Approved Minutes

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

Plenary Meeting

July 9-10, 2018

San Diego, CA, USA

Prepared by Kent Lusted

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Prepared by Kent Lusted

IEEE P802.3cd 50 Gb/s, 100 Gb/s, and 200 Gb/s Ethernet Task Force meeting convened at ~8:00 a.m., by Mark Nowell.

Chair welcomed attendees.

Introductions were made.

Chair reviewed agenda in http://www.ieee802.org/3/cd/public/July18/agenda_3cd_01_0718.pdf

Motion #1:
Move to approve the agenda:
- Moved by: Steve Trowbridge
- Second by: Mike Dudek
- Passed by voice without opposition

Minutes were posted shortly after the May meeting. Chair asked if there was any feedback on the posted minutes. No one responded.

Motion #2:
Move to approve the May 2018 minutes:
- Moved by: Pete Anslow
- Second by: Greg McSorley
- 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 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
http://www.ieee802.org/3/cd/public/July18/agenda_3cd_01_0718.pdf

Chair noted that there was a slide with a statement on the participation in IEEE 802 Meetings. Chair noted that by participating in the IEEE 802 meeting, that participants accept these requirements. 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.

There was a request by Piers Dawe to send a liaison letter to the IBTA. Chair asked Piers to prepare a draft of the letter.

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

Chair reviewed the adopted objectives.

Chair reviewed the adopted timeline and the current timeline.   Chair reviewed the path to completing sponsor ballot.

Chair reviewed the D3.3 recirculation Sponsor Ballot results.

Chair reviewed a few different paths to completion of the standard as shown on slide 32 and slide 33 of http://www.ieee802.org/3/cd/public/July18/agenda_3cd_01_0718.pdf Pete Anslow noted that the October SASB date was not correct.

Goals for the meeting:

- Comment Resolution
- Review Technical presentations
- Generate D3.4

Chair noted the possibility of an contingent interim in August as has been previously announced.

Chair reviewed the meeting logistics. Chair noted that the meeting may run into Monday evening.   Chair asked presenters to focus on the changes to the contribution, in the interest of time. The Task Force will break at 9:45 a.m. for the IEEE 802.3 Working Group opening plenary and resume at 1:00 p.m.

Chair reviewed the meeting agenda.

Chair noted that there was a late contribution from Jonathan King on the TDECQ map. Chair asked if there was opposition to hearing it. No one responded.

Future Meetings:
- August 8 Contingent Interim
    - 7-9am Pacific. Details to be sent out on the reflector.
- September 2018 Interim
    - Week of September 9, 2018 -- Spokane, WA, USA
- November 2018 Plenary
    - Week of November 11, 2018 – Bangkok, Thailand

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/July18/lusted_3cd_01_0718.pdf
- Tentatively expect calls to resume on July 25, 2018. Announcement will be made over the email reflector.

Presentation #1:
"Chief Editor's Report", Matt Brown
See: http://www.ieee802.org/3/cd/public/July18/brown_3cd_01_0718.pdf
- Chief Editor thanked the editors and advisors for their efforts to review and produce the draft.

- Chair thanked the editorial team for their work to prepare the draft and comment responses.
- Chief Editor noted that there were 6 comments withdrawn (#11-16) as a result of a logistical issue inputting comments from a non Sponsor Ballot participant.

Chair noted that the electrical comments would be addressed immediately after lunch due to the late arrival of the editor.

Presentation #2:
"Comment Agenda", Matt Brown
See: http://www.ieee802.org/3/cd/public/July18/brown_3cd_02_0718.pdf
- Matt reviewed the list of comments considered "bucket" worthy. (see: http://www.ieee802.org/3/cd/comments/8023cd_D33_comment_proposed_responses_bucket_list.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 a motion during closing business.

Matt Brown reviewed the tentative plan for comment resolution.

Presentation #3:
"Transition time measurement using the SSPRQ pattern (comment r03-44)", Greg LeCheminant
See: http://www.ieee802.org/3/cd/public/July18/lecheminant_3cd_01_0718.pdf
- The measurement is made before equalization.
- The yellow text on slide 7 is additional text that was added in the comment text.

