

Ethernet Bandwidth Assessment Ad hoc- General Introduction

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Teleconference
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Agenda

- Guidelines
- Introduction
- Overview
- Next Steps
- Industry Communications
- Next Meetings

Guidelines for IEEE-SA Meetings

- **All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.**
- **Don't discuss the interpretation, validity, or essentiality of patents/patent claims.**
- **Don't discuss specific license rates, terms, or conditions.**
 - Relative costs, including licensing costs of essential patent claims, of different technical approaches may be discussed in standards development meetings.
 - Technical considerations remain primary focus
- **Don't discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.**
- **Don't discuss the status or substance of ongoing or threatened litigation.**
- **Don't be silent if inappropriate topics are discussed... do formally object.**

If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at patcom@ieee.org or visit <http://standards.ieee.org/about/sasb/patcom/index.html>

See *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and “Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy” for more details.

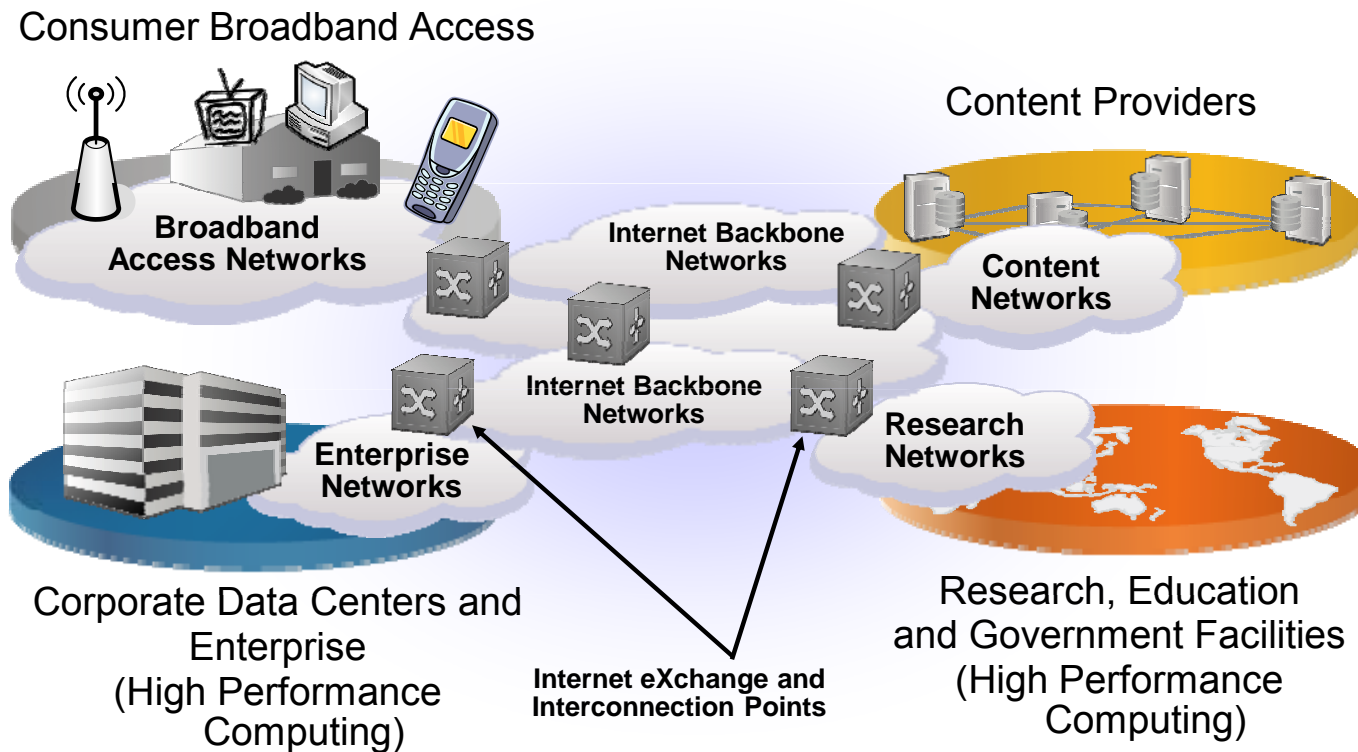
This slide set is available
at <https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.ppt>

