# Plenary Meeting – July 2008 – Denver, CO  USA

**Official Meeting Minutes**

**Chair = Mike McCormack**
**Recording Secretary = Bill Delveaux**

**Note:  All times given in local Denver MST (GMT-6) time**

**Note:  See Comment Resolution database for a record of those events**
**Note:  All voting is taken by name and recorded.  Please refer to**
[http://grouper.ieee.org/groups/802/3/at/public/jul08/ballots_1_0708.pdf](http://grouper.ieee.org/groups/802/3/at/public/jul08/ballots_1_0708.pdf)
 **for the voter record spreadsheet.**

**July 15th, 2008:**
Meeting called to order at 9:01am

Introductions – went around the room

Sign in sheet sent around the room – enter name, employer, and affiliation

Recording Secretary appointed – Bill Delveaux

At 9:07am - Patent Policy read by Mike McCormack
- Slide #1 of the patent policy were read out loud by Mike McCormack
- Slide #2 read out loud by Mike McCormack – Links provided
- Slide #3 read out loud by Mike McCormack – Potentially Essential Patents
- Mike McCormack asks if any of the members want to identify any potentially essential patents – none
- Slide #4 read out loud by Mike McCormack – Other Guidelines

*Agenda:*
Tuesday:
- Appoint Recording Secretary
- Introductions
- Patent Review / Rules Review
- Review and discuss agenda
- Liaison / Adhoc Reports (partial)
- Commenter responses not related to L2
- Comment resolution
- New feature presentations
- L2 Adhoc review for 802.1 meeting
Wednesday (Start at 10am)
- Patent Review
- Commenter responses related to L2
- New feature presentations
- Comment resolution
Thursday (Start at 9am)

- Patent Review
- Adhoc Reports (balance)
- New feature presentations
- Comment resolution
- Housekeeping:
  - Approve minutes of May/June meetings
  - Plan next meeting

Motion to accept the agenda by Randy Rannow and Seconded by Yair Darshan.
At 9:31am - Agenda passed without opposition (voice vote)

Ground Rules – mutual respect and consideration
- No cost, product pitches, etc
- All may speak and vote
- No restrictions on presentations or materials
- No prices in any currency, complexity is OK
- 802.3 rules apply
Rules – in general... behave
Rules – web sites presented for bylaws, operating rules, etc. presented

Electronic information
- Web address – http://www.ieee802.org/3/at/index.html
- eMail reflector – stds-802-3-poep@ieee.org
- Private Area – user name and password given (not recorded here)
- Next meeting – please monitor http://www.ieee802.org/meeting/index.html

Present state:
- 30 disapproval voters, 2 votes short for technical approval
- 521 comments
- 3 days to clear comments

Time Limit review:
    Presentations:
      - 45 min max
      - 15 min discussion max
    Debate of Motions:
      - 2 turns to speak, priority to first time speakers
      - 3 minutes per speaker max
      - 30 min per motion max
    Debate of comments
      - 2 turns to speak, priority to first time speakers
      - 1 min per speaker max
      - 5 min per comment max

***TIA Liaison Presentation report – Valerie Maguire – maguire_1_0708.pdf***
Started at 9:37am
- TR42.7 – Copper Cabling

- New project: TSB-184 "Guidelines for Supporting Power Delivery over Twisted Pair Cabling" opened

### *4-pair Adhoc report – Yair Darshan – darshan_1_0708.pdf*
Started at 9:55am
- Suggested remedy for all 4-pair comments
- Discussion around Alt-A and Alt-B simultaneous power

\*\* Break at 10:55am

### *Sleep Mode for 802.3at Systems – Ramesh Sastry – sastry_1_0708.pdf*
Started at 11:12am
- Use reserved bit in TLV to define sleep mode
- PD reports power needed for sleep mode
- PD changes TTL (max 18 hours)

\*\* Break for lunch at 11:40am

### *Proposed Resolution to #482 – Geoff Thompson & Yair Darshan – thompson_1_0708.pdf*
Started at 1:13pm
- 48V battery systems cannot directly power PoE
- Proposal to include lower voltages with lower power

Motion by Geoff Thompson, Seconded by Yair Darshan:
> Move that the task force accepts the recommended change as recorded on slide 7 in thompson_1_0708.pdf.
>
> All in room:
> Yes:   3       No:   21      Abstain:        8
>
> Technical Motion – fails (at 2:21pm)
>
> Please note:  All voting is taken by name.  Please refer to http://grouper.ieee.org/groups/802/3/at/public/jul08/ballots_1_0708.pdf for the voter record spreadsheet.

Started Comment resolution at 2:22pm.  Please see Comment Resolution database for a record of the events.

