MINUTES FOR 802.3AF PORTLAND, OR
JULY 2001

TUESDAY 7/10/01

8:29 AM - meeting convened by Steve Carlson
Dean Stoddart – Siemon Company volunteered to be Recording Secretary
Steve Carlson:
1. Opening comments and introduction
2. Review agenda/Objectives
3. "Big Ticket/Little Ticket" – need a list
4. November Ballot MUST happen
5. Do we go to Copenhagen or stay in the states? – need a sponsor to handle it
6. Boilerplate announcements

Mike McCormack:
     -See presentation file at 802.3af website
Review Timeline
1. Everyone needs copy of comment tool (on 802.3af website in private section), start getting comments in and figure out a way to handle them.
2. Draft 2.0 – go over comments at the September interim and then charter to draft 2.1 for Working Group ballot after September interim.
3. Draft 2.2 will be the "clean copy" for Working Group ballot NLT 10/31/01.
4. Draft 3.0 created during the November plenary.
5. Draft 3.1 in January 2002
6. Draft 3.2 in March 2002 Plenary
7. Sponsor Ballot pool – must be member of IEEE.
8. By draft 3.2 there should be only small changes, maybe only a possible Draft 4.0

Bob Grow:
Copenhagen Interim
1. On schedule - September 17-21, 2001

PRESENTATIONS

Yair Darshan – PowerDsine – "Derivation of Start-up Mode Parameters"
     -See presentation file at 802.3af website
Discussions followed concerning limit of 400 mA.
Yair Darshan – PowerDsine – "Port to Port Cross Regulation"
     -See presentation file at 802.3af website
Discussions followed concerning the need for an addition to the spec for port to port regulations
Roger Karam – Cisco – "Noise Specification Proposal"
     -See presentation file at 802.3af website

Discussions followed including noise proposals for data degradation in the spec. Also, EMI requirements in different environments were discussed, and whether it is a requirement for the spec.

Donald Stewart - Avaya - "Concept Issues List"
　　　-See presentation file at 802.3af website
Broke the presentation down into its primary issues and discussed each.

1. Auto polarity – feel that "not blowing anything up" is the minimum requirement. Do we need to be more complicated than that?
2. How do we prevent detection by a second PSE? – is considered a low priority, because it will auto-correct itself.
3. Need consistent PD and PSE slopes – high priority
4. Testing 1 second number for powering a valid PD – high priority
5. Start up parameters with battery and false detects and overloads – high priority.
6. 0.1 volt Detection Cadence – low priority
7. oversubscribed PSE not probe – (should it be put in management?) – high priority
8. Port capacitance during operation – need to decide cap numbers – other info based on Yairs' comments and presentation.
9. Inrush – high priority
10. Power removal discovery – High priority
11. Stable power operation (Z over Frequency) – High priority

Dave Dwelley – Linear Tech. – "Specifying PD input capacitor"
　　　-See presentation file at 802.3af website
comments by August 30th on this proposal should be sent to the reflector.

Dave Dwelley – Linear Tech. – "Maximum cap without inrush control in PD"
　　　-See presentation file at 802.3af website
Small cap versus large cap? – although this is a "second order" issue, we must decide which.
We are going to use 180 uF as a placeholder for the next meeting(s).

Donald Stewart - Avaya - "Concept Issues List"
　　　-See presentation file at 802.3af website
Broken down into basic issues (from above but in order of priority)

1. Auto polarity – "no blow up" – If connected backward should be prepared to either function properly or not give a signature.
2. Need consistent PD and PSE slopes

Presentation from John Jetzt
　　-Will choose between 10 and 45 Kohms

3. Start up parameters – hold off until some work can be done.
4. Max capacitor vs. PSE specify – Choose option a. – placeholder capacitance value = 570 uF
5. Spec does not address in-rush – now moot, it has been set by 180 uF placeholder as shown above.
6. Methods of power removal discovery – pass this issue for now.
7. Need stable power spec – Yair takes as homework
8. Second PSE detection – do nothing for now – in addition, we must avoid PD back powering.

9. 1.0 second powering of a valid PD - we will add test statements
10. 0.1 volts under detection cadence overly severe – what do we choose – 1.0 volt is the new placeholder – need to also specify the output current limit. Placeholder is 10 uA.

Meeting adjourned at 4.18 PM

WEDNESDAY 7/11/01

8:30 AM - meeting convened by Steve Carlson

Chris DiMinico – TIA Liason/Questions
DTE powering requirements is also a concern of the TIA. He requests a list of action items to bring to the TIA task group. Mike McCormack to take a bullet item list.
1. Power capacity of connecting hardware. Need a real definition of what the minimum current capacity is.
2. LCL of the cable. We will be inserting noise in a different mode. What should the TIA specify?
Will recap a list for Chris later on.

