## **Approved Minutes**

## IEEE P802.3cd 50 Gb/s, 100 Gb/s, 200 Gb/s Ethernet Task Force

Plenary Meeting July 11-13, 2017 Berlin, Germany Prepared by Kent Lusted

## **Table of Contents**

Table of Contents	1
IEEE P802.3cd 50 Gb/s, 100 Gb/s, 200 Gb/s Ethernet Task Force – July 11, 2017	2
IEEE P802.3cd 50 Gb/s, 100 Gb/s, 200 Gb/s Ethernet Task Force – July 12, 2017	6
IEEE P802.3cd 50 Gb/s, 100 Gb/s, 200 Gb/s Ethernet Task Force – July 13, 2017	9
Attendees	11

### IEEE P802.3cd 50 Gb/s, 100 Gb/s, 200 Gb/s Ethernet Task Force – July 11, 2017

Prepared by Kent Lusted

IEEE P802.3cd 50 Gb/s, 100 Gb/s, and 200 Gb/s Ethernet Task Force meeting convened at ~1:00 p.m., by Mark Nowell, Task Force Chair.

Chair welcomed attendees.

Introductions were made.

Chair reviewed agenda in http://www.ieee802.org/3/cd/public/July17/agenda\_3cd\_01\_0717.pdf

### Motion #1:

Move to approve the agenda:

- Moved by: Adee Ran
- Second by: Arthur Marris
- Passed by voice without opposition

Minutes were posted shortly after the May meeting. Chair noted that a change was made to the minutes after posting to correct the date of the July 2017 Plenary listed in the future meetings section. Requested if anyone had any other changes. No one responded.

#### Motion #2:

Move to approve the May 2017 minutes:

- Moved by: Steve Trowbridge
- Second by: Mike Dudek
- Passed by voice without opposition

Chair reminded participants to observe meeting decorum. Called for members of the press. No one responded. Photography and recording are not permitted.

Chair asked for a show of hands for new attendees. A few people indicated.

Chair reviewed the reflector and web information. Chair reviewed the ground rules for the meeting.

Chair reviewed the attendance procedures. Chair reminded participants to sign into the IEEE Meeting Attendance Tool and to sign the book.

Chair reviewed the IEEE structure.

Chair reviewed the Bylaws and Rules slides in <a href="http://www.ieee802.org/3/cd/public/July17/agenda">http://www.ieee802.org/3/cd/public/July17/agenda</a> 3cd 01 0717.pdf

Chair noted that there was a new slide with a statement on the participation in IEEE 802 Meetings. Chair asked if there were questions about the participation requirements. No one responded.

**IEEE Patent Policy**: Chair reviewed the Patent related slides on the 4 slides contained in the agenda. Chair calls for potentially essential patents. No one responded. Chair read the Guidelines for IEEE WG meetings. No one responded.

### **Chair advised the WG attendees that:**

- The IEEE's patent policy 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 strongly encouraged;
- There may be Essential Patent Claims of which the IEEE is not aware. Additionally, 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.

No one responded.

Chair reviewed the IEEE 802.3 Standards Process.

Chair noted that 2 liaison letters from the OIF were received in June and July with a copy of the OIF specification. The letters and documents are posted to the website. The Task Force will need to prepare a response for consideration.

Chair reviewed the P802.3cd Ethernet Task Force approved project documentation.

Chair reviewed the adopted objectives.

Chair reviewed the adopted timeline.

The technical presentations will be addressed during comment resolution.

### Goals for the meeting:

- Comment Resolution
- Review Technical presentations
- Generate Draft 2.1

Chair reviewed the meeting agenda.

### **Future Meetings:**

- Sept 2017 Interim
  - Week of September 11, 2017 Charlotte, NC, USA
- Nov 2017 Plenary
  - Week of November 5, 2017 Orlando, FL, USA

Anyone interested in hosting a meeting should contact the Chair or Steve Carlson.

