

# **Interim Meeting – September 2007 – Seoul Korea**

## **Official Meeting Minutes**

**Chair = Mike McCormack**

**Recording Secretary = Bill Delveaux**

**Note: All times given in local Seoul Korea time**

**Note: See Comment Resolution database for a record of those events**

## **September 11, 2007:**

Meeting called to order at 9:20am

Books explained and sent around

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.

At 9:27am - Patent Policy read by Mike McCormack

- Links provided
- 5 Slides pertaining to the patent policy were presented. Chair asks if any of the members wants to identify any patent claim / patent applications that affects the standards.
- Requested any letters to submit – none

Electronic information

- Web address – [www.ieee802.org/3/at/index.html](http://www.ieee802.org/3/at/index.html)
- eMail reflector – [stds-802-3-poep@ieee.org](mailto:stds-802-3-poep@ieee.org)
- Private Area
- Next meeting – watch [www.ieee802.org/meeting/index.html](http://www.ieee802.org/meeting/index.html)

## ***Agenda:***

Tue:

- Intro
- Recording Secretary appointed
- Patent Review
- Rule
- Liaison
- Subcommittee Reports
- Presentations

Wed:

- Patent Review
- Comment Resolution

Thur:

- Patent Review
- Approve minutes
- Comment resolution

Noted: March, May, and July minutes are missing from the web site

At 9:39am:

Agenda passed without opposition (voice vote)

Time Limit discussion:

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 vote max

Debate of comments

- 2 turns to speak, priority to first time speakers
- 1 min per speaker max
- 5 min per comment max

Some discussion directed to the Recording Secretary on the amount of information to be documented in the minutes. Wael Diab, Geoff Thompson, and Steve Carlson leading the comments. Basically, capture the highlights; motions, votes, debates. However, not a court reporter and not a full detailed list of each and every event.

Geoff Thompson moved to accept the Time Limit Slide shown in McCormack\_1\_0907.PDF  
Seconded by Wael Diab

Called to Question at 9:59am – passed without opposition by voice vote

***Liaison Report from TIA TR-42 – Wael Diab – rybinski\_1\_0907.pdf***

Started at 10:13am

- Wael presenting a presentation prepared by Val Rybinski and Sterling Vaden
- Meeting in Palm Springs in 2 weeks – Elections, Cat 6A comment resolution, current capacity

***Current Capacity for PoE+ - Wael Diab – diab\_1\_0907.pdf***

Started at 10:18am

- Max 720mA per pair up to 45C for Cat 5e, 6, and 6a UTP
- De-rating recommendations
- Want to stay backward compatible with .af
- Geoff mentions - 60C is at surface of copper, not the ambient

- Bundling and cable temp impractical and not something IT measures today in practice
- No Discussion

***Informal Update from ISO SC25 WG3 Meeting in Jeju, Korea Regarding Remote Powering (PoE)– Wael Diab – diab\_2\_0907.pdf***

Started at 10:42am

- Group of individuals from 802.3 presented this to ISO
- No liaisons received
- Liaison response coming into 802.3
- Discussion concerning the derating and temp rise. Issue that this is a report and technical discussions are being started. Tech discussion asked to be taken up with Wael and/or Mike offline.

***Classification Ad Hoc Extended Classification Using Two Classification Events – Clay Stanford – stanford\_0907.pdf***

Started at 11:16am

- Minor problem identified – solution agreed to
  - Review changes made since last presentation in SF
  - Mods to state machine, someone asked to look at details
  - Motion by Clay Stanford, Seconded by Yair Darshan
    - The 802.3at Task Force accepts as baseline materials pages 13, 14, and 15 of presentation stanford\_0907.pdf presented Sept 11, 2007 and instructs the editor to implement this change in the draft.
      - All in room
- For: 26 Against: 1 Abstain: 2  
 Technical Motion  
*Motion Passes*

\*\*\* recess until 1pm

***Durability of Connecting Hardware under Electrical Load for Power-over-Ethernet Applications - Yakov Belopolsky - Belopolsky\_1\_0907a.pdf***

Started at 1:05pm

- Electrical Contact Separation
- Discussion about 750 cycle testing, delta milliohms, gold plating, plug vs. jack degredation

***Current Limit Versus Energy Limit Based PSE - Thong Huynh – huynh\_9-11-07 r2.pdf***

Started at 1:47pm

- Review of system considerations
- MOSFET Power Dissipation – inrush and input transition
- Discussion that another presentation follows (Anoop) that addresses some items in this presentation, 57A short circuit may not be a valid point since .af can do

the same or worse, also that the PD will not operate below 30V so the 296mJ number is a worst case and may not be real life.

