2006 Nov 14 IEEE PoEPlus Task Force Minutes

Start at 09:00.

Agenda:

- Appoint Recording Secretary
- Discussion of order
- Intros
- Background stuff
- Presentations

Anoop Vetteth appointed Secretary Meeting Order

- Tue Wed 09:00-17:00 P802.3at
- Thurs 09:00-12:00 P802.3at

Core agendum approved by voice without opposition

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.

Patent Policy read by Mike McCormack

- Links provided
- Requested any letters to submit none
- Questions/Objections on patent policy requested none

Electronic information

- Web address www.ieee802.org/3/at/index.html
- eMail reflector stds-802-3-poep@ieee.org
- Next meeting watch www.ieee802.org/meeting/index.html

Mike proposes the venue for the Interim meeting in January 2008.

• Broadcom to host the meeting in Monterey, CA

Motion made by Mike McCormack

- 802.3at Interim meeting in January 2008 will be held at Monterey, CA
- Seconded by Fred
- Chair rules this is a procedural motion (50%)
- All yea: 40; nay: 1; abstain: 0
- o Motion passes
- o 33 of the members claim to attend

Mike proposes the venue for the Interim meeting in May 2008.

- ITU to host the meeting at Geneva, Switzerland
- Chair asks how many TF members would attend the interim meeting in May
 - o 29 people expected to attend the meeting
 - o Bill points out that the meeting is during the memorial day weekend

Mike proposes the venue for the Interim meeting in Sept 2008.

- ETRI/Samsung to host the meeting at Seoul
- Chair asks how many TF members would attend the interim meeting in Sept
 - 18 members expected to attend. 13 feel that they will possibly attend
 - No opposition. Many members feel that it is too soon to decide

Presentations

- 1) Valerie Rybinski
- 2) Clay Stanford
- 3) Fred Schindler
- 4) Terry Cobb
- 5) Daniel Feldman
- 6) Alan

TIA TR-42 Liaison to IEEE - Valerie Rybinski

- 1. Objectives
 - To determine max allowable cabling temperature rise for Cat 5e, 6 and 6A
 - Max allowable current
 - Max allowable DCRU
- 2. TR-42 members unanimously approved the liaison letter
- 3. Fred requests that the raw data be presented to the TF
- 4. Discussion on the ambient temperature for the Cable installations
- 5. Cable information to be shared in Dec, formal liaison communication will be done in Feb

Revision PAR against 802.1AB - Mike MCormack

1. Request for specific feedback before lunch

Room for Intrinsically safe powering for POE - Mike MCormack

- 1. Concern for Industrial use like petrochemical plants and hazardous materials handling
- 2. Request to consider PD subclass for intrinsically safe operation

Classification Ad Hoc Status Report - Clay Stanford

1. Presented solution for allowing PD to implement on

Fred Schindler

- 1. Baseline for Classification
- 2. Presented a solution to move out of the stalemate surrounding classification
- 3. Concerns on differentiating Endspans and Midspans on the basis of L1 and L2 Classification.
- 4. Straw poll on the proposal as is

Yea: 13

5. Straw poll on modifying the proposal to: PSEs shall choose the classification extension used.

Yea: 30

- 6. Motion:
- The IEEE 802.3at Task Force adopts diab_schindler_1106_1.pdf as the baseline for 802.3at classification as modified.

During the motion Mike McCorkack asked whether the motion precludes L1 classification from returning anything other than Class 4 during the second classification cycle if the response to the first classification cycle is Class 4. Wael Diab clarifies that the motion would indeed preclude this.

John Jetz asked Fred whether the PD can advertise a particular power level over L1 and negotiate a higher power lever through L2. Fred clarifies that the baseline does not preclude PDs from behaving in this manner.

- Moved by Wael Diab
- Seconded by Fred Schindler

Friendly amendment to change "under Class 4" to "After classifying a Class 4 PD" Friendly amendment to change "legacy limits" to "legacy limit"

- Chair rules this is a technical motion (75%)
- o All yea: 37; nay: 0; abstain: 3
- o .3 voters yea: 31; nay: 0; abstain: 2
- Motion passes

POEP Limits - Terry Cobb

- 1. Presented results for cable testing temperature raise
- 2. 10C temperature rise with 0.8A per pair on 2 pairs for a 144 cable bundle
- 3. 10C temperature rise with 0.55A per pair on 4 pairs for a 144 cable bundle
- 4. Recommends that the TF fix an upper limit on the number of cables in a bundle or fix the maximum total POE power sent through a bundle.