Introduction

- ❑ Bandwidth - frequent discussion during HSSG
 - ❑ CFI forecasts were based on aggregation needs
 - ❑ Initially, eco-system wasn't fully explored
 - ❑ Results –
 - ❑ Two growth rates – two speeds
 - ❑ Minor project delay
- Bandwidth projections driving ongoing discussions
- Market Need
 - ❑ Data Centers
 - ❑ Internet Exchanges
 - ❑ Carriers
 - ❑ Financial Community
 - ❑ R&D
 - ❑ Content Providers

The 2006 HSSG CFI

The Ethernet Ecosystem



July 18, 2006

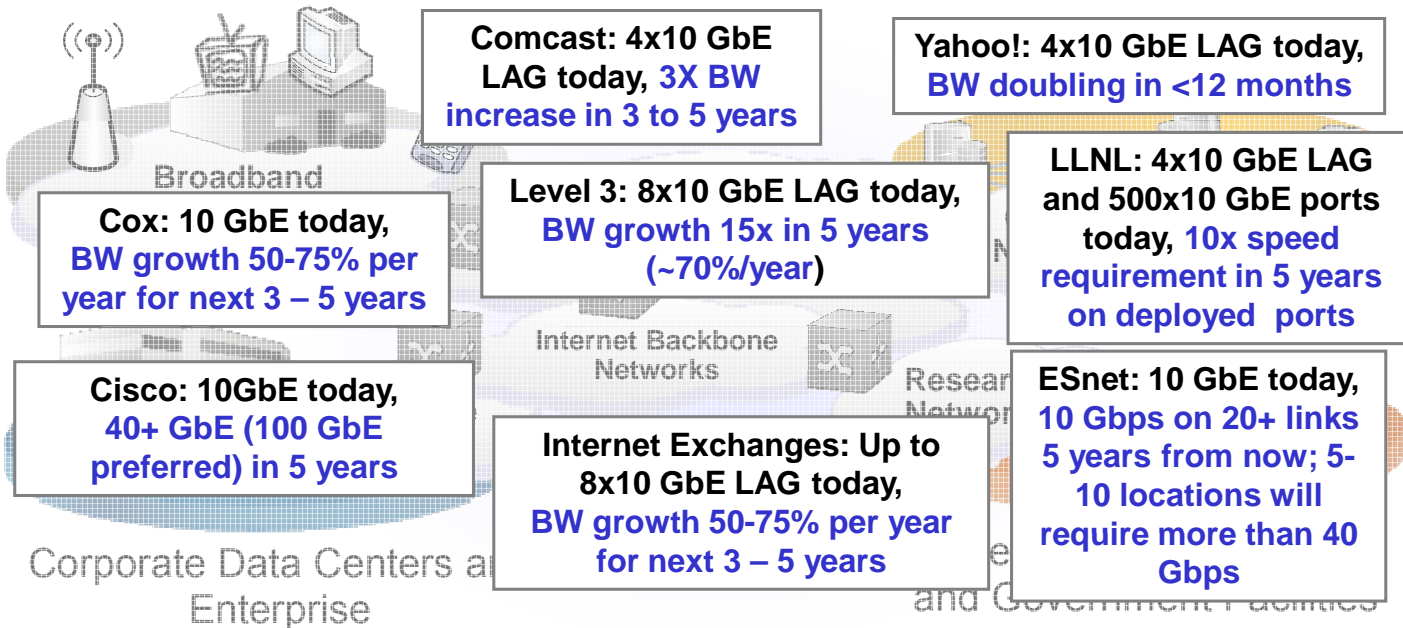
Higher Speed Study Group CFI, V 1.01
San Diego, CA

