

Unconfirmed Minutes
IEEE 802.3 CSMA/CD PLENARY
Kauai, HI
November 8-11, 1999

MONDAY, 8 NOVEMBER

ADMINISTRATIVE MATTERS

Mr. Geoff Thompson, Chair 802.3 CSMA/CD, opened the Working Group plenary at 1300, by welcoming meeting attendees and introducing Mr. David Law, Vice-Chair 802.3, Mr. Robert Grow, Secretary 802.3 who recorded these minutes, and the Task Force and Study Group Chairs: Mr. Jonathan Thatcher (Higher Speed Study Group), Mr. Stephen Haddock (802.3ad), and Mr. Steve Carlson (DTE Power via the MDI).

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 individuals asked to become voting members of 802.3 (indicated by * on [Attachment A4](#)): Anderson, Arlan J.; Badoni, Vipul D.; Bennett, Mike; Burton, Scott; Bynum, Roy; Carlson, Steve; Colla, Regis; Dawe, Piers; Dixon, Allen; Donhowe, Mark; Hawkins, John F.; Karst, Dennis L.; Lucas, Fred A.; McCormack, Michael; Mohl, Dirk S.; Musk, Robert; Paslaski, Joel; Plunkett, Timothy R.; Sabato, Simon; Stapleton, Nick; Van Gilder, John; Verigin, Iain; Villamor, Bill and Witkowski, Mike.

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 March Albuquerque 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: T. Dineen, S: W. Quackenbush.

Approved by voice without objection.

MOTION:

Approve the Minutes of the July 1999 Montreal 802.3 plenary meeting.

M: T. Dineen, S: A. Anderson.

Approved by voice without objection.

Working Group Activities Since Montreal

A Working Group and WG recirculation ballot of 802.3ad were conducted since the July meeting. The 802.3ad Task Force, DTE Power via the MDI Study Group and Higher Speed Study Group met in York, England in September. Details of these activities follow in the group reports. No new PARS or standards were approved.

Executive Committee Items

Mr. Thompson described the major items of discussion at the opening Executive Committee meeting.. This included the International Participation Fee, movement toward total electronic balloting, and a preview of items to be considered in the Thursday Exec Meeting.

He announced the meetings shown below, and the tutorials to be held during the week.. The Tuesday 8 pm tutorial slot, will explain the use of the IPF and its possible reallocation to make IEEE 802 standards freely available.

Mr. Thompson also announced that IEEE 802 had been approved as a Class C liaison to ISO. This will enable our standards to be directly submitted for fast track approval if internationalization is required.

There are a number of PARs for approval this week including three that Mr. Thompson announced to the Exec. The 802.14 Working Group is not meeting, and is expected to hibernate in March.

Document Distribution

802.3ad draft 2.0 was issued for a Working Group ballot conducted prior to the York interim meeting. Draft 2.1 was issued for a Working Group recirculation ballot that closed prior to this meeting.

802.3 minutes and the minutes of its Task Forces and Study Groups are published on the 802.3 web site as are the working drafts of 802.3 standards. (Web access for drafts is restricted to Working Group participants, others may purchase documents from IEEE.)

802.3 voting members are eligible to receive a copy of the Y2K edition of the CDROM containing all 802 standards, which will be distributed later during the meeting week.

External Liaison Report – FO2.2

FO2.2 had an unofficial meeting to discuss a 100BASE-SX standard. They considered a number of suggestions offered by Mr. Thompson but have not yet determined if recirculation is required.

External Liaison Report – TR-42

Mr. Paul Kolesar reported on the revision of ISO/IEC 568 building cabling. The revision includes separate sections for copper and fiber. The group is working with a high bandwidth multimode fiber strawman. Cat 6 copper is going into the document. The group targets next year approval for the updated specification. Cabling architecture is staying the same. The debate on the telecommunications outlet for fiber has been revisited. Changes allow small profile optical connectors everywhere but at the outlet, it is possible that the outlet specifications will also change to allow smaller profile connectors. Some changes in terminology are also being proposed.

