# Approved Minutes IEEE 802.3 Higher Speed Study Group September 11-13, 2007 Seoul, South Korea

Prepared by: Trey Malpass

Meeting convened at 9:10 AM, Tuesday, September 11, 2007.

# Agenda & General Information

By – John D'Ambrosia See – agenda\_01\_0907.pdf

- Introductions Everyone introduced themselves
- Appointed Secretary Trey Malpass appointed by Chair as Secretary for this meeting
- Motion to approve the agenda
  - o Moved by Matt Traverso, 2<sup>nd</sup> by Steve Trowbridge
  - Approved by voice vote without objection
- Motion to modify agenda to include minutes approval
  - o Moved by Howard Frazier, 2<sup>nd</sup> by David Law.
  - o Approved by voice vote without objection
- Motion to approve the July Plenary meeting minutes
  - o Moved by Pete Anslow, 2<sup>nd</sup> by Frank Chang
  - Approved by voice vote without objection
- Chair reviewed the Study Group decorum and rules and asked if members of the press were present; none noted.
- Chair reviewed the HSSG organization
- Goals for meeting
  - Hear Technical Presentations
  - Identify potential "Big Ticket Items"
  - Tutorial Preparations
- Ground Rules reviewed by Chair
- IEEE Structure, Bylaws & Rules reviewed by Chair
- IEEE Patent policy
  - o Chair showed the five slides to the body, reading slides 1 and 5 aloud
  - o The Chair advised the HSSG that:
    - The IEEE's patent policy is consistent with the ANSI patent policy and is described in Clause 6 of the IEEE-SA Standards Board Bylaws;
    - Early identification of patent claims which may be essential for the use of standards under development is encouraged;
    - There may be Essential Patent Claims of which the IEEE is not aware. Additionally, neither the IEEE, the WG, nor the WG chair can ensure the accuracy or completeness of any assurance or whether any such assurance is, in fact, of a Patent Claim that is essential for the use of the standard under development.

- The chair provided an opportunity for participants to identify patent claim(s)/patent application claim(s) and/or the holder of patent claim(s)/patent application claim(s) that the participant believes may be essential for the use of that standard. No one came forward.
- The group was reminded that Mr. Law provided a tutorial on the Patent Policy and the group was encouraged to review that information.
- Study Group function and IEEE Standards Process Flow
  - Function of the SG and the completed steps were reviewed
  - PAR and Task Force approval is expected in December; Task Force meetings will begin in January
  - Key Dates going forward were reviewed
- Reviewed Approved HSSG Project Documents and Objectives
- Possible Task Force timeline for standard development was reviewed
- Chris DiMinico submitted presentation, diminico\_01\_0907 late. Trey Malpass / Zhong
  Qiwen had made late request for presentation time, malpass\_03\_0907. Chair asked if
  there were any objections to hearing either of these presentations. There were none.
- Reviewed voting privileges and requirements to maintain those rights
- Chair reminded the HSSG to make sure they declared their affiliation
- Reviewed list of presentations

Title – Questions to be Answered By – John D'Ambrosia – Force10 See – dambrosia\_01\_0907.pdf

# Presentation #2

Title – 100GE and 40GE PCS Proposal

By – Mark Gustlin – Cisco See – gustlin\_01\_0907.pdf

Break at 10:45 AM Reconvened at 11:02 AM

# Presentation #3

Title – 100GE and 40GE PCS Modeling

By – Mark Gustlin – Cisco See – gustlin 02 0907.pdf

# Presentation #4

Title – 100GE Layering Model Overview

By – Trey Malpass – Huawei See – malpass\_01\_0907.pdf

Break for lunch at 12:00 noon Reconvened at 1:30 PM

Title – Partial Fault Protection
By – Trey Malpass – Huawei
See – malpass\_02\_0907.pdf

# Presentation #6

Title – 40 GbE and 100 GbE PCS Considerations

By – Steve Trowbridge – Alcatel-Lucent

See – trowbridge\_02\_0907.pdf

Break at 3:09 PM

Reconvened at 3:31 PM

# Presentation #7

Title – Rate Preset as Appropriate Support for OTN

By – Shoukei Kobayashi – NTT See – kobayashi\_01\_0907.pdf

# Presentation #8

Title – 40GE OTN – Support Options

By – Osamu Ishida – NTT See – ishida\_01\_0907.pdf

#### Presentation #9

Title – OTN Compatibility for 40 Gb Ethernet
By – Steve Trowbridge – Alcatel-Lucent

See – trowbridge\_01\_0907.pdf

# Presentation #10

Title – 40 GE WAN Interface
By – Trey Malpass – Huawei
See – malpass\_03\_0907.pdf

Meeting breaks for the day at 4:54 PM

Meeting reconvenes at 9:05 AM, Wednesday, September 12, 2007.