Comment resolution began.

Presentation #4:
"Completing the family of TDECQ-related specifications ", Piers Dawe
See: http://www.ieee802.org/3/cd/public/July18/dawe_3cd_01b_0718.pdf
- Updated version "01b" with editorial changes.

Chair reviewed the plans for the rest of the day: close electrical comments and then transition to optical topics.

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 a motion during closing business.

Break at ~9:45 a.m. Resumed at ~1:05 p.m.

Chair provided an opportunity for participant Q&A on presentation #4 from Piers Dawe since discussion was curtailed due to the start of the IEEE 802.3 Working Group opening plenary.

Chair announced that he received a proposed liaison letter for the IBTA and asked participants to review it. (see: http://www.ieee802.org/3/cd/public/July18/IEEE_802d3cd_to_IBTA_0718_liaison_draft.docx)

Chief Editor reviewed the comment resolution agenda. Chief Editor reviewed and edited the consensus building summary (see: http://www.ieee802.org/3/cd/public/July18/brown_3cd_03a_0718.pdf)

Chair reminded participants to sign into IMAT and to sign the attendance book.

Comment resolution resumed.

Presentation #5:
"Inter-operability risk for 50BASE-CR with Draft 3.3 ERL specifications (updated)", Mike Dudek
See: http://www.ieee802.org/3/cd/public/July18/dudek_3cd_01a_0718.pdf
- Updated version '01a' with editorial changes.
- Clarifying questions were asked and answered.

Straw Poll #1:
Straw poll to assess consensus during comment resolution. See response to comment #r03-18 in the final responses report.

Straw Poll #2:
Straw poll to assess consensus during comment resolution. See response to comment #r03-18 in the final responses report.

Presentation #6:
"Concerning Comments r03-21, -22, -42, -43 On TDECQ", Kohichi Tamura
See: http://www.ieee802.org/3/cd/public/July18/tamura_3cd_01b_0718.pdf
- Clarifying questions were asked and answered

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 a motion during closing business.

Chair announced a deadline of 8:00 a.m. Tuesday for bucket comments to be pulled for consideration on the floor.

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

Presentation #7:
"Achieving closure on TDECQ/SRS", Marco Mazzini
See: http://www.ieee802.org/3/cd/public/July18/mazzini_3cd_01c_0718.pdf
- It was noted that 5T/2-spaced taps were used in the sim tool.

Chair provided an update on the progress of the Task Force comment resolution. He noted that the Task Force may run as late at 7pm.

Presentation #8:
"TDECQ map and interpretation", Jonathan King
See: http://www.ieee802.org/3/cd/public/July18/king_3cd_02_0718.pdf
- Clarifying questions were asked and answered.

Chair noted that all updated presentations received had been posted to the website.

Straw Poll #3:
Straw poll to assess consensus during comment resolution. See http://www.ieee802.org/3/cd/public/July18/brown_3cd_03a_0718.pdf for details

Straw Poll #4:
Straw poll to assess consensus during comment resolution. See http://www.ieee802.org/3/cd/public/July18/brown_3cd_03a_0718.pdf for details

Break at ~5:20 p.m. Resumed at ~5:30 p.m.

Straw Poll #5:
Straw poll to assess consensus during comment resolution. See http://www.ieee802.org/3/cd/public/July18/brown_3cd_03a_0718.pdf for details

Presentation #9:
"TDECQ EQ Constraints", Phil Sun
See: http://www.ieee802.org/3/cd/public/July18/sun_3cd_01a_0718.pdf
- Clarifying questions were asked and answered.

- Discussed the fiber chromatic dispersion impact
- There was disagreement on the dispersion impact assumptions in the analysis.

Straw Poll #6:
Straw poll to assess consensus during comment resolution. See response to comment #r03-47 in the final responses report

Straw Poll #7:
Straw poll to assess consensus during comment resolution. See response to comment #r03-47 in the final responses report

Straw Poll #8:
Straw poll to assess consensus during comment resolution. See
http://www.ieee802.org/3/cd/public/July18/brown_3cd_03a_0718.pdf for details

Chair confirmed a start time of 8:00 a.m. on Tuesday, as was previously announced.