***PD Load Current Technical Analysis – Yair Darshan - darshan\_3\_0907.pdf***

Started at 2:24pm

- PD load behavior
- Discussion that presentation is a power supply optimization, an alternative method discussed.

***Overload Behavior for Type-2 PD- Anoop Vetteth – vetteth\_2\_0907.pdf***

Started at 3:02pm

- Defining PD behavior
  - FET can be in the linear region for 7ms
  - PD compliance model
  - Discussion on how this is similar to .af today, and PD\_Toverload questions.
  - Discussion on procedure and it was determined that traditionally we do not rescind a motion before changing it. Additionally, the chair asked if it was clear that this new motion will rescind the motion we passed in Geneva.
  - Motion by Fred Schindler, Seconded by Matt Landry
    - Move that IEEE P802.3at adopt pages 3, 7, 8, 12 and 13 in vetteth\_2\_0907.pdf as a baseline for the next draft.
      - All in room
- For: 25 Against: 0 Abstain: 2  
Technical Motion  
*The Motion Passes*

New motion:

Started at 3:58pm

- Motion by Wael Diab, Seconded by Thong Huynh
    - Move that IEEE P802.3at rescinds the motion from Geneva (May 2007) that reads "Move that there be a maximum current limit for type 2 PDs with the exception of current drawn by an input capacitor of maximum 0.12 uF".
      - All in room
- For: 27 Against: 0 Abstain: 1  
Technical Motion  
*The Motion Passes*

***Comment Editor Report – Chad Jones***

- Please review "New Comments in Easy Bucket" at [http://grouper.ieee.org/groups/802/3/at/comments/D0.9/P802d3at\\_D0p9\\_premtg\\_by\\_bucket\\_ez.pdf](http://grouper.ieee.org/groups/802/3/at/comments/D0.9/P802d3at_D0p9_premtg_by_bucket_ez.pdf)
- These comments need to be reviewed before tomorrow. The plan is to vote on accepting these all at once.

***Vport ad hoc PD input current vs PSE negative voltage transient  
Technical Analysis – Yair Darshan - darshan\_2\_0907.pdf***

Started at 4:04pm

- PSE Voltage Transient below Vport
- Discussion on cause, can be PD or multiple ports changing on PSE. PD with min cap and switching power supply.
- Discussion on how to solve issue of PD needing more current when port voltage drops.
- Suggested that we discuss in a brief ad hoc directly after the meeting today.

***D 0.9 Editors Report – Matt Landry – landry\_1\_0907.pdf***

Started at 4:30pm

- Are we ready for working group ballot? No, we still have TBDs.
- PSE state machines will be reviewed
- Review proposed PD state machine

***Vport ad hoc Fusing equation: how it was derived in 802.3af – Yair Darshan - darshan\_1\_0907.pdf***

Started at 4:39pm

- Equation derivation
- No discussion

\*\* Meeting adjourned

**September 12, 2007:**

Meeting called to order at 8:40am

Motion to amend to agenda, postpone call for patents and proceed to comment resolution.

- Motion by Chad Jones, Seconded by Mike McCormack
  - Move to approve the editor's recommendation as provided in P802d3at\_D0p9\_premtg\_by\_bucket\_ez.pdf, excluding comment 158.  
*Passed by voice without opposition (at 8:48am)*
- Motion to reconsider by Matt Landry, seconded by Fred Schindler.  
*Passed by voice without opposition (at 8:51am)*

New Motion:

- Motion by Matt Landry, Seconded by Fred Schindler
  - Move to change the editor's recommendation as provided in P802d3at\_D0p9\_premtg\_by\_bucket\_ez.pdf, comment 90 to read "Accept in Principle, Note was added in D0.9 page 4 line 8 showing drawings are informative".  
*Passed by voice without opposition (at 8:54am)*

Started Comment resolution at 8:57am

At 10:49am, the group took a break from comment resolution. The chair asked if we there was a request to review the patent policy. No one requested this.

