Unconfirmed Minutes
IEEE 802.3 CSMA/CD PLENARY
Albuquerque, NM
March 6-9, 2000

MONDAY, 6 MARCH

ADMINISTRATIVE MATTERS

Mr. Geoff Thompson, Chair 802.3 CSMA/CD, opened the Working Group plenary at 1300, by welcoming meeting attendees and introducing Mr. Robert Grow, Secretary 802.3 who recorded these minutes, and the Task Force Chairs: Mr. Stephen Haddock (802.3ad), Mr. Jonathan Thatcher (802.3ae), and Mr. Steve Carlson (802.3af). Mr. David Law, Vice-Chair 802.3 was unable to attend because of being confined with chicken pox, but he hoped that he would be able to join us later in the week. A committee member suggested that in view of David's selfless service to 802.3, it would be appropriate for the group to do something to let him know he is missed. Mr. Thompson indicated his willingness to use his discretionary expenditure authorization for that purpose. The Working Group unanimously supported this by voice vote.

Mr. Thompson explained attendance rules, the email reflectors maintained by the committee, and described information available on the web site. The Working Group web pages contain a wealth of information about 802.3. This includes the 802.3 Operating Rules, descriptions of how to subscribe to the various email reflectors, meeting minutes and an archive of presentations to the Working Group and its subgroups. The 802.3 home page is: http://www.ieee802.org/3. (This new URL gets you to the same page as the longer http://grouper.ieee.org/groups/802/3/index.html).

The meeting agenda was distributed, and the meeting attendees were asked to introduce themselves. Mr. Thompson reviewed the voting members of the Working Group (Attachment A2) and the requirements to qualify for voting membership. He presented the voters in peril (Attachment A3), and the potential voter list. The following indicated by * on Attachment A4 requested to become voting members: Buck, Steve F.; de la Garrigue, Michael; Ganley, Tim; Healey, Adam; Hoge, Jay; Hyer, David W.; Kabal, David; Kim, Dae Young; King, Neal; Lee, Changoo; Lowrey, Scott; Lysdal, Henning; McCarron, Philip L.; Muir, Robert; Nelson, Kristian; O'Toole, Michael; Parsons, Elwood T.; Pavlovsky, Alex; Pondillo, Peter; Rausch, Dan; Richkas, Dave; Simmons, Tim; Stetter, Claus; Suzaki, Tetsuyuki; Tailor, Bharat; and Warren, Jeff. The attendance lists were explained and circulated, the meeting attendance for the week is Attachment A5. All attendees were told of the obligation to register for the meeting and pay the $300 meeting fee. A discounted pre-registration rate of $250 was available for this meeting and will be available for the July LaJolla meeting. A list of future meetings and registration instructions are available through the IEEE 802 web site home page, http://www.ieee802.org.

Agenda (Monday-Tuesday)

MOTION:

Approve the agenda (Attachment A1).

> M: R Grow,   S: A. Andersen.
> Approved by voice without objection.

MOTION:

Delay approval of the Minutes of the Nov 1999 minutes till Thursday.

> M: M. McCarren,   S: A. Anderson.
> Approved by voice without objection.

Working Group Activities Since Kauai

Sponsor and sponsor recirculation ballots of 802.3ad were conducted since the November meeting with a brief meeting in Dallas. The 802.3ad Task Force, DTE Power via the MDI Study Group and Higher Speed Study Group met in Dallas, Texas in January. Details of these activities follow in the group reports.

Standards Board Report

Three 802.3 PARS were approved by the Standards Board: 802.3ae (10 Gigabit Ethernet), 802.3af (DTE Power via the MDI), and 1802.3rev.

Executive Committee Items

Mr. Thompson described the major items of discussion at the opening Executive Committee meeting. He reviewed the proposed rules change on ballot periods, and his resistance to shorter periods. Mr. Bynum commented that the time required for review is already too short. Mr. Robinson also commented that the ballot period is small compared to development time and shouldn't be cut only because it is easier to cut than the standards development time. Ms. Thaler indicated that the time for electronic motions should be separated from standards ballots. Mr. Thompson will convey the concerns to the executive committee.

A proposal to eliminate the Friday plenary was discussed. When asked, only 6 of the estimated 200 people in the room indicated they attend the meeting. These people were asked if they would be "heartbroken" if the meeting were replaced with timely web posting of status reports. None would be.

