# IEEE 802.3 Working Group July 2007 Plenary Week

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Web site: www.ieee802.org/3

## **Current IEEE 802.3 activities**

- Published
- P802.3ap, Backplane Ethernet
- P802.3ar, Congestion Management
- P802.3at, DTE Power Enhancements
- P802.3av, 10 Gb/s EPON
- Higher Speed Study Group
- Energy Efficient Ethernet Study Group



- 802.3ax / P802.1AX, Link Aggregation
- New <
- 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
- Meeting plan
  - Very short meeting to evaluate if there is any drive to reconsider project documents or request project withdrawal

#### P802.3at DTE Power Enhancements

- Increase the amount of power delivered over twisted pair copper from that specified by IEEE Std 802.3af-2003
  - At least 30 watts
  - Maintain compatibility with 802.3af
- Meeting plan
  - Technical presentations
  - Review proposed P802.3at/D0.8, including maintenance requests

## P802.3av 10 Gb/s EPON

- Define higher speed Ethernet passive optical network operation
  - Planning symmetrical and asymmetrical (10 Gb/s downstream, 1 Gb/s upstream)
  - Considering simplex operation
- Working on major architectural decisions
- Meeting plan
  - Technical presentations
  - Adoption of core proposals and concepts

## Higher speed (Ethernet) study group

- Evaluate definition of greater than 10 Gb/s MAC data rate and related PHY capability in IEEE Std 802.3
- The Study Group may recommend one or more PARs
- Meeting plan
  - Attempt to break consensus deadlock on request to define 40 Gb/s and 100 Gb/s operation
  - Drive for 802.3 approval of project documents (LMSC approval will have to wait for next plenary)

## **Energy Efficient Ethernet study group**

- Evaluate methods to reduce energy use by reduction of link speed during periods of low link utilization
  - Considering zero a link speed
  - Considering PHY modifications in support of lower power consumption
- Meeting plan
  - PAR and Five Criteria documents submitted for July 802.3 and LMSC approval
  - Tutorial will be held in support of PAR
  - EEESG documents are located at: http://www.ieee802.org/3/eee\_study/index.html
  - Begin to focus on technical options to meet objectives

#### **Officers**

- 802.3 Chair: Bob Grow (bob.grow@ieee.org)
- 802.3 Vice Chair: David Law (david\_law@3com.com)
- 802.3 Exec. Secretary: Steve Carlson (scarlson@esta.org)
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- Higher Speed Ethernet SG: John D'Ambrosia (jdambrosia@force10networks.com)
- Energy Efficient Ethernet SG: Mike Bennett (mjbennett@lbl.gov)

# **Preliminary Meeting Plan**

	Mon	Tue	Wed	Thu
AM	HSSG (interim)	P802.3ar P802.3at P802.3av	P802.3at P802.3av HSSG	P802.3at P802.3av HSSG
	LMSC Plenary	HSSG EEESG	EEESG Maint, Interp	EEESG
PM	802.3 Opening Plenary	P802.3at P802.3av HSSG EEESG	P802.3at P802.3av HSSG EEESG Maint, Interp	802.3 Closing Plenary
Eve	EESG tutorial P802.3av			

## **Published Standards**

- IEEE Std 802.3<sup>TM</sup>-2005 \*
  - IEEE Std 802.3/Cor 1-2006 \*
  - IEEE Std 802.3/Cor 2-2007
  - IEEE Std 802.3an<sup>TM</sup>-2006 \*
  - IEEE Std 802.3aq<sup>™</sup>-2006 \*
  - IEEE Std 802.3as<sup>TM</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/D1.1 (Link Aggregation)
  - Part of IEEE Std 802.3 revision
  - Extracted from IEEE Std 802.3-2005
  - WG 1<sup>st</sup> recirculation will close immediately before meeting
- P802.3Rev/D1.1
  - 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
  - WG 1<sup>st</sup> recirculation will close immediately before meeting
- P802.3at/D0.8 (DTE Power Enhancements)
  - In TF review