### IEEE 802.3 Working Group March 2008 Plenary Week

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### **Current IEEE 802.3 activities**

- P802.3ar, Congestion Management
- P802.3at, DTE Power Enhancements
- P802.3av, 10 Gb/s EPON
- P802.3az, Energy Efficient Ethernet



- P802.3ba, 100 Gb/s and 40 Gb/s Ethernet
- 802.3ax / P802.1AX, Link Aggregation
- 802.3ay / P802.3, IEEE Std 802.3 revision

### **P802.3ar Congestion Management**

- Proposed modified project documents failed to gain consensus support in July 2006
- Project is basically in stalemate induced inactivity
  - July 2007 motion to withdraw the project failed
  - Project is on the Dec 2008 administrative withdrawal list
- Meeting plan
  - Very short meeting to evaluate status and look for a way out of stalemate

### **P802.3at DTE Power Enhancements**

- Increase the amount of power delivered over twisted pair copper from that specified by 802.3af (Clause 33 of IEEE Std 802.3)
  - At least 30 watts at powered device
  - Maintain compatibility with 802.3af
- Meeting plan
  - Technical presentations
  - P802.3at/D2.0, submitted to WG for approval of WG ballot

### P802.3av 10 Gb/s EPON

- Define higher speed Ethernet passive optical network operation
  - 10 Gb/s downstream/1 Gb/s upstream, single SM fiber
  - 10 Gb/s downstream/10 Gb/s upstream, single SM fiber
  - Up to 3 power budgets that support 1:16 and 1:32 split ratios at distances of at least 10 and at least 20 km
- Meeting plan
  - Resolve comments on TF review draft P802.3av/D1.1 and continue refinement of draft

# P802.3az Energy Efficient Ethernet

- Transition to and from low-power use state in response to network demand
  - PHY energy efficiency enhancements for selected PHY types (popular twisted pair and backplane)
  - Maximize transparency to higher layers
- Meeting plan
  - Joint meetings with 802.1 subgroups for better joint understanding of EEE requirements and impacts on link operation
  - Consider baseline proposals that meet the scope and purpose of the PAR

#### P802.3ba 100 Gb/s & 40 Gb/s Ethernet

- Define operation at 100 Gb/s & 40 Gb/s over adopted objectives for link media / distance
  - 40 Gb/s, at least: 1 m backplane, 10 m copper cable, 100 m OM3 multimode fiber
  - 100 Gb/s, at least: 10 m copper cable, 100 m OM3 multimode fiber, 10 km single mode fiber, 40 km single mode fiber
- Meeting plan
  - Consider baseline proposals that meet the scope and purpose of the PAR

### **Officers (until end of this plenary)**

- 802.3 Chair: Bob Grow (bob.grow@ieee.org)
- 802.3 Vice Chair: David Law (david\_law@3com.com)
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- 802.3 Treasurer: Brad Booth (bbooth@ieee.org)
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- P802.3at DTE Power via the MDI Enhancements: Mike McCormack (mike\_mccormack@ti.com)
- P802.3av 10 Gb/s EPON: Glen Kramer (glen.kramer@teknovus.com)
- P802.3az Energy Efficient Ethernet: Mike Bennett (mjbennett@lbl.gov)
- P802.3ba 100 Gb/s and 40 Gb/s Ethernet: John D'Ambrosia (jdambrosia@ieee.org)

# **Preliminary Meeting Plan**

	Mon	Tue	Wed	Thu	
AM		P802.3ar P802.3at P802.3av P802.3az P802.3ba	P802.3at P802.3av P802.3az P8032.3ba Maint/Rules	P802.3at P802.3av P802.3az P802.3ba	
	LMSC Plenary				
PM	802.3 Opening Plenary	P802.3at P802.3av P802.3az P802.3ba	P802.3at P802.3av P802.3az P802.3ba	802.3 Closing Plenary	
Eve	P802.3ba	P802.3ba			

### **Published Standards**

- IEEE Std 802.3<sup>™</sup>-2005 \*
  - IEEE Std 802.3/Cor 1-2006 \*
  - IEEE Std 802.3/Cor 2-2007
  - IEEE Std 802.3an<sup>™</sup>-2006 \*
  - IEEE Std 802.3aq<sup>™</sup>-2006 \*
  - IEEE Std 802.3as<sup>™</sup>-2006 \*
  - IEEE Std 802.3ap<sup>™</sup>-2007
- IEEE Std 1802.3Rev-2001 \*
- \* Available through Get IEEE 802 http://standards.ieee.org/getieee802/802.3.html

# **Current project drafts**

- P802.3ar/D1.3 Congestion Management
  - No active work at this time
- P802.1AX/D2.1 (Link Aggregation)
  - Part of IEEE Std 802.3 revision
  - Extracted from IEEE Std 802.3-2005
  - 1<sup>st</sup> Sponsor recirculation ballot closed prior to meeting
- P802.3/D2.0 (Revision of IEEE Std 802.3)
  - Part of IEEE Std 802.3 revision
  - Merges 802.3an, 802.3ap, 802.3aq, 802.3as, Cor1, Cor2 and Maint #8 into IEEE Std 802.3-2005
  - 1<sup>st</sup> Sponsor recirculation ballot closed prior to meeting
- P802.3at/D2.0 (DTE Power Enhancements)
  - In WG preview for WG ballot approval
- P802.3av/D1.1
  - In TF review