# Unapproved Minutes IEEE 802.3 Next Gen ECDC Ad Hoc

Interim Meeting May 23, 2016 Whistler, BC, Canada

## Prepared by John D'Ambrosia

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### Session #1 - Single Pair BASE-T - Extended Reach

Prepared by David Brandt

Meeting started at approximately 7pm

David Law introduces himself and chairs the overall meeting

Meeting introductions.

There is a review of Bylaws, Rules, and References for operating the meeting

#### CFI rules are discussed

- Request for CFI time slot must arrive to the 802.3 chair 35 days prior to presentation (preferably the Sunday before)
  - o Tuesday July 26 in San Diego implies June 19
- Only an 802.3 voting member may submit a CFI
- A passing CFI motion leads to a WG closing plenary motion
- A passing WG motion is a request, the EC decides which SGs get formed
- Consensus building is key

Ludwig Winkel (Siemens) leads the consensus building exercise with a short context presentation:

"IEEE 802.3 NG-ECDC Ad Hoc – CFI – Long Reach – Agenda – TF Whistler, 2016-05-23"

Ludwig introduces Mick McCarthy (Analog Devices Inc.) who covers a detailed presentation:

- "10Mb/s Extended Reach Single Twisted Pair Ethernet PHY"
- <a href="http://www.ieee802.org/3/ad\_hoc/ngrates/public/16\_05/mccarthy\_ecdc\_01a\_0516.pdf">http://www.ieee802.org/3/ad\_hoc/ngrates/public/16\_05/mccarthy\_ecdc\_01a\_0516.pdf</a>

#### Proposed CFI deck presentation:

- The new deck presents the same CFI topic, but with additional and more focused material
- The goal is for a July CFI

#### Discussion/questions on deck:

- May not want to fix distance. If going for 5km, don't fix data rate. SG validation? Exclude outliers?
- Replace terms like "large" with a number
- Base-T add to 2.5/5G
- Separate power topic to its own slide, how much power, how many
- Rework discrete single twisted pair slide, points not obvious
- Mass market 100M, 5 years away, robust
- Why not slower, 1M?
- Tutorial before PAR
- Why single pair? Answer: That is what is installed.
- State connector mechanism is SG topic.
- Dotted lines s/b arrows on trend slide
- IS discussion: "don't preclude" is similar to EMC compliance
- Need to get copyright permission if copying
- Market ramp rate question
- Add TM to BroadR-Reach

- 10PASS-TS @ fixed rate? Clause to define use? Why not? 2 generations ago? Could be used as a technology base. Narrower in capability.
- DSL in feasibility, add newer ITU spec

General discussion regarding CFIs.

Ludwig Winkel will submit the CFI request for July.

John D'Ambrosia noted that he will get a room in July for CFI Consensus Presentation preparations.

Instructions were provided for signing up to the NG-ECDC Reflector.

Meeting ended at approximately 9 pm.

## Session #2 – 400GbE Extended Reach Optics

Prepared by John D'Ambrosia

Meeting started at approximately 7pm. John D'Ambrosia chaired the meeting.

Presentation: Agenda and General information

Presenter: John D'Ambrosia

URL: http://www.ieee802.org/3/ad\_hoc/ngrates/public/16\_05/agenda\_ecdc\_01a\_0516.pdf

Presentation: Optical transmission feasibility for 400GbE Extended Reach PMD

Presenter: Yoshiaki Sone

URL: http://www.ieee802.org/3/ad hoc/ngrates/public/16 05/sone ecdc 01b 0516.pdf

Presentation: The Path Forward Presenter: John D'Ambrosia

URL: http://www.ieee802.org/3/ad\_hoc/ngrates/public/16\_05/dambrosia\_ecdc\_01\_0516.pdf

General discussion regarding how to proceed, and the types of data that would be helpful were discussed: market applications and discussion of technical tradeoffs. It was noted that a white paper focusing on determining the technical feasibility of solutions might be problematic, as it is not the role of an ad hoc to determine technical feasibility. Discussion about potential tradeoffs in developing a solution was discussed. The bandwidth requirements of extended reach optics was also discussed, given the introduction of 200GbE at that meeting.

Meeting ended at approximately 8:00pm

# **Attendees**

NG-ECDC- Ju	Ses #1	Ses #2		
Last Name	First	Employer / Affiliation	Mon	Mon
	Name			
Bains	Amrik	Cisco	Х	
Brandt	Dave	Rockwell Automatioin	X	
Brillhart	Theo	Fluke	Х	
Brownlee	Phil	TDK	х	
Chabot	Craig	UNH-IOL	х	
Chang	Ayla	Huawei		Х
D'Ambrosia	John	Futurewei, subsidiary of Huawei	х	Х
Donahue	Curtis	UNH-IOL	Х	
Dove	Dan	DNS	Х	
Dube	Kathryn	UNH-IOL	Х	
Fife	James	Etopus		Х
Flatman	Alan	LAN Technologies	Х	
Gardner	Andy	LTC	Х	
Gong	Zhigang	O-Net		Х
Huang	Xi	Huawei		Х
Isono	Hidaki	Fujitsu Optical Components		Х
Johnson	Stephen	UNH-IOL	Х	
Jones	Peter	Cisco	Х	
Karpenske	Dave	PCN Technology	Х	
Kim	Yong	Broadcom	Х	
Kimber	Mark	Semtech		Х
Law	David	HPE	Х	
Lo	William	Marvell	Х	
Masuda	Takeo	Petra / OITDA		Х
McCarthy	Mick	Analog Devices	Х	
McDermott	Tom	Fujitsu		Х
Moffitt	Bryan	Commscope	Х	
Perez de	Ruben	KDPOF	Х	
Aranda				
Piehler	David	Dell		Х
Sakai	Toshiaki	socionext		Х
Sone	Yoshiaki	NTT		Х
Srivastara	Atul	NTT Electronics		Х
Stewart	Heath	LTC	Х	
Stover	David	LTC	Х	
Szczepanek	Andre	Inphi		Х
Tailor	Bharat	Semtech		Х

Tamura	Kohichi	Oclaro		Х
Umnov	Alexander	Corning	Х	
Wang	Tongtong	Huawei		Х
Wang	Xinyuan	Huawei		Х
Winkel	Ludwig	Siemens AG	Х	
Wu	Peter	Marvell	Х	
Xu	Qing	Belden	Х	
Zhuang	Yan	Huawei		Х
Zimmerman	George	CME Consulting	Х	