it appears that there are alternative means that can be employed to improve the precision of communications involving binary multiples. We believe that these alternatives should be given consideration.

Therefore, we respectfully suggest that the IEEE-SA Standards Board consider approving P1541 as a 2 year, Trial Use standard. We believe that this will encourage materially interested parties to comment on P1541, and participate in the process of developing a standard that will have broader support in the information technology industry.

Sincerely,

Paul Nikolich  
Chair, IEEE 802 LMSC

IEEE 802 Response to ITU-T SG15  
Re: Question 2/15

To: David Faulkner, Rapporteur, ITU-T Q2 /15  
From: Paul Nikolich, Chair IEEE 802  
Copy: Robert Grow, Chair IEEE 802.3  
Howard Frazier, Chair IEEE P802.3ah  
Frank J. Effenberger, Liaison, SG15

Response to Liaison Statement, 24 Oct 2002: Question 2/15

Dear Dr. Faulkner,

Thank you for your liaison letter and recommendations regarding optical specifications for Ethernet in the First Mile.

At the November, 11-14, 2002 meeting of the Ethernet in the First Mile Task Force (IEEE 802.3ah), we reviewed comments against draft 1.1 of P802.3ah Ethernet in the First Mile. As part of this review, specific comments were received from the participants of the Task Force to modify power levels for Point to Multipoint optics and to modify the “burst mode” timing parameters.

During resolution to these comments, the recommendations in document BM-14R1 were discussed. The committee adopted changes for power level recommendations and we left the decision regarding timing parameters for a future date.

We are currently editing Draft 1.2 of P802.3ah, and we will make a copy available to you as soon as it is ready.

Sincerely,

Paul Nikolich

# **TIA-TR42 Liaison**

**Engineering Committee on User Premises  
Telecommunications Cabling Infrastructure**

**November 2002,  
Kaua'i, Hawaii**

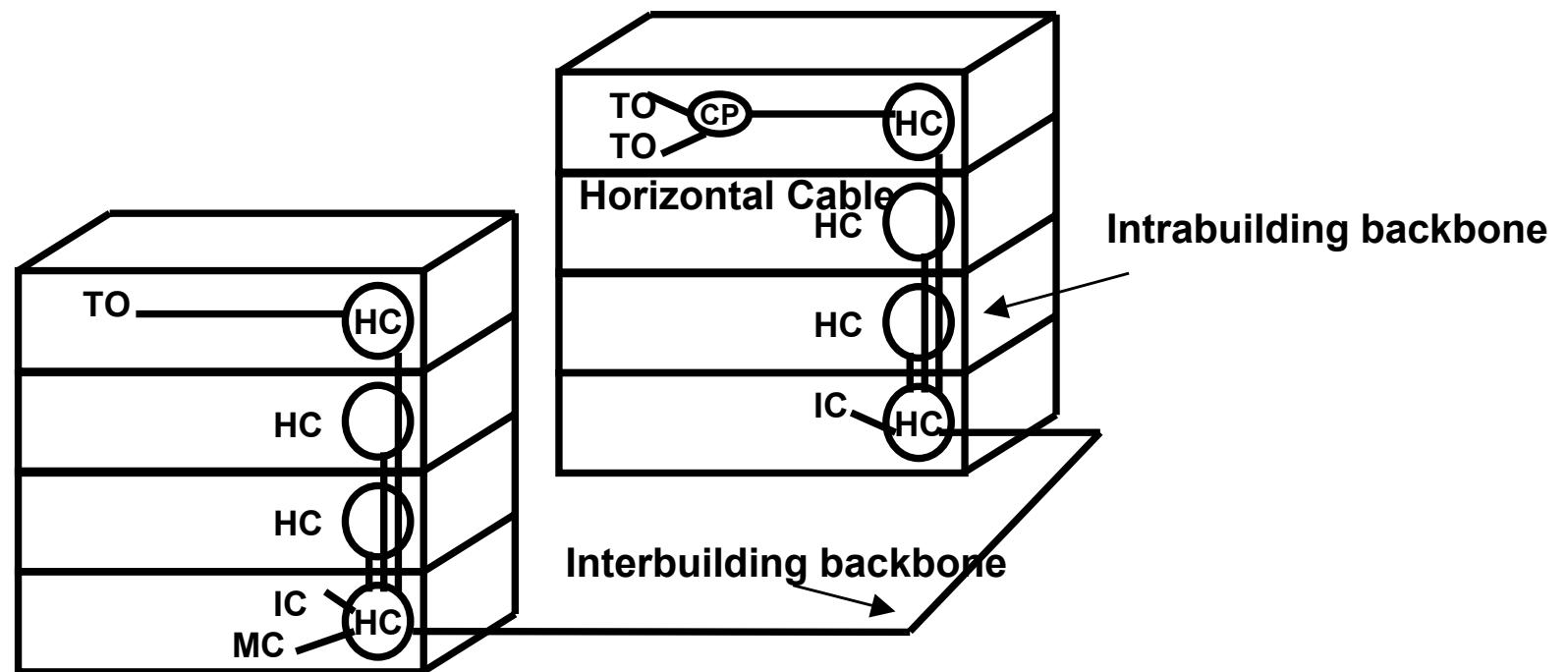
**Chris Di Minico  
CDT Corporation  
cd@mohawk-cdt.com**

# TR-42 - Commercial Building Telecommunications Standards

## TR-42 - TIA/EIA-568-A -----> TIA/EIA-568-B - Cabling Standard

Performance and technical criteria for a telecommunication cabling system

- Topology, and Components



## TR-42.3 - Commercial Building Telecommunications Pathways and Spaces

•TIA/EIA -569 - Pathways and Spaces



# TR-42- Copper and Fiber Cabling Work Groups

---

- **Category 6 -Std Approved (June 2002)- TIA/EIA-568-B.2-1**
- **42.7.2 - DTE Task Group -Addendum: 802.3af DTE Power -  
–Additional parameters (DC balance)**
- **TR42.1 Study Group: Telecommunications Cabling  
Infrastructure for Network Distribution Nodes**
  - Scope: Develop cabling topology, recognized media types,  
cabling requirements, and requirements for pathways & spaces  
for data centers (Draft 1- ~January 2003)**