

# Power over Ethernet Plus 802.3 Study Group Atlanta Plenary Report

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IEEE 802.3 March 2005 Plenary  
PoEP SG Interim Report

# PoE Plus Purpose

- Formed at the November 2004 802 plenary by 802.3 Working group motion

“Move that 802.3 authorize the formation of a Study Group to develop a standards project proposal (PAR and Five Criteria) for enhancements to PoE beyond the specifications of Clause 33.”

# Plenary Work

- Met Wednesday and Thursday
- 11 presentations
- Refined objectives
- Created first draft of 5 Criteria

# Presentations

- Economical Analysis
- How Power Management reduce system costs
- Power feeding methods
- PoE Plus Output Voltage Specification
- Feasibility of 4 Pair power/Gigabit Ethernet in the Midspan
- DC Current Imbalance
- Thermal Effects of PoE Phantom Current on Magnetics

# Presentations (cont)

- Thermal Effects of PoE Phantom Current on Magnetics
- Power over Ethernet - Plus (via Midspan over 4 wire pairs)
- Cable Temperature Rise from Power over Ethernet Applications
- Safety considerations for POE and POEplus<sup>1</sup>
- PoEPlus – My Thoughts

1 – Text provided online but not presented or reviewed by the Study Group

# Objectives

- $\geq 30$  Watts
- Going to physics limits
- Revise Clause 33
- 100% backward compatible
- New PDs will indicate they need new PSEs
- Cabling  $\geq$  Class D
- Class A & B EMI
- SELV
- Research extended classification
- Midspan support for 1000BASE-T
- Research and data for 10GBASE-T

# Straw poll

- The following poll was conducted:

IEEE 802 and 802.3 meeting planners should attempt to ensure attendees staying in the meeting hotel(s) receive broadband services in their rooms for no separate fee; or, if such agreement exists, explain how members can enforce the agreement.

All – Agree:28    Disagree:0    Abstain:1

# Motion

- Request that the IEEE 802.3 WG request extension of the POEP Study Group to the next Plenary meeting.

Moved: M McCormack on behalf of the SG

Yes: 37

No: 1

Abstain: 2



# Plans

- Meet at the eventual 802.3 interim site
  - Refine Objectives
  - Refine 5 Criteria
  - Develop PAR
- Meet at July Plenary
  - Request to become a TF