External Liaison Report – TR41.5

Mr. Terry Cobb reported on work within this group. They are proposing a Cat 6 PHY for GbE ([Attachment B1](#))

Internal Liaison Reports

No internal liaison reports.

PAR Approvals For This Week

Five PARs have been submitted to Executive Committee for Thursday consideration: 802.15a (coexistence) and an 802.16 (name change only). 802.3 submitted 802.3ae (10 Gigabit Ethernet), 802.3ef (DTE Power via the MDI) and 1802.3Rev.

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://grouper.ieee.org/groups/802/3/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.

State of Standards and Operating Rules of 802.3

Mr. David Law, Vice Chair of 802.3, reviewed IEEE Project 802.3 Working Group Standards Status ([Attachment A6](#)). He also showed a copy of the matrix showing which clauses are changed by subsequent supplements ([Attachment A7](#)). This matrix represents the current publication status of the full 802.3 standard IEEE 802.3, 1998 (the consolidated edition) and its supplements. Current versions of these summaries are available on the 802.3 web site, and the standards may be purchased from IEEE Standards.

It was suggested that the Standards Status should clarify the status of 802.3, 1998 as an ISO standard. (Law, Thompson to fix).

IEEE wants to drop the Network Systems Tutorial as a publication. It has some useful information but has been hard to find in the catalog and it is expensive. Consideration will be given to making this document available on the web.

Mr. Law announced a minor editorial change to the rules. The 802.3 rules are available on the 802.3 web site.

The 1802.3 Conformance Test Methodology Revision was also discussed. Mr. Law indicated that a group would meet to merge the front matter from 1802.3 with the technical matter from 1802.3d (10BASE-T) Conformance Test. The group would draft a request for extension and review the merge. Working Group approval of a PAR will be requested at the Thursday closing 802.3 plenary.

Ad Hoc on ITU-T Request For Input

A group was formed to draft a liaison letter on code space definition to SG 15. There are also some issues with ethernet over SONET proposals and overall integrity.

LINK AGGREGATION TASK FORCE (802.3ad)

Mr. Stephen Haddock, Chair 802.3ad, reported on the progress of the Task Force ([Attachment D1](#)). The group held a Working Group ballot prior to an interim meeting in York, UK in September, and a recirculation ballot prior to this meeting. There are some technical comments on substantive typographical errors introduced in comment resolution. The Sponsor Ballot will be issued (if approved) with an errata page covering these corrections. There is little work to do, so a brief Wednesday morning meeting is requested.

HIGHER SPEED STUDY GROUP (10 Gig Ethernet)

Mr. Jonathan Thatcher presented the status of the Study Group ([Attachment E1](#)). The group met in York, UK, where a PAR, Five Criteria and a set of objectives were refined. The group also agreed to a schedule for development of the project. In addition, the meeting included presentations on basic technology issues and alternatives for the scope of the proposed project.

Mr. Thatcher reviewed the key elements of the PAR, and the specific text of the Five Criteria. A straw poll was then conducted to determine the support for such a project. The 143 people that raised their hands was not significantly different than the 139 individuals indicating their support at an earlier meeting, therefore, a count of companies was dispensed with. The Study Group has a large volume of presentations scheduled, and will meet all day Tuesday and Wednesday.

DTE POWER VIA THE MDI

Mr. Steve Carlson presented the status of the Study Group. The group met in York, UK where a PAR, Five Criteria and a set of objectives were refined, a schedule discussed and technology issues presented.

Mr. Carlson described the purpose and scope of the proposed project and presented the detailed Five Criteria developed at the York meeting. The objectives of the group

were also reviewed. The group will meet Tuesday and Wednesday to review the objectives and correct any problems with the PAR and Five Criteria. The primary technical task will be to develop a constraint matrix.

