

4PPoE Study Group
July Plenary Meeting Minutes
Koussalya Balasubramanian
07/15/2013- 07/18/2013

Agenda
Recording Secretary appointed
Everyone in the room introduced themselves

Motion #1

Motion to approve Agenda as presented in slide 4 of agenda_0713.pdf

M : Jeff Heath
S: Koussalya Balasubramanian
(Procedural)

Discussion on the motion: None

Passed by voice without opposition

Motion #2

Motion to approve meeting minutes from May interim as posted in minutes_0513.pdf

M : Jeff Heath
S: Yair Darshan

(Procedural motion)

Discussion on the motion: None

Passed by voice without opposition

General Items

Chair went through general rules and regulations of IEEE
Chair read the patent policy
4-Pair PoE Study Group URL:
<http://www.ieee802.org/3/4PPOE/>

Presentation 1

Topic : Compatibility Matrix Ad-Hoc
Presenter : Yair Darshan

Discussions:

-Team suggested to remove column 4 of table on slide 9
Compatibility matrix shown on Slide 10 was rewritten as 3 different tables, such
that A) identification and B) Powering behavior for 1) Legacy PDs with New PSEs 2)
New PDs with Legacy PSEs 3) New PDs with New PSEs.

Break for lunch at 12:00PM
Back in session at 1:04PM

Presentation 2

Topic: Jeff Heath
Presenter: Proposed new .bt objectives

Discussions:

The presentation suggested 2 new objectives be added, for making lldp optional and 13W power up optional for type 3 PDs
Team suggested the request be worded differently or even consider not having these as objectives but investigate them in the task force

Presentation 3

Topic: 4-Pair Current Unbalance

Presenter: Christian Beia

Discussion:

Questions on where the presenter took the component ratings from -> mostly from vendors

Comment to the presenter -> channel resistance of 250hm/100m as specified in IEEE 802.3at includes all the connectors

This presentation has modeled diode bridge as voltage and resistance model as opposed to pure resistor model

Break at 2:45PM

Restarted at approximately 3:00PM

Presentation 4

Topic: Analysis of usable PD input power in 4P system

Presenter: Yair Darshan

Discussion

The variability of connector resistance could have been considered. Ie the unbalance effect will be different if Rmax for a component is 100mohm as opposed to 200mOhm. But this should be okay as the overall results shouldn't be altered very much due to this variance

To get phy experts input on imbalance effect on the magnetics

Uses pure resistance model for diode bridge

To sort out any calculation differences between the previous presentation and this one

Review of PAR and 5C

Chair reviewed the PAR with rest of the team – no change requested

Chair called for a 5C adhoc meeting

5C was reviewed

Suggestion to add building management also to broad market potential

Suggestion to add energy efficiency somewhere in the 5C

Recess, Meeting recessed until the next day

7/17/2013 Back in Session

Time: 9:04AM

Did another round of introduction through the room

Presentation 5

Topic: Power over 10GBASE-T Ethernet

Presenter: George Zimmerman

Discussion:

10GBaseT has a high pass filter at the Rx which ignores noise below 50MHz

Check noise spec of at

Did the experiment do dynamic load step on PoE?

Did the experiment include pair to pair and within a pair imbalance, to see if that impacts anything?

Special transformer used (for 10G + PoE) for the experiment but the presenter confirmed results should be similar for off the shelf 10G only transformers

No effect on link up time

Was the magjack integrated or 1x1 or 2xn? – 1x1

Review of Objectives

Dave took chair responsibility while Chad presented Objectives

Proposed Objective 2 – do we want to remove it as it is already part of 802.3 at? We can lose this and to avoid concerns of exceeding 100W we can add a maximum power objective and state LPS

Proposed Objective 4 –

We could lose it as this is already in the 802.3at objective

We were suggested the same from people outside the study group

But we are adding 10GBASE-T support, so this objective should be left there as this is related to the phy

Proposed Objective 6

Could delete it as it is straight out of 802.3at

Proposed Objective 7

Minimum and maximum power objective

Minimum is okay, we generally donot state maximum performance as an objective, instead we can state LPS.

We should have a separate objective on LPS and not mix it with minimum power level objective

Proposed Objective 8

Define parameters to limit maximum pair to pair current imbalance

Proposed Objective 9

Reword into simpler text that conveys backward compatibility

Proposed Objective 10

Reword into simpler text that conveys backward compatibility

Proposed Objective 11

Covered by Objective 3 – so will be removed

Break, Team dispersed for break at 10:44 PM

Reassembled at 11AM

More discussion on Objective

Wael and David gave some input on what objectives are meant and not meant to be

They gave their inputs on new proposed objectives as well

Also they suggested that objective 10 be broken into 2 parts and the last part where it says “option of providing power over 4pairs to 2Pairs PD” could be removed. Wael mentioned LLDP is considered to be part of management

As per their input another new objective of updating management and classification parameters was added

Team gave input to make the above new objective read “Update management parameters” as classification is covered under mutual identification.

Wael also noted in relation to the above discussion that to change anything already existing in standard a 75% of vote is needed

Motion# 3

Move to adopt objectives on slides 8,9,10,11 and 12 as shown in jones_1_0713.pdf

Move: W. Diab
Second: K. Balasubramanian
Technical: (>=75%)
Y:25 N:0 A:0

Motion Passes

Motion# 4

Move to modify objective 5 as captured on slide 6 from jones_1_0713.pdf, replacing "Investigate" with "Support".

Move: C Jones
Second: Y Darshan
Technical: (>=75%)
Y:22 N:0 A:2

Motion Passes

Exchange of duties & Lunch
Chad resumes Chair responsibilities

Team recessed for lunch at 11:50 PM
Back in session by 1:32PM

5C Review
Reviewed all the 5C and reworded as necessary/suggested by Team

Motion #5

Move to adopt the 5 Criteria as shown in 5Criteria_1_0713.pdf

Move: W. Diab
Second: K. Balasubramanian
Technical: (>=75%)
Y:18 N:0 A:0

Motion Passes

Motion #6

Move to request an extension of the study group

Move: W. Diab
Second: D. Dwelley
Majority vote (>50%)
Y:18 N:0 A:0

Motion Passes

Motion #7

Move to adjourn the meeting
Move: J. Heath
Seconded: K. Balasubramanian

Passed by voice without opposition.