

Unapproved Minutes
IEEE 802.3 New Ethernet Applications Ad Hoc
Interim Meeting
May 22 – May 24
New Orleans, LA, USA

Prepared by John D'Ambrosia

*Meeting called to order Monday May 22 at approximately 7:00pm
Chaired by John D'Ambrosia, Futurewei, Subsidiary of Huawei*

Presentation #1 – Agenda and General Information

Presented by – John D'Ambrosia

URL: http://www.ieee802.org/3/ad_hoc/ngrates/public/17_05/agenda_nea_01_0517.pdf

D'Ambrosia went over the agenda for the meeting –

- Monday, May 22, 7pm to 9pm
 - “Beyond 10km” SMF Optics
- Tuesday, May 23, 7pm to 9pm
 - Next Generation MMF PMDs
- Wed, May 24, 8am to noon
 - 100 Gb/s Electrical Signaling
- Ad Hoc Information
- Participation in the IEEE 802 Meetings
- Ground Rules
- Important Bylaws, Rules, References
- Patent policy.
- Overview of NEA Ad hoc
- Rules Change- Subclause 5.2 'Project authorization' of the IEEE-SA Standards Board Operations Manual

Presentation #2 - Draft – CFI Consensus – “Beyond 10km” PHYs

Presented by – John D'Ambrosia

URL: http://www.ieee802.org/3/ad_hoc/ngrates/public/17_05/dambrosia_nea_01a_0517.pdf

General discussion regarding presentation.

Discussion regarding timing of CFI, but general consensus to proceed with CFI at July 2017 Plenary.

Session #1 – broke at approximately 9pm.

Session #2 – called to order at approximately 7pm, Tues, May 23.

Chaired by John D'Ambrosia, Futurewei, Subsidiary of Huawei

Presentation #3 – Agenda and General Information

Presented by – John D'Ambrosia

URL: http://www.ieee802.org/3/ad_hoc/ngrates/public/17_05/agenda_nea_01_0517.pdf

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Presentation #4 – Consensus Building Discussion on Next-Generation MMF PMDs

Presented by – Robert Lingle

URL: http://www.ieee802.org/3/ad_hoc/ngrates/public/17_05/lingle_nea_01a_0517.pdf

General discussion regarding presentation.

Session #2 – broke at approximately 9pm.

Session #3 - Called to order at 8:05am, Wed. May 24.
Chaired by John D'Ambrosia, Futurewei, Subsidiary of Huawei

Presentation #5– Agenda and General Information

Presented by – John D'Ambrosia

URL: http://www.ieee802.org/3/ad_hoc/ngrates/public/17_05/agenda_nea_01_0517.pdf

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A liaison from the Broadband Forum

(http://www.ieee802.org/3/minutes/may17/incoming/BBF_to_IEEE_802d3_May_2017.pdf) was considered. The chair noted he had spoken with others offline, and the general consensus was that no response was necessary. The chair asked if there was any disagreement, there was none, so It was decided that no response was required.

Presentation #6 – Interconnect for 100G serial I/O ports

Presented by – Tom Palkert

URL: http://www.ieee802.org/3/ad_hoc/ngrates/public/17_05/palkert_nea_01_0517.pdf

General discussion about presentation

Presentation #7 – Working Towards 100Gb/s Serial Electrical Channel Technical Feasibility

Presented by – Rich Mellitz

URL: http://www.ieee802.org/3/ad_hoc/ngrates/public/17_05/mellitz_nea_01a_0517.pdf

General discussion about presentation

Presentation #8 – An Initial Investigation of a 100Gbps PAM4 VSR Channel

Presented by – Nathan Tracy

URL: http://www.ieee802.org/3/ad_hoc/ngrates/public/17_05/tracy_nea_01_0517.pdf

General discussion about presentation

Presentation #9 – The Reality of Channels at 100G

Presented by – Joel Goergen

URL: http://www.ieee802.org/3/ad_hoc/ngrates/public/17_05/goergen_nea_01_0517.pdf

General discussion about presentation

Meeting break at 10:0am

Meeting reconvened at 10:25am

Presentation #10– SERDES for 100Gbps

Presented by – Tom Palkert

URL: http://www.ieee802.org/3/ad_hoc/ngrates/public/17_05/palkert_nea_02_0517.pdf