Other Business

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

The meeting was adjourned at 1700, and T-shirts recognizing the completion of 1000BASE-T were distributed complements of the Gigabit Ethernet Alliance.

THURSDAY, 11 NOVEMBER

ADMINISTRATIVE MATERS

Mr. Geoff Thompson, Chair 802.3, opened the Working Group closing plenary at 0830 and welcomed those attending the meeting. The attendance lists were circulated.

MOTION:

Approve the agenda. ([Attachment A9](#))

The agenda was approved by voice without objection.

Working Group Positions on Executive Matters:

Mr. Thompson reviewed some matters to be considered by the Executive Committee. The new schedule used this week's meetings has overwhelming support from the Working Group. Mr. Thompson will report this as working group support for similar scheduling in future meetings.

Mr. Thompson presented the potential voter list, and the following requested to become voters (indicated by + on [Attachment A4](#)): Chen, Zinan; Dugan, Richard; Graham, Rich; Prediger, Bernd; Ramelson, Brian; Rijsinghani, Anil; Salzman, Mike; Weniger, Fred; and Yu, Mark.

Mr. Thompson again presented the voters in peril list ([Attachment A3](#)).

Ad Hoc report X1T1.5/ITU

Roy Bynam presented an X1T1.5/ITU ad hoc report ([Attachment B2](#)). 11 of the 18 members on the mail list voted on issues before the group.

The first item was to send an informal 802.3 letter to the SG15 Rapporteur's meeting to be held the week of November 16. Our likely need for a C2 code point needs early notification and will require formal action by our WG in March. The letter ([Attachment B3](#)) was sent by Mr. Carlo because of tight timing requirements.

The second item was drafting a letter to T1X1.5 which provides general positions on two items related to mapping of Ethernet MAC frames over SONET. The letter supports concerns expressed in T1X1.5/99-267. Support was expressed for T1X1.5/99-268r1 which better matches our requirements for robustness.

Mr. Thompson explained that two technical contributions were received from T1X1.5, and the ad hoc was attempting to respond to the contributions.

MOTION:

Move to approve the draft letter to T1X1.5 as presented to 802.3 @9:00AM. ([Attachment B4](#))

M: Mr. W. Quackenbush, S: Mr. C. Mick

Concern was expressed by various Working Group members about the letter, including the need to respond at this time for a project that will not go forward for quite some time. Concern was also expressed that the letter was too supportive of a specific proposal. Others expressed the opinion that it was important to indicate our interest.

Motion to table.

M: Mr. S. Haddock, S: Mr. P. Nicholich
Y: 59 N: 4 A: 15 Passed.

The motion was tabled.

Mr. Bynum discussed the third item related to a draft recommendation for carrying Ethernet frames over SDH/WDM by the use of LAPS. Based on the response to the previous motion, it was felt best to not make a motion on this item before there is wider discussion on the WG reflectors.

Mr. Chris DiMinico presented a letter from TIA TR-42.1 on a recent ballot of PN-4426, to be published as the TUA/EIA-569-B.1. It is proposed that our response be that the committee believes the unallocated margin can be used for additional connectors.

MOTION:

Move that the chair forward the proposed letter to TR-42.1 with appropriate edits to indicate our belief that the proposal is acceptable rather than our support of the proposal.

M: Mr. C. DiMinico, S: Mr. T. Szostak
Y: 50 N: 0 A: 15 Passed.

MAINTENANCE

Mr. David Law reviewed the 1802.3 reaffirmation ([Attachment G1](#)). It is proposed to merge the front matter from 1802.3e (removing the AUI Cable Conformance Test) with the technical matter from 1802.3d (10BASE-T Conformance Test). The project would be a revision PAR, which was prepared and submitted to the Exec for their consideration in their Thursday meeting ([Attachment G2](#)). Mr. Law reviewed the five criteria submitted with the PAR ([Attachment G3](#)).

