

IEEE 802.3  
4-Pair Power over Ethernet  
(4PPoE) Study Group  
11 November 2013,  
Dallas, Texas

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# Agenda

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- Report on September Interim Study Group Meeting
- Current Objectives
- Plans for the week

# Interim Business

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- Very short Interim meeting in York, lightly attended
- Two presentations
- No Changes to PAR, 5C, Objectives

# Agenda

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- Report on May Interim Study Group Meeting
- **Current Objectives**
- Plans for the week

- The project will amend IEEE Std 802.3-2012 by amending Clause 33
- IEEE Std 802.3 will comply to the limited power source and SELV requirements as defined in ISO/IEC 60950
- Specify Mutual Identification to address four pair operation
- The standard shall not preclude the ability to meet FCC/ CISPR/EN Class A, Class B, Performance Criteria A and Performance Criteria B with data for all supported PHYs
- Support for operation over the following channels that have DC loop resistance of no greater than 25 ohms:
  - Class D or better 4-pair copper medium from ISO / IEC 11801:2002, including Amendments 1 & 2
  - Class D or better media from ISO / IEC 11801:1995
  - Category 5e or better cable and components as specified in ANSI/TIA-568-C.2
  - Category 5 cable and components as specified in ANSI/TIA/ EIA-568-A

*Adopted by the IEEE 802.3 4PPoE Study Group May 2013*

- Support operation with 10GBASE-T
- The project shall support a minimum of 49 Watts at the PD PI.
- Define parameters to limit maximum pair-to-pair current imbalance.
- 4PPoE PDs which operate at power levels consistent with IEEE 802.3-2012 PDs will interoperate with IEEE 802.3-2012 PSEs.
- 4PPoE PSEs will be backwards compatible with IEEE 802.3-2012 PDs.
- Update management parameters

*Adopted by the IEEE 802.3 4PPoE Study Group July 2013*

# Agenda

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- Report on May Interim Study Group Meeting
- Current Objectives
- Status of PAR, 5C
- Plans for the week

# Plans for week

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- Meet Tuesday and Wednesday 8:30am to 6pm
- Meet Thursday 8:30am to noon
- Main items
  - Presentations on Tuesday
  - Wednesday reserved for responses to comments on PAR, 5C
  - Request formation of Task Force on Thursday



# Presentations

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Agenda and General Information	Chad Jones	Cisco
802.3 Draft Development Process	Marek Hajduczenia	Bright House Networks
Cable Heating	Alan Flatman	LAN Technologies
Predicting Cable P2P Resistance Imbalance (P2PRI) from existing cabling parameters	Yair Darshan	Microsemi
Analysis of usable PD input power in 4P system	Yair Darshan	Microsemi
Channel Current Imbalance	Christian Beia	ST Micro

# 4PPoE Web Information

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- IEEE 802.3 4PPoE web site:  
<http://www.ieee802.org/3/4PPOE/index.html>
- All information is in the public area
  - PAR
  - Objectives
  - Meeting material