The chair made some opening comments regarding review of the draft tutorial and the timeline for the day.

# Presentation #11

Title – Considerations for 40G Backplane Ethernet PHY

By – Ilango Ganga – Intel See – ganga\_01\_0907.pdf

Title – Copper Interconnects

By – Chris DiMinico – MC Communications

See – diminico\_01\_0907.pdf

Break at 10:17 AM

Reconvened at 10:31 AM

#### Presentation #13

Title – Consider Transceiver Interfaces for 100G and 40G Ethernet

By – Frank Chang – Vitesse See – chang\_01\_0907.pdf

# Presentation #14

Title – Nx10G I/O Specification Proposal

By – Lew Aronson – Finisar See – aronson\_01\_0907.pdf

# Presentation #15

Title – Channel Studies on 4x25G Optical Module with CEI-25CFBI Electrical Interface

By – Wenbin Jiang – JDSU See – zhong\_01\_0907.pdf

Break for lunch at 11:56 AM Reconvened at 1:34 PM

#### Presentation #16

Title – Single Mode Fibre Skew Variation

By – Pete Anslow – Nortel See – anslow\_01\_0907.pdf

# Presentation #17

Title – Common LAN WDM Grid Proposal for all 100GE SMF Reaches

By – Chris Cole – Finisar See – cole\_01\_0907.pdf

# Presentation #18

Title – 200GHz Grid 4x25G WDM (100GE) for SMF Reach Objectives

By – Wenbin Jiang – JDSU See – jiang\_01\_0907.pdf

Break at 3:22 PM

Reconvened at 3:46 PM

# Presentation #19

Title – Optical Interface for 100G SMF PMD

By – Matt Traverso – Opnext See – traverso\_01\_0907.pdf

Title – DQPSK Serial PMD for 100GbE on 40-km SMF

By – Noriyuki Takeda – KDDI Labs

See – takeda\_01\_0907.pdf

# Presentation #21

Title – Implementation of Differential Precoder for DQPSK

By – Hidehiro Toyoda – Hitachi See – toyoda\_01\_0907.pdf

David Law requested to make a short presentation/discussion on Thursday. Chair asked the group if there were any objections; there were none.

Meeting breaks for the day at 4:45 PM

Meeting reconvenes at 9:13 AM, Thursday, September 13, 2007.

Chair reviewed the scope of work to be done as the group moves forward.

## Presentation #22

Title – Mean Time to False Packet Acceptance (MTTPA)

By – David Law, 3Com See – law\_01\_0907.pdf

Break at 10:00 AM

Reconvened at 10:21 AM

#### Presentation #23

Title – Tutorial – Preview and Discussion
By – John D'Ambrosia, Force10 Networks

See – tutorial\_01\_0907.pdf, tutorial\_02\_0907.pdf

An editing work session was held for the tutorial slides.

Break for lunch at 11:45 AM Reconvened at 12:10 PM

Tutorial review and editing session continued.

The chair requested contributions from the group to address the issue of a <10km SMF reach objective.

# Future Meetings:

- November 2007 Plenary
  - November 13-15
  - Hyatt Regency Atlanta
  - Atlanta, GA, USA

It is noted that the HSSG Tutorial is on Monday night November 12.

Motion to adjourn – moved by Larry Green; 2<sup>nd</sup> by Brad Booth. Approved by acclamation. Meeting adjourns at 1:50 PM on Thursday, September 13, 2007.