### **IEEE P802.3cd Task Force Ad-hoc report:**

"802.3cd Task Force Ad-hoc report", Kent Lusted

See: http://www.ieee802.org/3/cd/public/July17/lusted 3cd 01 0717.pdf

 Tentatively expect calls to resume on July 27, 2017. Announcement will be made over the email reflector.

#### Presentation #1:

"Chief Editor's Report", Matt Brown

See: http://www.ieee802.org/3/cd/public/July17/brown 3cd 01 0717.pdf

- Chair thanked the editors and advisors for their efforts to review and produce the draft.
- Matt noted that the "bucket worthy" comment file posted to the website was updated on Tuesday morning to version v2.

### Presentation #2:

"Comment Agenda", Matt Brown

See: http://www.ieee802.org/3/cd/public/July17/comment agenda july 2017.pdf

- Matt reviewed the list of comments considered "bucket" worthy. (see: <a href="http://www.ieee802.org/3/cd/comments/8023cd">http://www.ieee802.org/3/cd/comments/8023cd</a> D20 comment proposed responses buck et list-v2.pdf )
- Matt asked participants to review the proposed responses for the "bucket worthy" comments
  and notify the Chair, the Chief Editor and the Recording Secretary of any comments that
  should be addressed on the Task Force floor. The proposed responses to the unresolved
  bucket comments will be adopted in motion during closing business.

Chair displayed the proposed liaison response to OIF and noted that it was the same document as the final version displayed in the P802.3bs Task Force meeting. (see: <a href="http://www.ieee802.org/3/cd/public/July17/IEEE">http://www.ieee802.org/3/cd/public/July17/IEEE</a> 802d3bs to OIF CEI 0713 liaison.docx ) No changes were made.

### Motion #3:

Move that the Task Force approve the text in IEEE\_802d3bs\_to\_OIF\_CEI\_0713\_liaison.docx with editorial license granted to the Chair (or his appointed agent) as a liaison from the IEEE P802.3cd Task Force to OIF

- M: Mike Dudek
- S: Jonathan King
- Procedural (>50%)
- Results: passed by voice without opposition

Comment resolution began.

Chair noted that the Task Force meeting on Wednesday will consist of two tracks. The electrical track will be in the main room. The optical track will be in a breakout room. Both tracks will begin at 8:00 a.m. on Wednesday.

Break at ~3:00 p.m. Resume ~3:20 p.m.

Comment resolution continued.

### Presentation #3:

"Implementing an Extinction Ratio of 3.5 dB in 50GBASE-FR/LR in P802.3cd", Peter Stassar See: <a href="http://www.ieee802.org/3/cd/public/July17/stassar\_3cd\_01\_0717.pdf">http://www.ieee802.org/3/cd/public/July17/stassar\_3cd\_01\_0717.pdf</a>

### Presentation #4:

"Improving the extinction ratio specs- Summary of previous material (Comments 153, 37, 59, 129, 44)", Piers Dawe

See: http://www.ieee802.org/3/cd/public/July17/dawe 3cd 01 0717.pdf

Chair asked participants to review the proposed responses for the "bucket worthy" comments and notify the Chair, the Chief Editor and the Recording Secretary of any comments that should be addressed on the Task Force floor. The proposed responses to the unresolved bucket comments will be adopted in motion during closing business.

Chair reminded participants to sign into the IEEE Meeting Attendance Tool and to sign the book.

Chair reminded participants that the Task Force will resume at 8:00 a.m. on Wednesday in tracks.

Break for the day at ~5:55 p.m.

### IEEE P802.3cd 50 Gb/s, 100 Gb/s, 200 Gb/s Ethernet Task Force – July 12, 2017

Prepared by Kent Lusted

### **Optical track**

Meeting convened at ~8:05 a.m. by Mark Nowell.

Chair reminded participants to sign into the IEEE Meeting Attendance Tool.