Tutorials for the week were reviewed. Mr. Carlson provided extra background on the 802.3 sponsored tutorial to be given by folks from Walt Disney Imagineering on unconventional applications of Ethernet.

External Liaison Report – TR-42.2

Mr. Chris Diminico reviewed the status of building cabling standards (Attachment B1). The current ANSI/TIA/EIA 568-A-1995 will be revised and published this year with three parts, the main document, copper and fiber sections. They received a copy of Mr. Thompson's liaison report and created a study group to answer the building cabling system questions generated by the DTE Power SG.

External Liaison Report – TR41.5

Mr. Cobb reported on PN4657 (Attachment B2). The second draft has been completed and an additional specification for 50 meters on Cat 5 has been added. A 10-bit interface is defined. The document is expected to be ready for ballot by mid year.

External Liaison Report – TR41.3.4

Mr. Thompson reported briefly on this group that works on telephone applications.

External Liaison Report – SC25/WG3

Steve Swanson reviewed the Australia meeting and activities on fiber. There were a large number of presentations at the meeting. The working group reached consensus to go to a channel specification for fiber links. Fiber bandwidth is still out of sync with TIA, no preference on MMF core size. Unallocated margin was addressed, though no one was willing to take on the work to make a change, the issue might come back for future reconsideration. (Attachment B3)

Mr. Flatman was unable to attend but provided a summary to the WG (Attachment B4).

External Liaison Report – SC6

1000BASE-T is out for fast track approval. The workload has decreased, and the next meeting might be the last for SC6.

Internal Liaison Reports

Mr. Love reported on 802.5. Workload and attendance is down, and hibernation is being considered. Gigabit Token Ring passed overwhelmingly, Link Aggregation may be withdrawn.

PAR Approvals For This Week

PARS for consideration by the Executive Committee this week include: P802.1x Port-Based Network Access Control, P802.11e Medium Access Method (MAC) Enhancements, P802.11f Recommended Practices for Multi-Vendor Access Point Interoperability, P802.15.3 High Rate Wireless Personal Area Networks (WPAN), P802.16.3 Air Interface for Fixed Broadband Wireless Access Systems Operating Below 11 GHz. There was no request to review the PARs in committee. Mr. Thomson stated if any 802.3 participants want an ad hoc to review them, he would accommodate them. These PARs are available on the corresponding Working Group web pages.

Call for Patents

Mr. Thompson reviewed the IEEE patent policy. The IEEE requests release letters from holders of patents that may apply to standards in development. These letters state the patent holder's willingness to comply with the IEEE patent policy. 802.3 also solicits information on patents that have been filed but not yet issued, since it is easier to get release letters while company representatives are active in the working group (Attachment A8). The current patent policy as well as an example response letter can be found in the

IEEE Standards Companion, or on the web at http://www.ieee802.org/3/patent.html. No patent letters were presented, nor was there any expression from those attending of intent to submit a letter, in response to his request.

Future Meeting Sites

Two locations have been offered for the May meeting. Giga has offered to host in Copenhagen, Sept 5-7. Enterasys (a division of Cabletron) offers to host the meeting in Boston the week of Sept 11. This will be reviewed on Thursday. Mr. Thompson requested the Task Forces provide preferences.

State of Standards and Operating Rules of 802.3

With Mr. Law being unavailable, the chair deferred presentation of the state of the standard. There was no business on the operating rules. Current versions of both are included on the web site. Mr. David Law, Vice Chair of 802.3, presentation on IEEE Project 802.3 Working Group Standards Status (Attachment A6) and the matrix showing which clauses are changed by subsequent supplements (Attachment A7) are attached. The matrix represents the current publication status of the full 802.3 standard IEEE 802.3, 1998 Edition and its supplements. A consolidated version of Std. IEEE 802.3, 2000 Edition is planned for later this year.

Election of Chair and Vice Chair

Mr. Geoff Thompson was nominated as Chair of 802.3 by Mr. Carlson and seconded by Mr. Haddock. There were no other nominations, 83 members voted to reaffirm Mr. Thompson with none in opposition. Mr. Quackenbush moved and Mr. Bynum seconded a motion for acclamation which passed by voice.

Mr. Grow nominated Mr. David Law as Vice Chair 802.3 and Mr. Carlson seconded. Mr. Law was reaffirmed in the position by voice vote without opposition.