MOTION:

IEEE 802.3 approves the PAR and 5 Criteria as submitted for 1802.3rev. IEEE 802.3 requests the IEEE 802 Executive to submit the 1802.3rev PAR to NESCOM. IEEE 802.3 authorise the Chair to request a 2 year extension to the 1802.3 and 1802.3d standards.

M: Mr. D. Law, S: Mr. P. Nikolich
Y: 79 N: 0 A: 2 Passed.

Mr. Colin Mick presented the status on maintenance requests. There are a number of typographical items that can be handled as an errata. It is expected the committee will be requested to open a maintenance PAR in March.

LINK AGGREGATION (802.3ad)

Mr. Steve Haddock presented the status of the Task Force ([Attachment D2](#)). The Task Force recommends progressing the draft to Sponsor Ballot.

TECHNICAL MOTION:

Move that one of the Ethertype values reserved by 802.3 be assigned as the Slow Protocols Ethertype for 802.3ad.

M: Mr. S. Haddock, S: Mr. J. Lynch
Y: 67 N: 0 A: 5 Passed.

Mr. Haddock reviewed the recirculation ballot. There were 16 comments, nine being editorial, and three being technical. Three technical required comments from the previous ballot were in the recirculation. The approval ratio is 100%, with all previous disapprove votes being converted to approve. Mr. Haddock reviewed the technical comments resolved in the task force this week.

TECHNICAL MOTION:

Move that the 802.3 Working Group accept the resolution to all comments received in the Working Group recirculation ballot of P802.3ad draft 2.1, and authorize the editors to generate draft 3.0. Further that draft 3.0 be issued for LMSC sponsor ballot, and that the IEEE P802.3ad Task Force conduct meetings and administer recirculation ballots as necessary to resolve comments received during the sponsor ballot..

M: Mr. S. Haddock, S: Mr. S. Muller
Y: 75 N: 0 A: 1 Passed. 1012.

Mr. Haddock requested prompt reaction to the Sponsor Ballot request for those wishing to participate.

HIGHER SPEED STUDY GROUP

Mr. Jonathan Thatcher reviewed the progress of the Study Group ([Attachment E2](#)). There were a large number of presentations. Only a few of the presentations were not on the web as of Thursday 11 November. Minor modifications to the PAR ([Attachment E3](#)) were accepted and the PAR and five criteria ([Attachment E4](#)) unanimously approved for 802.3 consideration to forward. The technical presentations covered proposed interfaces, PCS code proposals, optics, the optical model, technical and economic feasibility as well as PMD proposals and updates. The following motion was divided with a vote being taken on each criteria.

TECHNICAL MOTIONS:

Approve the five criteria.

M: Mr. R. Bynam, S: Mr. A. Flatman

1. Passed by voice with no opposition or abstention
2. Passed by voice with no opposition or abstention
3. Passed by voice with no opposition or abstention
4. Passed by voice with no opposition or abstention
5. Passed by voice with no opposition or abstention

TECHNICAL MOTION:

Approve 802.3 HSSG PAR and 5 Criteria. Request 802 Executive to Approve PAR and Forward to NesCom

M: Mr. J. Thacher, S: Mr. T. Mathey
Y: 90 N: 0 A: 0 Passed.

MOTION:

Request 802.3 authorize HSSG to conduct an interim meeting in January

M: Mr. J. Thatcher, S: Mr. T. Dineen
Approved by voice without objection or abstain

As straw poll was conducted between Ottawa and Cambridge for a May interim meeting, having received hosting offers from Nortel and Cabletron respectively. 41 favoring the former and 30 the later. Planning will proceed for Ottawa.

DTE POWER VIA THE MDI

Mr. Steve Carlson reviewed the progress of the Study Group ([Attachment F2](#)). The SG recommends that the project should unambiguously identify a DTE powerable device. TR-41.3 had submitted some suggestions on the proposed objectives and scope of work. The SG took action on those items. Some changes were made and Mr. Carlson reviewed the PAR ([Attachment F3](#)), Five Criteria ([Attachment F4](#)) and Objectives as modified for the Working Group.