At 2:26pm Adam Healey introduces the attendance books
- Initial the day you are attending in the blue book (previous attendees)
- New attendees use the red book, include a business card if possible
- Must initial your affiliation in the book.  If you do not initial, you do not get credit for attending the meeting
- Electronic Book Signing – developing an electronic tool to track attendance. Official record is the physical books.
- Please use the Electronic Book signing this week

- Follow the instructions posted in the July plenary opening http://grouper.ieee.org/groups/802/3/minutes/jul08/0708_attendance_tool.pdf
- Cannot be on VPN, must be locally connected

At 3:28pm – Comment Resolution Ends

### *Discussion with 802.1 regarding 802.3at/802.3az use of LLDP – Wael Diab – diab_1_0708.pdf*
Started at 3:28pm
- Code point Locations - Four options investigated
- LLDP is an advertise only mechanism
- Ask 802.1: Any concerns with building a SM on top of LLDP
- Present both L2 approaches and ask if they care about which approach is used.

Bill Delveaux was replaced temporarily as recording secretary at 3:50pm by Chad Jones

Straw Poll to endorse the presentation
Y:26 N:0, Abstains not counted

At 3:58pm
Vote to modify agenda to allow Anoop to present changes to L2 State Diagram a day early
Y:11, N:1, A:9

### *Bugs in the L2 State machine – Anoop Vetteth – vetteth_1_0708.pdf*
Started at 4:00pm
- Demonstrated a bug in the power request mechanism that can generate a lot of traffic
- Three new MIBs to be added and defined as variables for the SD.
- The group defined desired features
  - Advertise power: High resolution max power required by a PD
  - Allocate power: High resolution max power allowed by PSE
  - Negotiate power: Re-advertisment and re-allocation of power
  - Realtime negotiation: allows quick enough negotiation to be <250msec to be possible
  - Required realtime negotiation: Enforce response times to negotiation <250msec
  - PD keep alive: Allow PDs to specify a minimum operating power
  - PD power levels: Allow PD to advertise its supported power levels
  - Sleep mode: Allow PD to turn off protocol transportation
  - Required realtime negotiation: Enforce response times to negotiation <x seconds
  - Timer negotiation: PD and PSE can select what timer value should be used
  - Power statistics: PD returns some values to allow statistical power management at the PSE

Straw poll taken for above features

| | | |
|---|---|---|
| Advertise power: | support: 17 | won't support: 0 |
| Allocate power: | support: 17 | won't support: 0 |
| Negotiate power: | support: 16 | won't support: 0 |
| Realtime negotiation: | support: 16 | won't support: 0 |
| Required realtime negotiation: | support: 4 | won't support: 8 |
| PD keep alive: | support: 6 | won't support: 0 |
| PD power levels: | support: 4 | won't support: 0 |
| Sleep mode: | support: 12 | won't support: 0 |
| Required realtime negotiation, x=5 sec: | support: 5 | won't support: 2 |
| Timer negotiation: | support: 12 | won't support: 0 |
| Power statistics: | support: 0 | won't support: 5 |

These are the list of items that will be discussed with 802.1 tomorrow.

Joint 802.1 and 802.3 meeting is Wednesday morning in Centennial C, 8am to 10am.

802.3at will reconvene at 10AM on Wednesday

** Meeting in recess at 5:20pm

**July 16, 2008:**

Meeting called to order at 10:09am.

The chair asked if there was a request to review the patent policy. No one requested this.

The chair asked if there were any new patents. No one responded.

The chair asked if there were any letters of assurance. No one responded.

Mike McCormack discusses the joint 802.1 and 802.3 meeting held earlier today. We have agreed to move the TLVs from 802.1AB to 802.3. We will decide on how to move it, possibly as a maintenance project.

*Comment Data Base Discussion #182 – Dan Dove – dove_1_0708.pdf*
Started at 10:17am
- Need accurate Power measurement
- Loss within the cable plant can be detected
- PD reports the amount of power the PD is using right now
- Add Octets to existing TLV, Field is optional (can write an FF)

*Discussion on comment #450 – Mike McCormack – mccormack_1_0708.pdf*
Started at 10:58am
- PD model number
- Unique to the implementer

### Discussion on comment #152 – John Jetzt – jetzt_1_0708.pdf
Started at 11:06am
- Fallback PD power value
- Power a PD could maintain limited functionality

** Break for lunch at 11:44pm

At 1:38pm – Back in session

### Two pair power considerations – Bill Delveaux – delveaux_1_0708.pdf
Started at 1:42pm
- Knowing two pair power, we can get more power at a better derating
- Concerns and Possible Solutions

** Break at 2:34pm

### Bugs in the L2 State machine – Anoop Vetteth – vetteth_1_0708.pdf
Started at 3:00pm
- update from yesterday, clarifying issues raised yesterday
- issues while being in sync or not-in-sync
- Additional states in NH state machine needed

Started Comment resolution at 4:02pm

** Meeting adjourned at 5:17pm

**July 17, 2008:**

Meeting called to order at 8:37am.