There is a maintenance request for a cable model for copper, so there will be a maintenance meeting.

Ad Hoc on ITU-T Request For Input

SONET definitions group working within HSSG/802.3ae. It is expected that the motion tabled in Hawaii will be revisited on Thursday. Mr. Thompson encouraged an ad hoc on the topic, but left the scheduling to Mr. Thatcher and 802.3ae.

LINK AGGREGATION TASK FORCE (802.3ad)

Mr. Stephen Haddock, Chair 802.3ad, reported on the progress of the Task Force (Attachment D1). The draft was approved on the first ballot, after recirculation there is 100% approval, no new ballots and no new comments received. The work of the task force is done, and Mr. Haddock thanked the editors, Rich Siefert and Tony Jeffery, as well as those members of 802.3 and 802.1 that contributed to the effort. The standard will be published in IEEE Std. 802.3, 2000 Edition.

HIGHER SPEED STUDY GROUP/802.3ae (10 Gig Ethernet)

Mr. Jonathan Thatcher presented the status of the Task Force (Attachment E1). The group met in Dallas, Texas in January. The meeting included presentations on basic technology issues and alternatives for the scope of the proposed project. These include PHY and PMD proposals for the MAN/WAN, LAN and in some cases for both. In Dallas, the Study Group also initiated work on common terminology for WAN and LAN. He also outlined the plan for 802.3ae Task Force meetings this week.

DTE POWER VIA THE MDI/802.3af

Mr. Steve Carlson presented the status of the Task Force (Attachment F1). The group met in Dallas, Texas in January. The focus of the meeting was to define constraints and to better bound the problem space (what decisions have to be made). There was agreement to only use two pairs (idle or data pairs is still open), and that detection and power feed would be done on the same pairs, with power feed not exceeding standardized limits. He also outlined the work plan for 802.3af for this week.

1802.3Rev

Mr. Thompson presented for Mr. Law the status of the new project (Attachment G1). David and our IEEE editor have come up with a draft fulfilling the PAR. The current draft has been loaded to the web site, and Mr. Thompson will entertain a motion for forwarding the draft to Working Group ballot. Since the document is a merger of two documents, it is felt that going to ballot is the best way to get the work done quickly.

Other Business

Room assignments for the Task Force, and Ad Hocs were scheduled.

The meeting was adjourned at 1555.

THURSDAY, 9 MARCH

ADMINISTRATIVE MATERS

Mr. Geoff Thompson, Chair 802.3, opened the Working Group closing plenary at 0830 and welcomed those attending the meeting. Mr. Thompson related Mr. Law's gratitude to the committee for their expressions of good wishes. The attendance lists were circulated.

MOTION:

Approve the agenda. (Attachment A9)

The agenda was approved without objection.

Mr. Thompson presented the potential voter list, and the following requested to become voters (indicated by + on Attachment A4): Alexander, Thomas; Brown, Dave; Dolfi, David; Goldis, Moty; Nakamura, Karl; Palkert, Tom; Patel, Bavash; Shain, Vadim;

Shastry, Nanjunda; Torres, Luis; Vilozny, Ron; Walker, Rick; Washburn; Ted; Williamson, Robert; and Wurster, Stefan;

Working Group Positions on Executive Matters:

The Executive is moving ahead with the deletion of the Friday 802 plenary.

DTE POWER VIA THE MDI (802.3af)

Mr. Steve Carlson reviewed the progress of the Task Force (Attachment F2). He described the subjects of presentations to the Task Force, relating them to the issues they address, and their importance to the objectives of the project. The presentations range from specific proposals for sourcing power, including mid-span injection to details of the regulatory requirements that will govern any proposed solution. Copies of the presentations are available on the 8023af web pages.

He displayed and explained the decisions that the group has made and needs to make. The group is roughly split in thirds between supplying power on the signal pairs, unused pairs and undecided. The decided at this meeting to support mid-span power insertion.

Mr. Calrson was confirmed as chair unanimously, and Mike McCormack as editor.

They decided that the committee would have to abide by the most stringent environmental requirements. They will publish and maintain a document that includes the technical decisions of the task force to enable new attendees to come up to speed faster. The current drive requirement of 300 mA was agreed.