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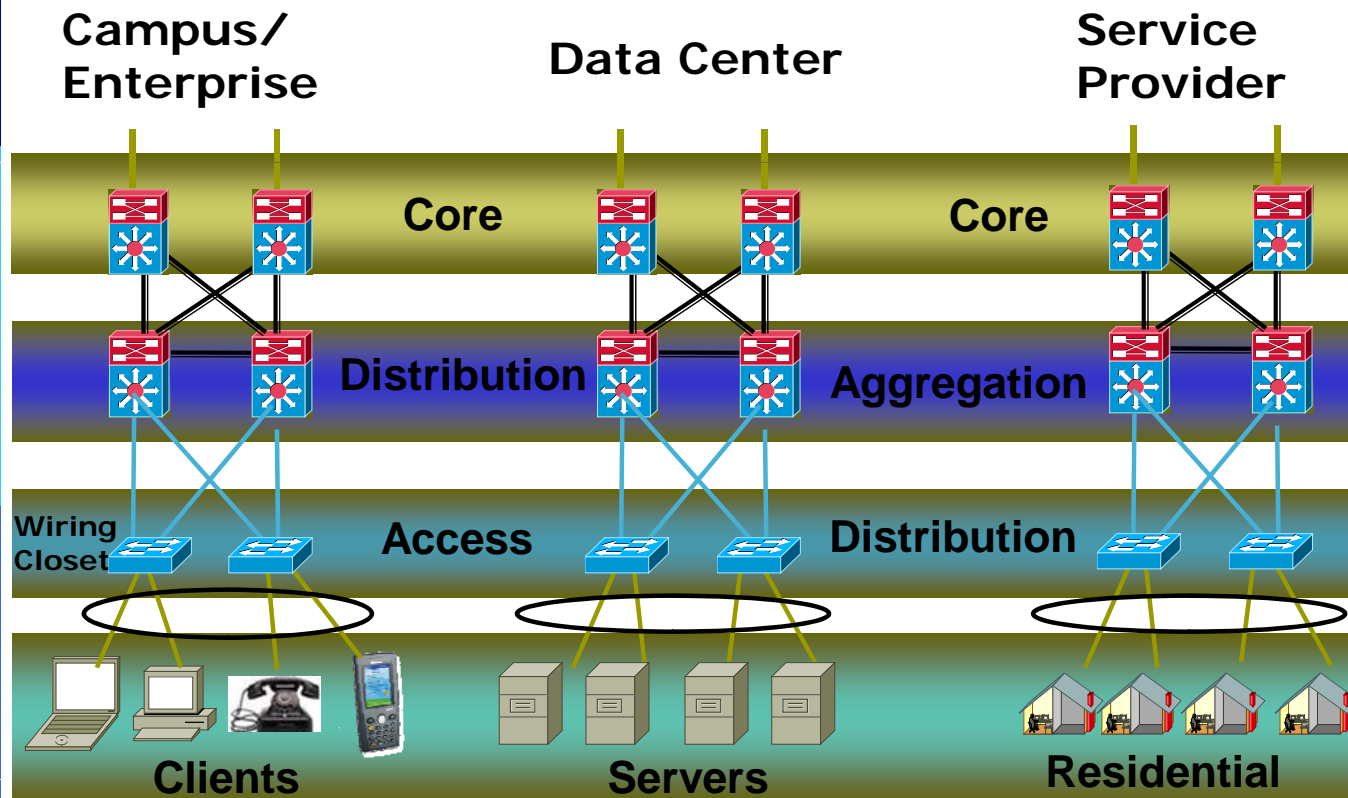
The 2006 HSSG CFI