TECHNICAL MOTION:

802.3 Motion: That the 802.3 Working Group accept the Objectives as submitted by the DTE Power via MDI Study Group.

M: Mr. S. Carlson, S: Mr. W. Quackenbush
Y: 76 N: 0 A: 1 Passed

The Five Criteria were presented, and the following motion was voted on each criteria.

TECHNICAL MOTION:

Accept the Five Criteria for DTE Power Via the MDI

M: Mr. S. Carlson, S: Mr. W. Quackenbush
1 Y: 75 N: 0 A: 1
2 Y: 71 N: 1 A: 0

3 Y: 73 N: 0 A: 1

4 Y: 67 N: 0 A: 5

5 Y: 68 N: 0 A: 5

The PAR was then presented.

TECHNICAL MOTION:

802.3 Motion: That the 802.3 Working Group accept the DTE Power via MDI PAR. Request to forward to the 802 Exec for submission to NESCOM.

M: Mr. S. Carlson, S: Mr. A. Anderson

Y: 68 N: 0 A: 2 Passed

Mr. Alan Flatman suggested that the term “unshielded twisted pair” be changed to “balanced”. This was accepted in the motion above as a change to the previously published PAR.

MOTION:

802.3 Motion: That the 802.3 Working Group authorize an interim meeting of the SG in January in Dallas, TX.

Passed by acclamation.

TECHNICAL MOTION:

802.3 Motion: That the 802.3 Working Group approve the creation of a liaison between the DTE Power via MDI SG and IEEE P1394b, and authorize the WG Chair to send a letter requesting the liaison.

M: Mr. S. Carlson, S: Mr. S. Burton

Passed by voice with no negative or abstention

TECHNICAL MOTION:

802.3 Motion: for liaison letter on TR-42.

M: Mr. S. Carlson, S: Mr. A. Flatman

Passed by voice with no negative or abstention

Mr. Thompson commented on Working Group’s rush to complete business, and understanding the desire, indicated that he would comply with the spirit of the above motions correcting the liaison relationships for presentation to the Executive Committee.

ADMINISTRATIVE MATTERS

Future Meetings

Interim meetings will be held in Dallas, Texas. Meeting information is available on the 802.3 web site.

Higher Speed Study Group (HSSG)	Dallas, Texas	17- Jan 1999
Link Aggregation (802.3ad)	Dallas, Texas	17- Jan 1999
DTE Power via MDI Study Group	Dallas, Texas	17- Jan 1999

802.3 Working Group Plenary

Albuquerque, NM

6-10 Mar 2000

La Jolla, CA

10-14 Jul 2000

Tampa, FL

6-10 Nov 2000

Action Items

Thompson Edit and send TR-42.1 liaison letter and other liaison letters

Mr. Thompson thanked all for their participation and without objection the meeting adjourned at 1125.

Respectfully submitted 11 November 1999

Robert Grow

IEEE 802.3 Secretary

bob.grow@intel.com

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 November 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

- B1 TIA Project – PN4657 (Cobb)
- B2 X1T1.5/ITU ad hoc report (Bynam)
- B3 SG15 letter
- B4 T1X1.5 letter

- C No working group actions on PARs from other groups

- D1 Monday 802.3ad Task Force report (Haddock)
- D2 Thursday 802.3ad Task Force report (Haddock)

- E1 Monday HSSG report (Thatcher)
- E2 Thursday HSSG report (Thatcher)
- E3 802.3ae PAR
- E4 802.3ae Five Criteria

- F1 DTE Power via MDI Call for Interest (Law)
- F2 Thursday Report on DTE Power via MDI Ad Hoc (Carlson)
- F3 802.3af PAR
- F4 802.3af Five Criteria

- G1 1802.3 Revision (Law)
- G2 1802.3rev PAR
- G3 1802.3rev Five Criteria