General discussion about presentation

Presentation #11 – 100Gb/s Single-lane SERDES Discussion

Presented by – Phil Sun

URL: http://www.ieee802.org/3/ad_hoc/ngrates/public/17_05/sun_nea_01a_0517.pdf

General discussion about presentation

Presentation #12 – 100G Electrical Interfaces in the Datacenter - Desirable Solution Attributes

Presented by – Rob Stone

URL: http://www.ieee802.org/3/ad_hoc/ngrates/public/17_05/stone_nea_01a_0517.pdf

General discussion about presentation

Presentation #13 – System Evolution with 100G Serial IO

Presented by – Ali Ghiasi

URL: http://www.ieee802.org/3/ad_hoc/ngrates/public/17_05/ghiasi_nea_01a_0517.pdf

General discussion about presentation

Straw Poll #1

- I would support development of a CFI that includes:
 - a) new backplane PHY,
 - b) new Passive Copper Cable PHY
 - c) Chip-to-chip (C2C AUI)
 - d) Chip-to-module (C2M AUI)
 - e) other
 - f) not at this time,
 - g) none of the above
- Results
 - a) 32
 - b) 26
 - c) 40
 - d) 48
 - e) 0
 - f) 2
 - g) 0

Straw Poll #2

- I would need more information before I would be ready to support development of a CFI on –
 - a. channel options
 - b. serdes technology
 - c. modulation formats
 - d. FEC options
 - e. overall system end-2-end architecture
 - f. Other
 - g. No further information
- Results
 - a. 9
 - b. 15
 - c. 5
 - d. 9
 - e. 22
 - f. 1
 - g. 18

Straw Poll #3

- I would support doing a Call-For-Interest at
 - a. Nov 2017 Plenary
 - b. Mar 2018 Plenary
- Results
 - a. 39
 - b. 10

Joel Goergen indicated he would begin working on a CFI deck, based on this input, and NEA teleconference calls would be announced.

Meeting adjourned at approximately 12:05pm.

Meeting Attendees

IEEE 802.3 NEA Ad hoc May 2017 Interim			5/22/2017	5/23/2017	5/24/2017
Last Name	First Name	Employer / Affiliation	Mon	Tues	Wed
Alvarado	Natasha	IEEE			x
Aslan	Hassaad	Maxlinear		x	
Baldwin	Thananya	Ixia		x	x
Booth	Brad	Microsoft		x	x
Braun	Ralf-Peter	Deutsche Telecom	x	x	x
Brooks	Paul	Viavi	x		x
Brown	Matt	MACOM		x	x
Burren	Gary	Eleniden Technologies	x	x	x
Butter	Din	Global Foundries			x
Caggioni	Francesco	APM	x		x
Carlson	Craig	Cavium			x
Chalupsky	David	Intel		x	x
Chang	Ayla	Huawei	x	x	x
Chang	Frank	Inphi	x	x	x
Chen	David	AOI	x	x	x
Choudhury	Mabud	OFS		x	x
Cole	Chris	Finisar	x	x	
Conroy	Keith	Acacia Comm	x		
D'Ambrosia	John	Futurewei, subsidiary of Huawei	x	x	x
Dawe	Piers	Mellanox Technologies		x	x
Diddle	Stephen	Keysight	x		
Donahue	Curtis	UNH-IOL			x
Dong	Peng	Huawei	x	x	x
Dudek	Mike	Cavium		x	x
Dupuis	Marc	Web Industry			x
Estes	David	Spirent	x		x
Ewen	John	Global Foundries			x
Fritsche	Matthias	Harting		x	
Ghiasi	Ali	Ghiasi Quantum	x	x	x
Goergen	Joel	Cisco		x	
Goldberg	Jonathan	IEEE-SA			x
Gong	Zhigang	O-Net	x	x	x
Gustlin	Mark	Xilinx		x	