Break for the day at ~7:00 p.m.

IEEE P802.3cd 50 Gb/s, 100 Gb/s, 200 Gb/s Ethernet Task Force – July 10, 2018

Prepared by Kent Lusted

IEEE P802.3cd 50 Gb/s, 100 Gb/s, and 200 Gb/s Ethernet Task Force meeting convened at ~8:05 a.m., by Mark Nowell.

Chair reviewed the plans for the day: hear presentations, close comments, and finish the agenda.

Chair noted that he had not received any requests to pull comments from the bucket for consideration on the floor. Chair asked if he missed any requests. No one responded. Chair announced that the bucket is now closed.

Chair displayed the two proposed liaison letters to IBTA and T11.2 that were posted to the website.

Motion #3:
Move that the Task Force approve the text in:
- IEEE_802d3cd_to_IBTA_0718_liaison_draft.docx and IEEE_802d3cd_to_FC_0718_liaison_draft.docx with editorial license granted to the Chair (or his appointed agent) as a liaison to IBTA and FC

M: Mike Dudek
S: Tom Palkert
Technical (>=75%)
Results: pass by voice without opposition

Chair reminded participants to sign into IMAT and to sign the attendance book.

Presentation #10:
"Restoring the optical power levels for the 50GBASE-SR family", Piers Dawe
See: http://www.ieee802.org/3/cd/public/July18/dawe_3cd_02_0718.pdf
- Clarifying questions were asked and answered

Comment resolution resumed.

Straw Poll #9:

Straw poll to assess consensus during comment resolution. See comment #r03-25 in the final responses report.

Chair noted that there was a late contribution from Pete Anslow that is a proposed implementation for TDECQ and SRS based on Monday's discussion. Chair asked if there was objection to hearing the presentation. No one responded.

Presentation #11:
"SRS test source calibration", Jonathan King
See: http://www.ieee802.org/3/cd/public/July18/king_3cd_01a_0718.pdf
- Updated version '01a' with editorial changes and an additional slide. No objections.
- Clarifying questions were asked and answered.

Straw Poll #10:
Straw poll to assess consensus during comment resolution. See http://www.ieee802.org/3/cd/public/July18/brown_3cd_03a_0718.pdf for details.

Greg LeCheminant displayed a late contribution showing the difference between the corrected response and Bessel filter response. (see: http://www.ieee802.org/3/cd/public/July18/lecheminant_3cd_02_0718.pdf)

Chair reminded participants to sign into IMAT and to sign the attendance book.

Break at ~10:15 a.m. Resumed at ~10:30 a.m.

Presentation #12:
"Implementation of changes to TDECQ and SRS", Pete Anslow
See: http://www.ieee802.org/3/cd/public/July18/anslow_3cd_01_0718.pdf
- Clarifying questions were asked and answered.

Continued comment resolution.

Pete Anslow noted that his last presentation omitted a text change to Clause 140.7.5. He displayed in an updated "01a" of the presentation. See: http://www.ieee802.org/3/cd/public/July18/anslow_3cd_01a_0718.pdf

Comment resolution ended.

Chair discussed the schedule of the Task Force and reviewed slide 32 in http://www.ieee802.org/3/cd/public/July18/agenda_3cd_01_0718.pdf Chair noted that the Task Force schedule was trending to scenario 3 to give participants longer time to assess the changes to the draft. This would result in a potential SASB approval in early December. Chair

noted that this would result in the Task Force not requesting pre-submittal at the Working Group closing plenary. Chair asked for feedback. There was support for scenario 3. Chair stated scenario 3 would be the path and that the August contingent interim would be cancelled.

Chair discussed the continued need for ad hocs to continue consensus building activities. He noted that he would coordinate with the P802.3ck Task Force.

Motion #4:
Move to:
- Accept the proposed responses to any unresolved comments listed in 8023cd_D33_comment_proposed_responses_bucket_list.pdf
- Generate Draft 3.4 from Draft 3.3 and closed comments

M: Matt Brown
S: Kent Lusted
Technical (>=75%),
Results: Y: 69   N: 0   A: 0
Motion Passes

Chair thanked the editorial team for their work on the draft and asked for a round of applause. There was thunderous applause!