IEEE802.3at and Midspans - Daniel Feldman

1. Presented the forecast and other data on Midspans

Customer Premises Cabling – ISO Liaison Report – Alan

- 1. CAT5e has 25 ohm loop resistance. Old CAT5 cables might have 40 ohm loop resistance
- 2. Discussions regarding the un-mating of the connector at high power levels
- 3. General consensus within the TF to request ISO to reconsider their recommendation regarding un-mating of the connectors

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Presentations

- 1) Fred Schindler
- 2) Yair Darshan

Vport Ad Hoc Discussion – Fred Schindler

- 1. Presented the indirect di/dt limit for PDs, derived from the limits on the PSE in the af spec
- 2. Pointed out that many present PDs do not adhere to this limit
- 3. Discussion on the loop resistance is 12.5 ohm a realistic model? Fred points out that the male connector resistances at the end points are not accounted for
- 4. Asks the TF if anyone has issues lowering the PD voltage below the present minimum value of 36V. Yair objects by saying that increasing the dynamic range of the DC-DC on the PD would reduce the efficiency.
- 5. General consensus within the TF that the PD minimum voltage requirement should not be reduced from 36V.

UTP Cables Temperature Tests - Yair Darshan

- 1. Presented the cable limits as per independent testing conducted by PowerDsine
- 2.

Motion moved by Mike McCormack

- IEEE P802.3at will meet the week of May 28-31, 2007 at the IEEE 802.3 interim meeting being hosted by the ITU in Geneva
 - Chair rules this is a procedural motion (50%)
 - All yea: 34; nay: 0; abstain: 4
 - Motion passes

Mike brings up the Timeline slide and points that the TF is way behind schedule. He motivates the group to close in on many issues. Chad wants to initiate a motion that we start incorporating the approved motions into the draft.

Motion:

- Move that the P802.3at task force charter the editor to incorporate approved motions and maintenance items into draft 0.1.
- Moved by Chad Jones
- o Seconded by D Feldman

Friendly amendment to add "maintenance items" to the motion

- Chair rules this is a technical motion (75%)
- All yea: 35; nay: 0; abstain: 1

- o .3 voters yea: 30; nay: 0; abstain: 0
- o Motion passes

Mike says that the TF should submit a liaison letter to the 802.1AB group to incorporate the features that the TF needs for Layer-2 negotiation. Mike requests for a motion to appoint a member to convey the requirements of the TF to the 802.1AB revision track. Motion:

- Move that the P802.3at chairman appoint a liaison to the 802.1AB revision track.
- o Moved by T Locke
- Seconded by Y Darshan
- Chair rules this is a procedural motion (50%)
- All yea: 33; nay: 0; abstain: 2
- Motion passes

Mike initiates a discussion on the reply to the response to the liaison letters from the cable groups.

Val requests the following information in the response to the TIA:

Difference between the channel model used by the poep TF

Impact on un-mating the connectors

Request for raw data

Straw poll -

Choice between two separate responses to the TIA and ISO or just a single combined response to both?

One Combined letter – 8 Two letters – 16

Don't Care- 2

Chair requests that the group go through the objectives and evaluate the progress. Chad goes through the list of objectives and the TF discuss the progress.

Motion

Move that technical feasibility for 1000BASE-T PoE midspans has been demonstrated and they are therefore in the scope of the specification as long as the Class D 2002 channel transmission performace is met.

- Moved by D Feldman
- o Seconded by J Dupuis

Friendly amendment to change the text to incorporate "scope of specification" and "ClassD 2002 channel transmission performance is met".

- Chair rules this is a technical motion (75%)
- o All yea: 20; nay: 2; abstain: 13
- o .3 voters yea: 14; nay: 2; abstain: 11
- Motion passes

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Resumed work on the reply to the response to the liaison letters from the cable groups.

Motion

- Move that the chair forward the liaison correspondence:
 - "TIA Request.doc"
 - "TIA Response.doc" and
 - "ISO Response2.doc
 - to 802.3 chair for editing and forwarding under his signature to the appropriate parties.
- o Moved by T Locke
- o Seconded by M Landry
- Chair rules this is a procedural motion (50%)
- o All yea: 28; nay: 0; abstain: 2
- Motion passes

Review the meeting minutes from Sept Interim Meeting Motion

- Move to accept the September 2006 interim meeting minutes as recorded in "Sept 06 minutes.pdf"
- o Moved by M Landry
- o Seconded by F Yang
- Chair rules this is a procedural motion (50%)
- All yea: 32; nay: 0; abstain: 1
- Motion passes

Mike McCormack moves to adjourn the proceedings of the committee – Passed by voice without opposition

Adjourned at 9:45AM