Chair asked participants to review the proposed responses for "bucket" worthy comments and notify the Chair, the Chief Editor and the Recording Secretary of any comments that should be addressed on the Task Force floor. The proposed responses to the unresolved bucket comments will be adopted in a motion during closing business. (see: <a href="http://www.ieee802.org/3/cd/comments/8023cd">http://www.ieee802.org/3/cd/comments/8023cd</a> D20 comment proposed responses bucket list-

Comment resolution began.

Break at ~10:00 a.m. Resume at ~10:20 a.m.

Break for lunch at ~12:05 p.m. Resume at ~1:00 p.m.

### Straw Poll #1:

v2.pdf )

I am interested in modifying certain specifications on SMF PAM4 interfaces:

- A) optical transmit power
- B) Need more information
- C) Not interested in any changes

Chicago Rules

A) 1 B) 14 C) 1

Optical track finished at ~2:45 p.m.

### **Electrical track**

Electrical track convened at ~8:10 a.m. by Kent Lusted. He reminded participants that the optical track is located in another conference room.

Kent Lusted reminded participants to sign into the IEEE Meeting Attendance Tool and to sign the attendance book.

Kent Lusted asked participants to review the proposed responses for "bucket" worthy comments and notify the Chair, the Chief Editor and the Recording Secretary of any comments that should be addressed on the Task Force floor. The proposed responses to the unresolved bucket comments will be adopted in a motion during closing business. (see:

http://www.ieee802.org/3/cd/comments/8023cd D20 comment proposed responses bucket list-v2.pdf )

Comment resolution began.

### Presentation #5:

"Cable attenuation and COM test results", Tom Palkert

See: http://www.ieee802.org/3/cd/public/July17/palkert 3cd 01a 0717.pdf

• It was noted that the supporters agree with the insertion loss change but not the COM number change.

Kent Lusted reminded participants to sign into the IEEE Meeting Attendance Tool and to sign the attendance book.

Break at ~10:00 a.m. Resume at ~10:35 a.m.

Kent Lusted reminded participants to sign into the IEEE Meeting Attendance Tool and to sign the attendance book.

Kent Lusted asked participants to review the proposed responses for "bucket" worthy comments and notify the Chair, the Chief Editor and the Recording Secretary of any comments that should be addressed on the Task Force floor. The proposed responses to the unresolved bucket comments will be adopted in a motion during closing business. (see:

http://www.ieee802.org/3/cd/comments/8023cd D20 comment proposed responses bucket list-v2.pdf )

Mike Dudek withdrew comment #110.

Break for lunch at ~12:05 p.m. Resume at ~1:00 p.m.

Mike Li withdrew comment #164 and #165.

Kent Lusted asked participants to review the proposed responses for "bucket" worthy comments and notify the Chair, the Chief Editor and the Recording Secretary of any comments that should be addressed on the Task Force floor. The proposed responses to the unresolved bucket comments will be adopted in a motion during closing business. (see:

 $\frac{\text{http://www.ieee802.org/3/cd/comments/8023cd}}{\text{v2.pdf}} \text{ )} \\ \frac{\text{bucket list-v2.pdf}}{\text{bucket list-v2.pdf}}$ 

Break at ~3:00 p.m. Resume at ~3:30 p.m.

Comment resolution continued.

#### Presentation #6:

"SNDR and SNR ISI (Comments 140, 139)", Piers Dawe

See: http://www.ieee802.org/3/cd/public/July17/dawe\_3cd\_02a\_0717.pdf

#### Presentation #7:

"KRn return loss and test fixture", Piers Dawe

See: http://www.ieee802.org/3/cd/public/July17/dawe 3cd 04 0717.pdf

Kent Lusted reminded participants to sign into the IEEE Meeting Attendance Tool and to sign the attendance book.

Kent Lusted asked participants to review the proposed responses for "bucket" worthy comments and notify the Chair, the Chief Editor and the Recording Secretary of any comments that should be addressed on the Task Force floor. The proposed responses to the unresolved bucket comments will be adopted in a motion during closing business. (see:

http://www.ieee802.org/3/cd/comments/8023cd\_D20\_comment\_proposed\_responses\_bucket\_list-v2.pdf\_)

Adee Ran withdrew comment #122.