Motion #5:
Move to Adjourn:
- Moved by: Mike Dudek
- Second by: Nathan Tracy
- Passed by voice vote without opposition

Meeting ended at ~11:45 a.m.

Attendees

P802.3cd, July 2018				9-Jul-18	10-Jul-18
Last Name	First Name	Employer	Affiliation	Monday	Tuesday
Abbott	John	Corning	Corning	x	x
Anslow	Pete	Ciena Corporation	Ciena Corporation	x	x
Baca	Rich	Microsoft	Microsoft	x	x
Baldwin	Thananya	Keysight Technologies	Keysight Technologies	x	x
Baumgartner	Steven	Global Foundries	Global Foundries	x	x
Beaodoin	Denis	TI	TI	x	
Bouda	Martin	Fujitsu	Fujitsu	x	x
Bovington	Jock	Cisco	Cisco	x	x
Braun	Ralf-Peter	Deutsche Telekom	Deutsche Telekom	x	x
Brooks	Paul	Viavi Solutions	Viavi Solutions	x	x
Brown	Matt	MACOM	MACOM	x	x
Butter	Adrian	Global Foundries	Global Foundries	x	x
Calvin	John	VTM	VTM	x	x
Chalupsky	David	Intel	Intel	x	
Chen	C. C. David	Applied Optoelectronics	Applied Optoelectronics	x	x

Choudhury	G. Mabud	OFS	OFS	x	x
Chuang	Keng Hua	HPE	HPE	x	
Cole	Chris	Finisar	Finisar	x	x
Dawe	Piers	Mellanox	Mellanox	x	x
DeAndrea	John	Finisar	Finisar	x	
Dudek	Mike	Marvell Technologies	Marvell Technologies	x	x
Estes	Dave	Spirent Communications	Spirent Communications	x	x
Fathi	Borhan	Nvidia	Nvidia	x	
Ferretti	Vince	Corning	Corning	x	
Ghiasi	Ali	Ghiasi Quantum, Huawei	Ghiasi Quantum, Huawei	x	x
Gopalakrishnan	Karthik	Inphi	Inphi		x
Gorshe	Steve	microsemi	microsemi	x	x
Grow	Bob	RMG Consulting	RMG Consulting	x	
Gustlin	Mark	Xilinx	Xilinx	x	x
Harrison	James	Huawei	Huawei	x	
Hashardni	Kobi	Dustphotonics	Dustphotonics	x	x
Haynes	Hayden	UNH-IOL	UNH-IOL		x
Healey	Adam	Broadcom Inc.	Broadcom Inc.	x	x
Heck	Howard	Intel	Intel	x	x
Hess	Dave	Corddata	Corddata	x	

Holden	Brian	Kandou Bus	Kandou Bus	x	x
Horner	Rita	Synopsys	Synopsys	x	
Ishibe	Kazuhiko	Anristu	Anristu	x	x
Isono	Hideki	Fujitsu Optical Components	Fujitsu Optical Components	x	x
Issenhuth	Tom	Huawei	Huawei	x	x
Jackson	Ken	Sumitomo	Sumitomo	x	x
Kabra	Lokesh	Synopsys	Synopsys	x	
Kagami	Manabu	Toyota CRDL	Toyota CRDL	x	x
Kanuri	Mrudula	Nvidia	Nvidia	x	
Kareti	Upen Reddy	Cisco	Cisco	x	x
Kimber	Mark	Semtech	Semtech	x	x
Kiuchi	Hideki	JAE	JAE	x	x
Kochuparambil	Beth	Cisco	Cisco	x	x
Kolesar	Paul	CommScope	CommScope	x	x
LeCheminant	Greg	Keysight Technologies	Keysight Technologies	x	x
Lee	JuneHee	Samsung	Samsung	x	x
Levin	Alex	Microsoft	Microsoft	x	x
Lewis	Dave	Lumentum	Lumentum	x	x
Lewis	James	Ford Motor Co.	Ford Motor Co.	x	
Li	Mike	Intel	Intel	x	x