Hayahi	Takehiro	HAT Lab		x	
Hayakana	Akinori	Fujitsu Laboratories	x	x	x
Healey	Adam	Broadcom Ltd	x		x
Heck	Howard	Intel			x
Hess	Dave	CORD Data		x	x
Hidaka	Yasuo	Fujitsu Lab of America		x	
Ho	Iluna	AOI	x		
Hormeyer	Bernd	Phoenix Contact			x
Huang	Xi	Huawei	x		
Hyakutako	Yasuhiro	Adamant Co. Ltd		x	
Ingham	Jonathan	Foxconn Interconnect Technology	x		
Isono	Hidaki	Fujitsu Optical Components	x		x
Issenhuth	Tom	Issenhuth Consulting	x		x
Jackson	Kenneth	Sumitomo	x	x	x
Johnson	John	Broadcom Ltd		x	
Johnson	John	Broadcom	x		
Jones	Peter	Cisco		x	
Kareti	Upen Reddy	Cisco		x	x
Kimber	Mark	Semtech	x	x	
Klempa	Michael	UNH-IOL			x
Kolesar	Paul	CommScope		x	x
Lane	Brett	Panduit		x	x
Lapak	Jeffrey	UNH-IOL			x
Lewis	David	Lumentum		x	
Li	Mike	Intel		x	x
Lim	Jane	Cisco	x	x	x
Lingle	Robert	OFS		x	x
Liu	Hai-Feng	Intel	x	x	x
Lusted	Kent	Intel		x	x
Makamoto	Edward	Spirent			x
Maki	Jeffrey	Juniper Networks	x	x	x
Malicoat	David	Malicoat Networking Solutions		x	x
Matoglu	Erdem	Amphenol			x
McDermott	Tom	Fujitsu	x		
McDonough	John	NEC		x	x

McSorley	Greg	Amphenol			x
Mellitz	Richard	Samtec		x	x
Meritake	Toshiyuki	JAI			x
Minejimo	Kenta	JAE			x
Mitcheltree	Tom	US Conec		x	
Nang	Joseph	Applied OptoElectronics	x		x
Nicholl	Gary	Cisco	x	x	
Nowell	Mark	Cisco	x	x	x
Ofelt	David	Juniper Networks	x	x	x
Palkert	Thomas	Molex / Macom		x	x
Parsons	Earl	Commscope	x	x	
Pimpinella	Rick	Panduit		x	x
Rabinovich	Rick	Ixia	x	x	x
Rotolo	Salvatore	STMicroelectronics	x		x
Sakai	Toshiaki	socionext			x
Satake	Toshiaki	USConec		x	
Sayre	Edward	Samtec	x	x	
Schube	Scott	Intel		x	x
Shirao	Mizuki	Mitsubishi Electric	x		x
Sommers	Scott	Molex			x
Sprague	Ted	Infinera	x	x	x
Srivastara	Atul	NTT Electronics	x		
Stassar	Peter	Huawei	x	x	
Strone	Rob	Broadcom		x	x
Sun	Phil	Credo			x
Swanson	Steve	Corning		x	
Szczepanek	Andre	Inphi			x
Tailor	Bharat	Semtech		x	
Takahara	Tomoo	Fujitsu Laboratories	x		x
Tamura	Kohichi	Oclaro	x	x	
Toyserkani	Pirooz	Cisco	x	x	x
Tracy	Nathan	TE Connectivity	x	x	x
Traverso	Matt	Cisco	x	x	x
Trowbridge	Steve	Nokia		x	
Twebly	Jeff	Credo		x	x
Uchiyama	Asami	Mitsubishi Electric	x		
Ulrichs	Ed	Source Photonics	x		x

Umnov	Alexander	Corning	x	x	x
Vanderlaan	Paul	Berk-Tek		x	
Wang	Xinyuan	Huawei	x		x
Wang	Tongtong	Huawei	x		x
Wang	Yi	Applied OptoElectronics	x		
Wang	Yi	AOI			x
Welch	Brian	Luxtera	x	x	x
Wertheim	Oded	Mellanox Technologies			x
Xu	Qing	Belden	x	x	x
Xu	Yu	Huawei		x	x
Yin	Yue	Huawei	x	x	x
Young	James	Commscope		x	
Young	Adrian	Leviton		x	x
Zambell	Andy	Amphenol			x
Zhang	Huanlin	Applied OptoElectronics	x		
Zhong	Qiwen	Huawei		x	
Zhuang	Yan	Huawei		x	x
Zimmerman	George	CME Consulting / Commscope / Aquantia		x	
Zivny	Pavel	Tektronix		x	
Zuo	Tianjian	Huawei		x	x