Steve Carlson talked about the registration fee and the social tonight

At 10:54am the group returned to comment resolution.

At 11:12am, the group stopped comment resolution to review the ad hoc from yesterday.

***PD input current vs PSE negative voltage transient  
Technical Analysis (update) Yair Darshan – darshan\_2\_0907.pdf***

Started at 11:15am

- Review results from ad hoc meeting last night
  - Motion by Yair Darshan, Seconded by Fred Schindler
    - Move that the IEEE802.3at Task Force adopt presentation darshan\_2\_0907.pdf slide 5 to be incorporated in the next 802.3at draft.
      - All in room
- For: 21 Against: 0 Abstain: 0
- Technical Motion
- The Motion Passes*
- Note: We determined that there is a corner case where a PSE power transient happens simultaneously with a PD overload event. When this happens, the PD may require a capacitor larger than the minimum allowed (5uf) to avoid a reboot. In the opinion of the adhoc, the chance of these two infrequent events happening simultaneously is very small, and the impact on the PD with a small cap is minor (a disconnect followed by a normal reconnect), so the adhoc chose to ignore this case.

At 11:30am the group returned to comment resolution.

\*\* Meeting adjourned at 5:26pm

**September 13, 2007:**

Meeting called to order at 8:30am

Question – any objection to postpone approving the minutes and proceed to comment resolution?

No objection, group starts comment resolution.

At 8:37am, Question - Does anyone need a review of the patent policy? No one requests a review.

At 8:38am the group returned to comment resolution.

\*\* Break for lunch, 30 minutes, at 12:02pm

At 12:40pm, the group discussed accepting the meeting minutes. It was brought up that the minutes have not been posted the required number of days in order to accept them.

An additional interim was discussed – Oct 18th and Oct 19<sup>th</sup> – to do comment resolution.

- Motion by Wael Diab, Seconded by Geoff Thompson
  - Move that the IEEE802.3at Task Force defer approving the meeting minutes.

*Passed by voice without opposition (at 12:50pm)*

At 12:52pm the group returned to comment resolution.

At 1:11pm there was a debate on the comments. The main point was that our task force is modifying an existing clause, but we are not a maintenance group. More discussion may be needed.

At 2:34pm the group discussed the additional interim meeting again. A proposed schedule that shows we can have a meeting on October 18, 19 and meet a 10-day review of the next rev. It was noted that at this point of the task force, we are not required to meet a 15-day review period. Wael Diab has an issue with a 10-day review period, he voices that this is not enough time to do a good review.

At 2:56pm the group returned to comment resolution.

At 6:42pm, the group stopped comment resolution to discuss.

New motion:

Started at 6:43pm

- Motion by David Law, Seconded by Chad Jones
  - Charter a DLL ad hoc to develop baseline text for the Data Link Layer classification protocol. This text is to be based on adopted resolutions, comments received in D0.9 and augment as required to complete. Appoint Wael Diab to chair ad hoc.

*Passed by voice without opposition (at 6:45pm)*

Discussion about the items left to do and what the best way to accomplish these. Alignment around Chad doing some "bucketing" of the 50 unclassified comments. Mike will make subsets to be worked by assistant comment editors to be named later.

Discussion about "Big Ticket Items"; PSE Classification and PL requirements (Classification ad-hoc), DLL (new ad-hoc), PSE side SOA (Vport ad-hoc), Cable (liaison), 2P vs. 4P (plow around).

Discussion about using the existing ad-hocs to move the comment resolution forward. The ad-hocs will suggest text before the next time we meet. Alignment on driving forward using the ad-hocs.

- Motion by Wael Diab, Seconded by Yair Darshan
    - Move that we adjourn the meeting and the session.
      - Voice vote taken
      - Geoff Thompson requested a hand count
- The Motion Passes*

\*\* Meeting and session adjourned at 7:07pm

Next meeting will be announced via the email reflector.