

IEEE 802.3WG

Opening Plenary Report

Update: Industry Connections
Higher Speed Ethernet Consensus

John D'Ambrosia

Dell

San Diego, CA, USA, July 2012

Stroll Down Memory Lane...

Higher Speed Study Group Call-For-Interest Summary and Motion

**John D'Ambrosia
San Diego, CA
July 20, 2006**

A Little Further




IEEE P802.3ba 40Gb/s and 100Gb/s Ethernet

Final Report

San Diego, CA, USA
July 2010

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“Ethernet Bandwidth Assessment” Program Submission

- **Background and Purpose**

During the IEEE P802.3ba 40Gb/s and 100Gb/s Ethernet project, it was observed that core networking and computing applications were growing at different rates, driving the need to develop the two new wireline Ethernet speeds. The focus of this IC activity will be to perform an appraisal of future “Ethernet Wireline Bandwidth Needs” of applications within the Ethernet eco-system.

Related Standard – IEEE Std 802.3-2008 and IEEE Std 802.3ba-2010

Related Sponsor – IEEE 802

- **Charter and Scope**

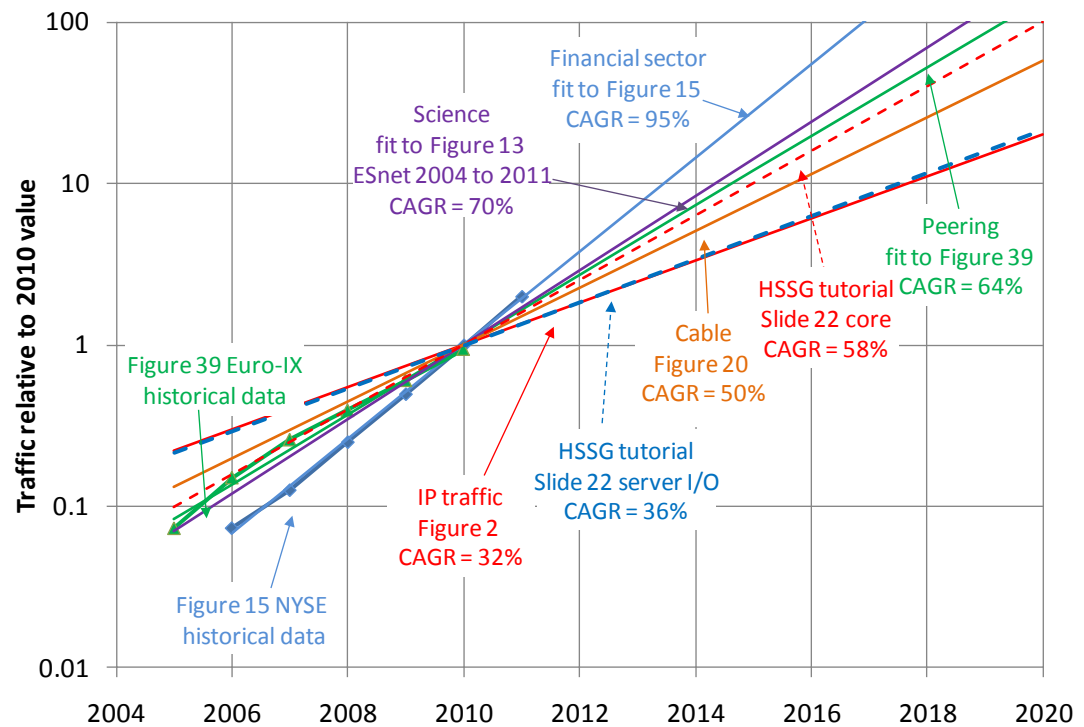
The scope of this IC will focus on gathering information that will enable an evaluation of the bandwidth needs for Ethernet wireline applications, including, but not limited to, core networking and computing. This evaluation will then enable the generation of a white paper(s) and related presentations on the future bandwidth needs of Ethernet wireline applications, which can then be used for future reference by an appropriate related standards activity.

- **Proposed Deliverables**

This evaluation will then enable the generation of a white paper(s) and related presentations on the future bandwidth needs of Ethernet wireline applications, which can then be used for future reference by an appropriate related standards activity.

