

## IEEE 802.3az Energy Efficient Ethernet

#### **Opening Plenary Report**

Dallas, TX November 10, 2008

Mike Bennett mjbennett@ieee.org

## IEEE 802.3az EEE Contacts

Task Force ChairMike Bennett (mjbennett@ieee.org)

Web MasterBruce Nordman (bnordman@lbl.gov)

Editor-in-Chief
 Sanjay Kasturia (kasturia@teranetics.com)

## Reflector and Web

To subscribe to the EEE TF reflector, send your request to:
<u>ListServ@ieee.org</u>

with the following in the body of the message (do not include "<>"): subscribe stds-802-3-eee <yourfirstname> <yourlastname> end

- Send reflector messages to: stds-802-3-eee@listserv.ieee.org
- For complete instructions on reflector usage, subscription, and unsubscription:

http://www.ieee802.org/3/az/reflector.html

Task Force web page URL: <u>http://www.ieee802.org/3/az/</u> Reflector and Web

Our latest draft is D1.0

Task Force *private* web page URL:

http://www.ieee802.org/3/az/private/index.html

Login: 802.3az Password: xxxxxx

#### Overview of IEEE 802.3 Standards Process (2/5) Task Force Meeting Phase



Interim meeting

#### Sept 13-14, 2008 – Seoul, South Korea

Hosted by LG-Nortel

Great venue, especially on such short notice - thank you!

Attendance: ~20 people

Presentations

#### 10GBASE-T

ad-hoc report

- LPI parameter selection
- Refresh, Quiet, and Alert signal proposals

Comment tool tutorial

#### Presentations (cont)

The remaining presentations supported comments on clauses:

- 14 10BASE-Te
- 40 1000BASE-T

Comments on D0.9

- □ 85 comments received
  - 38 technical

47 editorial

All resolved

Progress (cont.)

Motions from the Interim

Motion #2

Adopt proposal in chadha\_01\_0908.pdf for Twisted Pair Model for a Class D (Category 5) or better cable **Moved by: M. Chadha; Seconded by: S. Kasturia Technical; ≥ 75% required to pass** 

Y:16 N: 0 A:1 Motion passes

Progress (cont.)

Motions from the Interim

Motion #3

802.3az task force adopt Alert signal proposal for 10GBASE-T mode in taich\_01\_0908.pdf for inclusion in draft 1.0 of 802.3az

Moved by: D. Taich; Seconded by: D. Dove

Technical; ≥ 75% required to pass

Y:10 N: 2 A:6 Motion passes

Progress (cont.)

- Motions from the Interim
  - Motion #4

Charter the 802.3az editorial team to create D1.0 using 8023az-0-9.pdf, chadha\_01\_0908.pdf, taich\_01\_0908.pdf and the comment resolutions captured in D09responses.pdf

Moved by: H. Barrass ; Seconded by: M. Chadha Technical; ≥ 75% required to pass

Y:16 N: 0 A:0

**Motion passes** 

#### Editorial team produced D1.0

- Review began October 8
- Comment submission deadline October 26

#### Comments received on D1.0

- 334 comments received
  - 175 technical (T + TR)
  - 159 editorial (E + ER)

## Goals for this Meeting

- Continue hearing proposals
  - □ Fill in TBDs and holes
  - Review architecture
- Resolve what to do with TP-PMD
- Review draft D1.0 and proposed changes
- Process comments on D1.0
  - Those who submitted comments please review comment responses before the meeting
- Direct editors to produce D1.1 for Task Force review
- Lay the ground work for the next meeting

#### Objectives

Define a mechanism to reduce power consumption during periods of low link utilization for the following PHYs

- 100BASE-TX (Full Duplex)
- 1000BASE-T (Full Duplex)
- 10GBASE-T
- 1000BASE-KX (added in July)
- 10GBASE-KR
- 10GBASE-KX4

• Define a protocol to coordinate transitions to or from a lower level of power consumption

• The link status should not change as a result of the transition

• No frames in transit shall be dropped or corrupted during the transition to and from the lower level of power consumption

• The transition time to and from the lower level of power consumption should be transparent to upper layer protocols and applications

## Objectives

- Define a 10 megabit PHY with a reduced transmit amplitude requirement such that it shall be fully interoperable with legacy 10BASE-T PHYs over 100 m of Class D (Category 5) or better cabling to enable reduced power implementations.
- Any new twisted-pair and/or backplane PHY for EEE shall include legacy compatible auto negotiation

# Thank You!