To break the "log jam" on what pairs to use for power, a set of action items was adopted. Addressing these issues should allow the decision to be made. A list of recommended test will be posted. The Task Force will prepare a tutorial for the July meeting.

LINK AGGREGATION (802.3ad)

Mr. Steve Haddock presented a very brief recap on the sponsor ballot results, which he also presented on Monday. To complete the submission to RevCom he made a motion

MOTION:
Move that the 802.3 Working Group reaffirm the previous submission of P802.3ad to REVCOM..

M: S. Haddock,   S: T. Dineen.
Y: 70 N: 0 A: 6 Passed.

STD. 1802.3/REVISION

The draft includes a merge of two documents, removing the AUI cable conformance that has not been properly maintained and is no longer relevant to the industry. This is basically an editorial task, but review is solicited to assure it is done correctly and no technical errors are introduced.

MOTION:

Move that the draft for the Revision of Std. 1802 (1802.3Rev) as distributed for preview be forwarded to Working Group Ballot.

M: T. Dineen,   S: E. Turner.
Y: 77 N: 0 A: 5 Passed.

MAINTENANCE

The group met during the week to discuss maintenance requests received. The major focus of the meeting was a proposal to add a link model for UTP copper cabling. The current standard only has a pointer to FDDI TP-PMD for Cat 5 specifications. A maintenance PAR is expected to be before the Working Group in July. In the interim, there will be a conference call to focus on the link model proposal (available in the maintenance section on the web).

10 GIGABIT ETHERNET (802.3ae)

Mr. Jonathan Thatcher reviewed the progress of the Task Force (Attachment E2). Mr. Thatcher was confirmed as Chair of the Task Force, Steve Haddock as Vice Chair, Brad Booth as Chief Editor, Walt Therion as PMA/PMD Track Chair, Ben Brown as everything else Track Chair.

The Task Force adopted a motion to reduce the number of PMD proposals to seven by July with fewer expected before the Working Group ballot. The TF also overwhelmingly voted to request Mr. Thompson to send a liaison letter to FDA/CDRH regarding new laser safety requirements.

MOTION:

Authorize chair of IEEE 802.3 to send a liaison letter to the appropriate laser safety official at the FDA/CDRH (Jerome Dennis) which encourages the adoption of the new laser safety requirements and requests input on:

- FDA/CDRH intent to harmonize with IEC revisions

- Possible time line for completion of the harmonization

- Policy of granting variance to the FDA/CDRH requirements prior to IEC standard harmonization

- Interpretation of the applicability of class 1M to fiber optic communication systems

M: J. Thatcher,   S: T. Szostak.
Y: 82 N: 1 A: 0 Passed.

Mr. Carlo commented that Ron Peterson at the Standards Board should be included in the generation of the letter. Mr. Thompson graciously accepted the action item for the letter.

Mr. Thatcher reviewed the EOS over SONET liaison response letter recommendation adopted by the task force. The recommendation included in Mr. Thatcher's presentation restructured the letter to indicate our related work, with multiple

proposals being considered. Mr. Thompson indicated he would edit the letter to promise updates on our work.

Mr. Thatcher reviewed the task force vote to hold an interim meeting in September with Boston being selected over Copenhagen. Mr. Thompson reported that 802.3af also chose Boston by a narrow margin.

MOTION:

Revote on September meeting

M: R. Taborek,   S: J. Hoge.
Y: 54 N: 47 A: 10 Passed.

Comments were made that the major difficulty with the Copenhagen meeting was the dates, with travel being required over the Labor Day weekend for US participants as well as conflicting with the beginning of school for some participants with families.

A count was made of preference. Copenhagen (Sept 5-7): 52 Boston (week of Sept 11): 63. The September meeting will be scheduled for Boston. Task Force dates will be scheduled in July.

Mr. Thatcher reported on liaison reports given to the task force. A brief discussion ensued about the appropriateness of liaison matters being conducted in task forces. There is no problem discussing liaison matters in Task Forces, but positions and formal communications always go through 802.3 and the Executive Committee. The reports included OIF studying low cost box to box interconnect, and TIA FO2.2.1 about the help needed to meet the 802.3ae schedule.

He displayed the list of presentations briefly highlighting some. The presentations are available on the 802.3ae section of our web site.