Bandwidth and Growth Projections

Consumer Broadband Access



Higher Speed Ethernet Penetration

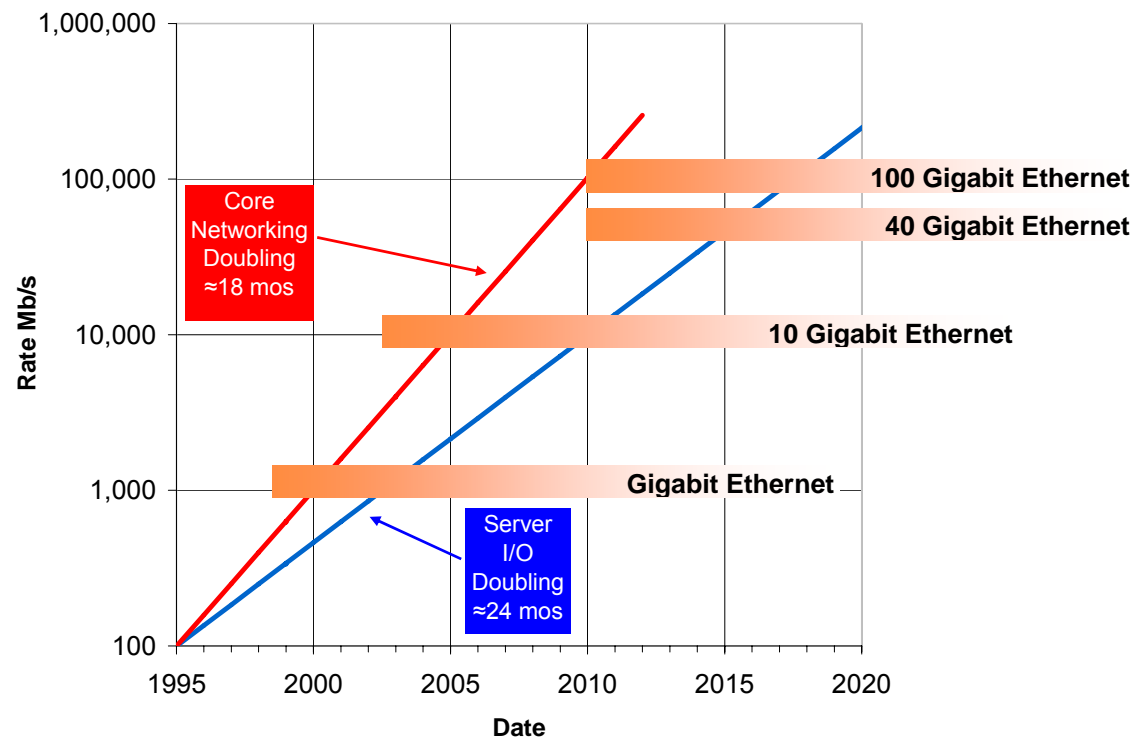


IEEE 802.3 Higher Speed Study Group - TUTORIAL

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Understand the Eco-System Need

40GbE and 100GbE: Computing and Networking



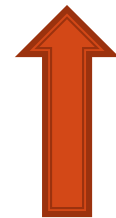
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Looking Back



The
Great
Debate!



Overview

- Industry Connections Program —
 - Program of the IEEE-SA Board of Governors (BOG) to provide safe harbour environment for building consensus and developing documents prior to a formal standards development effort.
- Creation of Ad hoc resulted from request made via the IEEE Industry Connections program for an effort based on individual participation
 - IEEE 802 EC (related sponsor) supported development of IC activity as 18 month pilot program
 - Request approved by IEEE Board of Governors
 - Mentors - James Wendorf (Industry Connections) & David Law (IEEE 802.3)
 - Organized by David Law as an ad hoc in 802.3WG.
 - See <http://www.ieee802.org/3/private/email/msg01054.html>.
 - Any output of the ad hoc will require approval of the IEEE 802.3 Working Group.
- As an ad hoc, we will use phone conferences and face-to-face meetings
- The role of this ad hoc is to gather information, not make recommendations or create a CFI

“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.

Next Steps

- Agree on deliverables
 - White Papers / Presentations
 - How many?
 - Consider timing
- Decisions / output will require IEEE 802.3 WG approval

Industry Communications

- Frequent communications during HSSG and IEEE P802.3ba Task Force:
 - ITU-T Study Group 15
 - OIF
- Communications should be drafted for IEEE 802.3WG approval at March Plenary

Future Meetings

- March 2011 Plenary
 - Singapore
 - Week of March 13
 - Marina Bay Sands Hotel
- April Teleconference –
 - Date TBD
- May 2011 Interim
 - Week of May 23
 - Location TBD
- July 2011 Plenary
 - San Francisco, CA, USA
 - Week of July 17
 - Hyatt Regency San Francisco at Embarcadero Center
- Sept 2011 Interim
 - Week of Sept 12
 - Location TBD
- Future Meeting information at: <http://ieee802.org/3/interims/index.html>
- Anyone interested in hosting a meeting or teleconference contact me.