September Interim – Copenhagen or not?
The room is split into thirds (Yes, No, Don't Know). We already know it can't be the same week as Copenhagen. The group feel that if we met in a North American hub city, even if there was a fee of less that $100, most would be able to go. We will officially vote tomorrow.

PRESENTATIONS

Jennifer Rasimas/Steve Jackson – Nortel – "Proposed Isolation Environment C addition to IEEE 802.3"
-See presentation file at 802.3af website
Discussions followed concerning the need for Env. C., safety issues, grounding issues.

CHANGE IN PROCESS FOR PRESENTATIONS:
Provide updates to the editor, and verify that David Law has received them by the Tuesday following the meeting.

Dan Romascanu (Avaya), Avi Berger (PowerDsine) – "IETF Power Ethernet MIB"
-See presentation file at 802.3af website
Discussion followed concerning implementation, requested changes, management options, and the need for assistance on the subject, possibly from Mr. Law.

Steve Carlson/ Geoff Thompson
Energy Star Program - .pdf's available of Draft 1. This is something to think about to include some provisions in the 802.3af draft to accommodate Energy Star.

Review "Ticket List"

Startup parameters – relates to the dv/dt issue – need to evaluate using new cap values (Dave, Yair)

Oversubscribed PSE and midspan – we will add verbage into the spec to recommend shift to a slower cadence (3x instead of 2x)

In-rush – 180 uF max is adopted, and no longer a placeholder.

"Power removal discovery" – Rick Brooks has a proposal that he will work on

Stable power operation – need on reflector by 8/13/01 for comments by group. Group view by 8/30/01.

Second PSE detection – do nothing.

1.0 seconds - we have no test procedures at this point. So, in order to cover we need some test statements for the spec. This must be done as a group.

0.1 Volt under detection cadence – specify maximum output current limit during cadence interval. Placeholder is +/-10 uA.

Meeting temporarily adjourned at 1:30 PM for two hours so that ad-hoc groups can discuss the "Ticket items"

3:33 PM meeting reconvened by Steve Carlson

Rick Brooks - proposal

"We add to the 802.3af spec the following input PD input capacitances in order to allow more alternatives to measure the PD power request signature."

For PD input voltages of 2.8 VDC to 10 VDC
PD cap valid range: 50 nF to 100 nF

For PD input voltages during normal powering
(37 VDC to 57 VDC)
Maximum PD cap value : 5 uF

Approved by acclimation

Yair Darshan –
dV/dt issues:

Negative Transient:
For Cpd<180 uF, I min=10 mA
For Cpd>180 uF, Imin=56uA/uF
Td=300 ms min 400 ms max.

Positive Transients:
Exp-1:
570uF, dv=13 v, 350 mA load, 55 ms

dv/dt= 13v/5ms
meeting adjourned at 4:15 PM by Steve Carlson

THURSDAY 7/12/01

8:47 AM - meeting convened by Steve Carlson

September Interim Straw Poll
        Assuming that it is near the NYC or Boston area, how many people would go to
the interim?
Y: 29
N: 1

Formal Vote – September Interim
Motion: Move that the 802.3af task force chair request from the 802.3 Working Group
permission to hold an interim meeting during September at a location other than
Copenhagen, in North America, and city to be determined.
Moved M. McCormack
Second: P. Schwartz
All: Y: 30   N: 1   A: 1
Voters: Y: 25   N: 1   A: 1
Motion Passes

Straw Poll
        Who can come to Copenhagen?
Y: 13
N: 7
On the fence: 9

Steve Jackson – Nortel - Environment C comments:
1. Does not preclude A or B
2. Need a failure matrix
3. Only 802.3af applies for Environment C
Steve will ask the .3 group for assistance, and to find out whether anything is going to be
done about it.

Timeline: Mike McCormack
Providing basic information up until the November Plenary
Editorial comments vs. technical comments
Need to stick to the timeline, timing is critical

Formal Vote – Draft 2.0
Motion: Move that the 802.3af task force charter the editor to create a draft 2.0 of the
802.3af specification.
Moved: S. Jackson
Second: P. Schwartz

All: Y: 33   N: 0   A: 0
Voters: Y: 28   N: 0   A: 0
Motion Passes

Formal Vote – Approve May 2001 minutes
Motion: Move that the 802.3af task force accept the minutes of the May interim.
Moved: L. Leo
Second: A. Lehr
Motion Passes by acclimation

Meeting adjourned by Steve Carlson at 10:12AM