Liang	Yongxuan	AOI	AOI	x	
Lim	Jane	Cisco	Cisco	x	x
Liu	Hai-Feng	Intel	Intel	x	x
Liu	Karen	Lightwave Logic	Lightwave Logic	x	x
Lusted	Kent	Intel	Intel	x	
Lyubomirsky	Ilya	Inphi	Inphi	x	x
Maki	Jeffery	Juniper Networks	Juniper Networks	x	x
Malicoat	David	Senko/Aquantia	Senko/Aquantia	x	x
Marques	Flavio	Furukawa	Furukawa	x	x
Marris	Arthur	Cadence	Cadence	x	x
Mazzini	Marco	Cisco	Cisco	x	x
McSorley	Greg	Amphenol	Amphenol	x	x
Mein	John	Dust Photonics	Dust Photonics	x	x
Mellitz	Richard	Samtec	Samtec	x	x
Melton	Stuart	US Conec	US Conec	x	x
Moritake	Toshiyuki	JAE	JAE	x	x
Nakamoto	Edward	Spirent Communications	Spirent Communications	x	x
Nolan	John	QLogic	QLogic	x	x
Nowell	Mark	Cisco	Cisco	x	x
Ofelt	David	Juniper Networks	Juniper Networks	x	

Palkert	Tom	Molex - MACOM	Molex - MACOM	x	x
Pepper	Gerald	Keysight Technologies	Keysight Technologies	x	x
Pimpinella	Rick	Panduit Corp.	Panduit Corp.	x	
Poelstra	Henry	Teledyne Lecroy	Teledyne Lecroy	x	x
Pozzebon	Dino	microsemi	microsemi	x	x
Rabinovich	Rick	Keysight Technologies	Keysight Technologies	x	x
Ran	Adee	Intel	Intel	x	x
Reinhard	Michael	SEI Antech-Europe GmbH	SEI Antech-Europe GmbH	x	
Sakai	Toshiaki	Socionext	Socionext	x	x
Sambasivan	Sam	AT&T	AT&T	x	
Sayre	Edward	Samtec	Samtec	x	x
Schube	Scott	Intel	Intel	x	
Sekel	Steve	Keysight Technologies	Keysight Technologies	x	x
Shirao	Mizuki	Mitsubishi Electric	Mitsubishi Electric	x	x
Slavick	Jeff	Broadcom Limited	Broadcom Limited	x	
Sluyski	Mike	Acacia Communications	Acacia Communications	x	x
Sommers	Scott	Molex	Molex	x	x
Sprague	Ted	Infinera	Infinera	x	x
Stassar	Peter	Huawei	Huawei	x	x
Sun	Phil	Credo	Credo	x	x

Swanson	Steve	Corning	Corning	x	x
Tailor	Bharat	Semtech Corp	Semtech Corp	x	x
Takahara	Tomoo	Fujitsu Laboratories	Fujitsu Laboratories	x	x
Takefman	Michael	Inphi	Inphi	x	
Tamura	Kohichi	Oclaro	Oclaro	x	x
Tooyserkani	Pirooz	Cisco	Cisco	x	x
Tracy	Nathan	TE Connectivity	TE Connectivity	x	x
Trowbridge	Steve	Nokia	Nokia	x	x
Twombly	Jeff	Credo	Credo	x	x
Ulrichs	Ed	Source Photonics	Source Photonics	x	x
Vitali	Marco	Sicoya	Sicoya	x	x
Wang	HaiFei	Huawei	Huawei	x	x
Wang	Xinyuan	Huawei	Huawei	x	
Welch	Brian	Luxtera	Luxtera	x	x
Withey	James	Fluke	Fluke	x	
Xu	Yu	Huawei	Huawei	x	x
Yang	Mengna	AOI	AOI	x	
Young	Adrian	Leviton	Leviton		x
Young	James	Commscope	Commscope		x
Yuchen	Lu	Huawei	Huawei	x	

Zambell	Andrew	Amphenol	Amphenol	x	x
Zeydel	Bart	MACOM	MACOM	x	x
Zivny	Pavel	Tektronix	Tektronix	x	x