Power over Ethernet Plus
802.3 Study Group
Atlanta Plenary Report

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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\(^1\)
• PoEPlus – My Thoughts

\(^1\) – Text provided online but not presented or reviewed by the Study Group
Objectives

• ≥ 30 Watts
• Going to physics limits
• Revise Clause 33
• 100% backward compatible
• New PDs will indicate they need new PSEs
• Cabling ≥ 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