Chair announced a start time of 9:00 a.m. on Thursday. The Task Force will start promptly with a presentation and participants are encouraged to arrive on time.

Chair stated that the updated responses will be posted to the website tonight for participant review. If there is a comment that was closed in a track that should be review by the broader Task Force, please notify the Chair and the Chief Editor.

Break for the day at ~5:55 p.m.

### IEEE P802.3cd 50 Gb/s, 100 Gb/s, 200 Gb/s Ethernet Task Force – July 13, 2017

Prepared by Kent Lusted

Meeting convened at ~9:00 a.m. by Mark Nowell.

Chair reviewed the plans for the day.

Chair reminded participants to sign the attendance book.

The updated responses were posted to the website for participant review. If there is time and there is a comment that was closed in a track that should be addressed by the broader Task Force, please notify the Chair and the Chief Editor.

Chair asked participants to review the proposed responses for "bucket" worthy comments and notify the Chair, the Chief Editor and the Recording Secretary of any comments that should be addressed on the Task Force floor. The proposed responses to the unresolved bucket comments will be adopted in a motion during closing business. (see: <a href="http://www.ieee802.org/3/cd/comments/8023cd">http://www.ieee802.org/3/cd/comments/8023cd</a> D20 comment proposed responses bucket list-v2.pdf )

### Presentation #8:

"Return Loss of Test Channel for Rx ITT in Clause 136 (#72)", Yasuo Hidaka See: http://www.ieee802.org/3/cd/public/July17/hidaka 3cd 02a 0717.pdf

Comment resolution began.

There was a request to pull comments #185, #2, and #103 from the "bucket" list. There was a request to pull #85 from the bucket list.

Break at ~10:10 a.m. Resume at ~10:25 a.m.

Reviewed <a href="http://www.ieee802.org/3/cd/public/July17/brown\_3cd\_02a\_0717.pdf">http://www.ieee802.org/3/cd/public/July17/brown\_3cd\_02a\_0717.pdf</a> when resolving #172 & #173

### **Attendance Straw Poll**

- I will attend the IEEE P802.3cd meetings at the September interim in Charlotte, NC, USA (week of September 11, 2017)
  - P802.3cd: Y: 41, Maybe: 10
- I will attend the IEEE P802.3cd meetings at the November plenary in Florida, USA (week of November 5, 2017)

P802.3cd: Y: 46, Maybe: 8

### Motion #4:

- Move to:
  - Accept the proposed responses to any unresolved comments listed in 8023cd\_D20\_comment\_proposed\_responses\_bucket\_list-v2.pdf
  - Generate Draft 2.1 from Draft 2.0 and closed comments
- M: Matt Brown S: Adee Ran Technical (>=75%)

Y: 56 N: 0 A: 0Motion Passes

### Motion #5:

Move to Adjourn:

- Moved by: Steve Trowbridge
- Second by: Nathan Tracy
- Passed by voice vote without opposition

Meeting ended at ~11:25 a.m.

# <u>Attendees</u>

P802.3cd, July 2017			11-Jul-17	12-Jul-17	13-Jul-17
Last Name	First Name	Affiliation	Tuesday	Wednesday	Thursday
Anslow	Pete	Ciena Corporation	х	х	x
Booth	Brad	Microsoft	х		x
Braun	Ralf-Peter	Deutsche Telekom	х	х	
Brown	Matt	MACOM	х	х	х
Butter	Adrian	Global Foundries	х	х	х
Cady	Ed	Luxshare	х	х	
Chen	C. C. David	Applied Optoelectronics	х	х	х
Choudhury	G. Mabud	OFS	х		
Chuang	Keng Hua	HPE	х	х	х
Dawe	Piers	Mellanox	х	х	х
DiMinico	Christopher	MC Communications/Panduit	x	x	x
Dudek	Mike	Cavium	x	X	x
Budok	- William	Caviani	, A		, A
Estes	Dave	Spirent Communications	x	x	x
Fife	James	eTopus Technology	x	x	x
		1 37			
Ghiasi	Ali	Ghiasi Quantum, Huawei	x	x	x
Gorshe	Steve	microsemi	х	х	х
Grillaert	Joost	Nexans	х		
Gustlin	Mark	Xilinx	х	х	x
Hashimoto	Tomohiro	Socionext	х	х	х
Hayakawa	Akinori	Fujitsu Laboratories	х	Х	x
Hegde	Raj	Broadcom	x	x	x