Last NameFirst NameAffiliationAbbasGhaniEricsson, UKAnslowPeteNortelBelopolskyYakovBELBennettMikeLBNLBoothBradAMCCBraunRalf-PeterDeutsche Telekom, T-SystemsCarrollMartinVerizonChangFrankVitesseChienChing-yunITRI TaiwanChowJackyMarvellColeChrisFinisarD'AmbrosiaJohnForce 10 NetworksDiMinicoChrisMC CommunicationsDoveDanDoveNetworking - Procurve by HPFlatmanAlanLAN TechnologiesFrazierHowardBroadcomGangaIlangoIntelGengDongyuHuaweiGodboleAnilInphi CorpGreenLarryIxiaGrowBobIntelGustlinMarkCisco
Anslow Pete Nortel Belopolsky Yakov BEL Bennett Mike LBNL Booth Brad AMCC Braun Ralf-Peter Deutsche Telekom, T-Systems Carroll Martin Verizon Chang Frank Vitesse Chien Ching-yun ITRI Taiwan Chow Jacky Marvell Cole Chris Finisar D'Ambrosia John Force 10 Networks DiMinico Chris MC Communications Dove Dan DoveNetworking - Procurve by HP Flatman Alan LAN Technologies Frazier Howard Broadcom Ganga Ilango Intel Geng Dongyu Huawei Godbole Anil Inphi Corp Green Larry Ixia Grow Bob Intel
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Bennett Mike LBNL Booth Brad AMCC Braun Ralf-Peter Deutsche Telekom, T-Systems Carroll Martin Verizon Chang Frank Vitesse Chien Ching-yun ITRI Taiwan Chow Jacky Marvell Cole Chris Finisar D'Ambrosia John Force 10 Networks DiMinico Chris MC Communications Dove Dan DoveNetworking - Procurve by HP Flatman Alan LAN Technologies Frazier Howard Broadcom Ganga Ilango Intel Geng Dongyu Huawei Godbole Anil Inphi Corp Green Larry Ixia Grow Bob Intel
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Flatman Alan LAN Technologies Frazier Howard Broadcom Ganga Ilango Intel Geng Dongyu Huawei Godbole Anil Inphi Corp Green Larry Ixia Grow Bob Intel
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Geng Dongyu Huawei Godbole Anil Inphi Corp Green Larry Ixia Grow Bob Intel
Godbole Anil Inphi Corp Green Larry Ixia Grow Bob Intel
Green Larry Ixia Grow Bob Intel
Grow Bob Intel
Guetlin Mark Cisco
Oustill   Iviair   Oisco
Ishida Osamu NTT
Isono Hideki Fujitsu
Jewell Jack JDSU
Joo Bheom-Soon ETRI
Kang Tae-kyu ETRI
Kim Jung-sik ETRI
Kim Daeuh ETRI
King Jonathan Finisar
Kipp Scott Brocade
Kiyo Hiramoto Opnext Japan
Kobayashi Shoukei NTT
Law David 3Com
Leung Wai-shun BEL
Li Zeng Huawei
Maki Jeffery Juniper Networks
Malpass Technology - Huawei
Marris Arthur Cadence
McDonough John NEC America
Minghui Wang HBC Technologies
Muller Shimon Sun
Ngi Alex Helix AG
Nicholl Gary Cisco
Nowell Mark Cisco
Parsons Glenn Nortel

Pepper	Gerald	Ixia
Ryoo	Jeong-dong	ETRI
Sambasivan	Sam	AT&T
Schielletcenz	Dieter	Independent
Seely	Ted	Sprint
Seki	Murihiro	Sumitomo Electric
Snively	Robert	Brocade
Steerman	Henk	AMS-1X
Storaasli	Olaf	Draka Comteq
Swanson	Steve	Corning
Takamichi	Toru	NEC
Takeda	Noriyuki	KDDI R&D Laboratories Inc.
Tawa	Katsuhisa	Sumitomo Electric
Thiagarajian	Sashi	Ciena
Toyoda	Hidehiro	Hitachi
Traverso	Matt	Opnext
Trowbridge	Steve	Alcatel-Lucent
Tsumura	Eddie	Excelight
Veatch	Anthony	Siemon Company
Vetteth	Anoop	Cisco
Wong	Zhi	Altera Corp
Yoo	Tae-whan	ETRI
Zhangzhen	Jiang	Huawei