The chair asked if there was a request to review the patent policy. No one requested this.

The chair showed and read slide #3 of the Patent Slide set. The chair asked if there were any new patents. No one responded.

The chair asked if there were any letters of assurance. No one responded.

### Transformer Channel Adhoc – Fred Schindler – schindler_1_0708.pdf
Started at 8:40am
- Channel Model Details
- Statistics Review
- Vpse distribution
- Looking for channel resistance unbalanced distribution
- Reviewed TBD text

### Four Pair Adhoc report – Yair Darshan – darshan_2_0708.pdf

Started at 9:14am
- Four pair operation as two separate two pair PDs inside one device
- PD – PSE interoperability

### *Reduced Operation Field Proposal – John Jetzt – jetzt_2_0708.pdf*
Started at 9:38am
- Add a PD field for reduced power operation
- Optional value
- "I can run at this value, but not any less"
- Regarding comment #152

### *PD Model Number – Mike McCormack – mccormack_2_0708.pdf*
Started at 9:50am
- MIB – PDModelNumber
- Update table 30-4 to include this attribute
- Can we use "Resource Info"?
- Regarding comment #450

### *Cable and Thermal Derating Revisited – Bill Delveaux – delveaux_2_0708.pdf*
Started at 10:10am
- Knowing 2-pair power, propose improving derating
- Derate 600ma, known 2-pair power, to 5C
- Initial motion to add "Type 2 operation that energizes two pairs requires a 5°C reduction" in paragraph 33.1.4.2

Motion by Bill Delveaux, Seconded by Martin Patoka:

Move that the IEEE 802.3at Task Force adopt the following changes to the text in paragraph 33.1.4.2:
> *Guidelines for the ambient operating temperature of cables for 802.3at Type 2 applications are addressed in ISO/IEC TR 29125 and TIA/EIA-TSBXX "Guidelines for Supporting Power Delivery over Balanced Twisted-Pair Cabling".*

All in room:
Yes: 19    No: 9    Abstain: 4

Technical Motion – fails (at 10:53am)

### *Updated proposed changes to section 30 and 33.7 – Anoop Vetteth – vetteth_DLL_0708.pdf*
Started at 11:06am

Motion by Anoop Vetteth, Seconded by Wael Diab:
Move that the 802.3at Task Force adopts the text for the DLL and MGMT sections as presented in avetteth_DLL_0708.pdf to amend the text in D3.1_8023at-30_v01_wwd_3.fm and landry_DLLdiags_v03_wwd.fm. The Task Force charters the editor to integrate into draft 3.1 for WG Ballot Recirculation.

All in room:
Yes:    26      No:     0       Abstain:        8

Technical Motion – passes (at 11:13am)

Started Comment resolution at 11:14am

Finished Comment resolution at 11:45am

Motion by Mike McCormack,  Seconded by Fred Schindler:
Move that the 802.3at Task Force to accept the resolutions in the comment database, to authorize the editor to create D3.1 and instruct the chair to request a re-circulation ballot to begin 25-Jul-2008.

All in room***:
Yes:    35      No:     0       Abstain:        0

Technical Motion – passes (at 11:51am)

*** This vote was by a show of hands and is not in the voter spreadsheet

Note: The following three motions are shown in order of being brought to the floor, but were voted on in inverse order

Motion by Chris DiMinico, Seconded by Wael Diab :
Move that the 802.3at Task Force instruct the chair to prepare and requests the 802.3 chair send a liaison letter to ISO/IEC JTC 1/SC 25/WG 3 and to TIA TR42 chair requesting reconsideration of the temperature derating of 802.3at deployment over 2-pairs at 600 mA in ISO/IEC TR 29125 and in TIA/EIA-TSBXX "Guidelines for Supporting Power Delivery over Balanced Twisted-Pair Cabling".

All in room:
Yes:    14      No:     14      Abstain:        7

Procedural Motion – fails

Unfriendly Amendment by Bill Delveaux, Seconded by D. Matthew Landry:
Change the text to strike 600mA from the motion.

All in room:
Yes:    6       No:     22      Abstain:        7

~~Procedural~~ Technical Motion – fails

Motion by Wael Diab with agreement to do the motion:
Motion to over rule the ruling of the Chair that the vote is procedural.

All in room:
Yes:    15      No:     14      Abstain:          0

Procedural Motion – passes, Chair is over ruled

*** This vote was by a show of hands and is not in the voter spreadsheet

Motion to adjourn by Chad Jones, seconded by Bill Delveaux, motion passes without opposition by voice.
** Meeting and session adjourned at 12:11pm

Ballot Spreadsheet can be found at:
http://grouper.ieee.org/groups/802/3/at/public/may08/ballots_1_0508.pdf