Hidaka	Yasuo	Fujitsu Laboratories of America	x	x	x
Huang	Xi	Huawei	x		х
Ishibe	Kazuhiko	Anristu	х	х	х
Isono	Hideki	Fujitsu Optical Components	х	х	x
Issenhuth	Tom	Huawei	х	х	х
Kang	Vincent	GUC	х	х	х
Kareti	Upen Reddy	Cisco	х	х	х
Kawatsu	Yasuaki	Apresia Systems		х	х
Kimber	Mark	Semtech	х		х
Kochuparambil	Beth	Cisco		х	
Lapak	Jeff	UNH-IOL	х	x	
LeCheminant	Greg	Keysight Technologies	х	x	х
Lee	JuneHee	Samsung	х	x	х
Leizerovich	Hanan	Multiphy	х	х	
Li	Mike	Intel	х	х	х
Lim	Jane	Cisco	х	х	х
Lusted	Kent	Intel	х	х	х
Maki	Jeffery	Juniper Networks	х		х
Marris	Arthur	Cadence	х	х	
McSorley	Greg	Amphenol	х	х	х
Mellitz	Richard	Samtec	x	х	х
Muth	Karl	Rockley Photonics		х	
Nakamoto	Edward	Spirent Communications	х	х	х
Nishimura	Kei	Hitachi	х	x	
Nowell	Mark	Cisco	х	х	х
Ofelt	David	Juniper Networks	х	x	х
Palkert	Tom	Molex - MACOM	x	x	x

Pham	Phong	US Conec	х		
Pozzebon	Dino	microsemi	х	х	х
Ran	Adee	Intel	x	x	X
Rechtman	Zvi	Mellanox	x	x	x
Rotolo	Salvatore	ST Microelectronics	х	х	Х
Rysin	Alexander	Mellanox	x	х	
Schwenk	Martin	Fujitsu		X	
Shirao	Mizuki	Mitsubishi Electric	x	x	x
Shrikhande	Kapil	Innovium	x		
Sommers	Scott	Molex	x	X	
Sone	Yoshiaki	NTT	x	x	
Sprague	Ted	Infinera	x	x	x
Stassar	Peter	Huawei	x	х	Х
Sun	Liyang	Huawei	x		
Swanson	Steve	Corning	x		
Szczepanek	Andre	HS2 Consulting	x	X	x
Tailor	Bharat	Semtech Corp	x	X	x
Takahara	Tomoo	Fujitsu Laboratories	х	х	х
Takai	Atsushi	Huawei Japan	х		х
Takai	Yosuke	Yamaichi Electronics	х	х	х
Tamura	Kohichi	Oclaro	х	х	х
Tan	Kan	Tektronix	х	х	х
Tooyserkani	Pirooz	Cisco	х	х	х
Tracy	Nathan	TE Connectivity	х	х	х
Traverso	Matt	Cisco	х	х	х
Trowbridge	Steve	Nokia	х	x	x
Weber	Markus	Acacia	х	х	
White	Martin	Cavium	х	x	
Williams	Tomoo	Acacia	х	х	х
Yamamoto	Shuto	NTT	x		x

Yang	Shih-chih	AOI	x	X	x
Yasueda	Jin	Teledyne Lecroy	х	х	
Yingo	Lin	Applied Optoelectronics	х	х	х
Zhao	Qing	Huawei	х	х	х
Zivny	Pavel	Tektronix	x	х	x