IEEE 802.3 BWA Status Update

- Work has been completed.
- http://www.ieee802.org/3/ad_hoc/bwa/public/jul12/1207_BWA_open_report.pdf
- Tutorial this week!
- Pending IEEE 802.3 WG approval this week!



Source: IEEE 802.3 BWA Tutorial -

http://www.ieee802.org/802_tutorials/2012-07/BWATutorial_D1_12_0716.pdf

- What's Next?

“Higher Speed Ethernet Consensus” Program Submission

- **HSE ICAID:** <https://mentor.ieee.org/802-ec/dcn/12/ec-12-0033-00-00EC-higher-speed-ethernet-icaid.pdf>

- **Background and Purpose**

The completion of the IEEE 802.3 Industry Connections Ethernet Bandwidth Assessment Ad hoc has demonstrated that the bandwidth requirements of multiple application spaces are continuing an exponential climb with the forecasted growth in 2020 to reach a level 100x the bandwidth required in 2010. The purpose of the Industry Connection’s Higher Speed Ethernet Consensus activity will be to build consensus related to initiating a new effort targeting the next speed of Ethernet for wireline applications, which will be used for the evaluation and possible development of a Call-For-Interest for the next Higher Speed Study Group.

Related Standard – IEEE Std 802.3-2008 and IEEE Std 802.3ba-2010

Related Sponsor – IEEE 802

- **Charter and Scope**

- The scope of this IC activity will focus on building consensus related to the next speed of Ethernet for wireline applications, which will be used for the evaluation and possible development of a Call-For-Interest for the next Higher Speed Study Group.

- **Proposed Deliverables**

- The proposed deliverables will be the historical records, i.e. meeting notes & presentations, of the meetings held by this Industry Connections activity.

HSE ICAID Initial Members

- John D'Ambrosia, Dell
- Mark Nowell, Cisco
- David Ofelt, Juniper
- Pete Anslow, Ciena
- Steve Trowbridge, Alcatel-Lucent
- Ali Ghiasi, Broadcom
- Thananya Baldwin, Ixia
- Gerald Pepper, Ixia
- Mark Gustlin, Xilinx
- Kapil Shrikhande, Dell
- Chris Cole, Finisar
- Kai Cui, Huawei
- Scott Kipp, Brocade
- Jon Anderson, Opnext
- Mike Peng Li, Altera
- Andy Moorwood, Infinera
- Henk Steenman, AMS-IX
- Andy Bach, NYSE
- Arnold Nipper, DE-CIX
- Robert Lingle, OFS
- Michael Benett, LBNL-Energy Sciences Network
- Martin Carroll, Verizon
- Sam Sambasivan, AT&T
- Ralf-Peter Braun, Deutsche Telekom
- Huang Xi, Huawei
- Parantap Lahiri, Microsoft
- Louie Lee, Equinix
- Peter Stassar, Huawei
- Jeff Maki, Juniper
- Dirk Breuer, Deutsche Telekom
- Ryan Latchman, Mindspeed
- Sudeep Bhoja, Inphi
- Mike Dudek, Qlogic
- Hiroshi Hamano, Fujitsu Labs
- Nishihara Susumu, NTT
- Taichi Kogure, Opnext
- Rick Rabinovich, Alcatel-Lucent
- Beth Kochuparambil, Cisco
- Scott Sommers, Molex
- Tom Palkert, Xilinx, Molex, Luxtera
- Paul Kolesar, Commscope
- Jianyao Chen, Gigoptix
- Megha Shanbhag, TE Connectivity
- Nathan Tracy, TE Connectivity
- Francois Tremblay, Semtech
- Mabud Choudhury, Commscope
- Masashi Kono, Hitachi
- Velu Pillai, Broadcom
- Vasu Parthasarathy, Broadcom
- Hugh Barrass, Cisco
- Marc Dupuis, TE / Madison
- Eric Hall, Aurion
- Daniel Sparacin, Aurion
- Gary Nicholl, Cisco
- Katsuhisa Tawa, Sumitomo
- Greg McSorley, Amphenol
- Wheling Cheng, Juniper
- John Petrilla, Avago
- Dan Dove, Applied Micro
- Joel Goergen, Cisco
- Frank Change, Vitesse

Thank You!