He next reported on a survey taken in the task force regarding the PHY options before the committee. There is significant detail in the presentation that should be reviewed, but in general, the task force favors a unified PHY that would support both LAN and WAN applications and disfavors WAN only or LAN only PHYs. Separate LAN and WAN PHYs also received significant favor. There is also data on the weighting criteria (e.g., cost, risk, etc.) had in those decisions.

ITU-T LIAISON

T1X1.5 sent a liaison letter requesting comment and directions on two submissions related to Ethernet over SONET. A motion to approve a response letter was tabled in November, and the Task Force made a recommendation for an edited letter as reported earlier by Mr. Thatcher.

MOTION:

Take the issue of sending a liaison response letter to T1X1.5 off of the table and then accept the letter drafted by and presented by the P802.3ae TF as presented on March 9, 2000 to 802.3, to be edited and sent by the Chair of 802.3 WG to T1X1.5.

M: R. Bynum,   S: T. Dineen.
Y: 52 N: 0 A: 1 Passed.

ADMINSTRATIVE MATTERS

Meeting Fees and 802 standards availibility

Mr. Carlo requested the group's input on the disposition of the International Participation Fee. Current meeting registration includes $100 allocated to IPF, and 802 will be dropping its IPF payments after the July meeting. The basic question is if attendees wanted a lower meeting fee, or wanted to support freely available 802 standards. Making standards freely available would require additional fees and corporate contributions would be the targeted source.

Extensive Q&A, followed. The IEEE provides us a legal umbrella, editorial staff, conducts ballots and the like.

The following questions were asked:
1) Would you consider to offset the IPF fees and contribute the $100 per meeting to initiate this program (No net fee change)? YES: 70 NO: 5
2) Would you consider soliciting your company to be an 802 sponsor for this program for about $10K per year?
    - Sponsor recognition on special WEB page for downloading
    - Companies able to advertise that they are IEEE 802 Sponsors
    YES: 23 NO: 38

SRP Tutorial and Call for Interest

Mr. Frazier reported on the Spacial Reuse Protocol activities of the week. There was a tutorial followed up with a call for interest. At the tutorial 33 individuals from 14 companies expressed interest in participating in the work.

Discussion followed about SRP using common PHYs, and how much it overlaps with the WAN efforts of 802.3 and EOS efforts of T1X1.5. There was no directed or suggested position to the chair.

MOTION:

Approve the November Kauai minutes

They were approved by voice without objection.

Mr. Thompson thanked the group for their work, and the meeting was adjourned at 1157.

Future Meetings

Interim meetings will be held in Ottawa, Ontario, Canada. Meeting information is available on the 802.3 web site.

10 Gigabit Ethernet (802.3ae)	Ottawa, Ontario, Canada	22-24 May 2000
(may be moved to 23-25 May, please check announcement		
DTE Power via the MDI (802.3af)	Ottawa, Ontario, Canada	25-26 May 2000
802.3 Working Group Plenary	La Jolla, CA	10-14 Jul 2000
	Tampa, FL	6-10 Nov 2000
	Hilton Head, SC	12-16 Mar 2001

Action Items

Mr. Thompson	Room night estimates to May Interim host
Mr. Thompson	802.3ad RevCom submission motion to Exec
Mr. Thompson	Liaison letter to FDA/CDRH
Mr. Thompson	Liaison letter to T1X1.5
Mr. Thompson	Response to TR41.5 on selector field assignment

Respectfully submitted 9 March 2000

Robert Grow

IEEE 802.3 Secretary

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ATTACHMENTS:

A1   Monday 802.3 Agenda
A2   802.3 Voting Member List
A3   802.3 Voters in Peril
A4   802.3 Potential Voter List
A5   March 1999 Attendance List
A6   802.3 Standards Status
A7   8802.3 Clause Change Matrix
A8   Call for patents and example response letter
A9   Thursday 802.3 Agenda
A10   802.3 Rules Status (Law)

B1   TR42.2 (DiMinico)
B2   TR 41.5 Multi Building Distribution - PN4657 (Cobb)
B3   SC25/WG3 (Swanson)
B4   SC25/WG3 (Flatman)

C   No working group actions on PARs from other groups

D1   802.3ad Task Force report (Haddock)

E1   Monday HSSG report (Thatcher)
E2   Thursday HSSG report (Thatcher)

F1   Monday DTE Power via MDI report (Carlson)
F2   Thursday DTE Power via MDI report (Carlson)

G1   1802.3 Revision (Law)