BWA Editors Ad hoc call, 13 Aug 2019

- Please send email to BWA ad hoc chair with name, employer, affiliation.
  - This information is being collected for record of teleconference attendance.
  - Please send asap.
- Draft Agenda
  - Approval of Agenda
  - IEEE Pre-PAR Patent Policy - https://development.standards.ieee.org/myproject/Public/mytools/mob/preparslides.pdf
  - IEEE 802 Participation Policy - https://mentor.ieee.org/802-ec/dcn/16/ec-16-0180-05-00EC-ieee-802-participation-slide.pdf
  - Background
    - Review of IEEE 802.3 BWA 2012 Outline / Findings
    - Review of Presentations Submitted
  - Discussion - BWA Part II Outline

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/preparslides.ppt

Participation in IEEE 802 Meetings

Participation in any IEEE 802 meeting (Sponsor, Sponsor subgroup, Working Group, Working Group subgroup, etc.) is on an individual basis

- **Participants in the IEEE standards development individual process shall act based on their qualifications and experience. (https://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf section 5.2.1)**

- **IEEE 802 Working Group membership is by individual; "Working Group members shall participate in the consensus process in a manner consistent with their professional expert opinion as individuals, and not as organizational representatives". (subclause 4.2.1 "Establishment", of the IEEE 802 LMSC Working Group Policies and Procedures)**

- **Participants have an obligation to act and vote as an individual and not under the direction of any other individual or group. A Participant's obligation to act and vote as an individual applies in all cases, regardless of any external commitments, agreements, contracts, or orders.**

- **Participants shall not direct the actions or votes of any other member of an IEEE 802 Working Group or retaliate against any other member for their actions or votes within IEEE 802 Working Group meetings, see https://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf section 5.2.1.3 and the IEEE 802 LMSC Working Group Policies and Procedures, subclause 3.4.1 "Chair", list item x.**

By participating in IEEE 802 meetings, you accept these requirements. If you do not agree to these policies then you shall not participate.

(Latest revision of IEEE 802 LMSC Working Group Policies and Procedures: http://www.ieee802.org/devdocs.shtml)

IEEE 802 Executive Committee
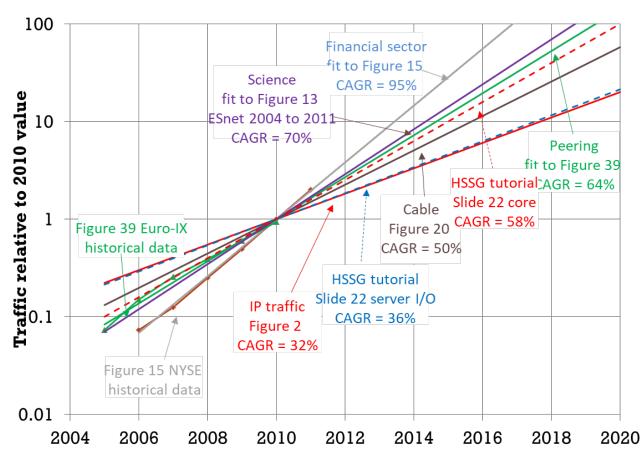
Review of 2012 BWA Outline

Contents

IEEE 802.3 BWA Findings

- The exponential rise in traffic is predicted to continue

Increased # **Increased** **Increased** **Bandwidth**
of users + **access** + **services** = **explosion**
rates and **everywhere**
methods

Financial sector fit to Figure 15 CAGR = 95%

Science fit to Figure 13 ESnet 2004 to 2011 CAGR = 70%

Peering fit to Figure 39 CAGR = 64%

HSSG tutorial Slide 22 core CAGR = 58%

Cable Figure 20 CAGR = 50%

HSSG tutorial Slide 22 server I/O CAGR = 36%

IP traffic Figure 2 CAGR = 32%

Figure 39 Euro-IX historical data

Figure 15 NYSE historical data

Review of Submitted Presentations

- Sept 2018 - [Introduction - Ethernet Bandwidth Assessment, Part II](#)
- Nov 2018 - [Broadband Development Status and Trend in China](#)
- 02 April 2019 – [Trends in Automotive Networks](#)
- 02 April 2019 - [Future EPON Bandwidth Needs](#)
- 09 April 2019 - [Traffic Growth in Telecom Networks and Mega Datacenters](#) (LightCounting)
- 11 June 2019 - [Available Industry Data](#) (Equinix / Akamai / Sandvine / Internet World Stats)
- 24 June 2019 – [Cisco VNI Forecast Update](#)
- 09 July 2019 – [The European IXP Scene](#)
- Anticipated Submissions –
    - 20 Aug 2019 – Review of Networks in PeeringDB
    - Sept 2019 – 800 GbE Needs in China
    - 24 Sept 2019 - "Switching, Routing, and Server 5-Year Forecast" (Dell'Oro)
    - [Email Summary](#) of Published Reports on Broadband Findings