

# Approved Minutes

## IEEE P802.3ct Task Force Meeting (11/13-11/14)

IEEE 802 November 2019 Plenary

Waikoloa Village, HI, USA

Prepared by John D'Ambrosia

All times HST

Location: Hilton Waikoloa Village

The meeting called to order at 08:05 am, Nov 13, 2019

Chair noted that the meeting would be run as a joint task force meeting the entire time and reminded the group of the July 2019 motion passed at the WG allowing motions to be taken during any joint meeting between the task forces.

General Introductions were made by participants.

Presentation #1 – Agenda and General Information  
Presenter: John D'Ambrosia  
URL: [http://www.ieee802.org/3/ct/public/19\\_11/agenda\\_3ct\\_c\\_1119.pdf](http://www.ieee802.org/3/ct/public/19_11/agenda_3ct_c_1119.pdf)  
Motion #1: Move to approve the Task Force Agenda (noted on Page 2)  
Moved: Tom Issenhuth  
Second: Steve Trowbridge  
Results: Approved by voice vote without opposition

Motion #2: Move to approve the following minutes –  
1. Sept 2019 -  
[http://www.ieee802.org/3/ct/public/19\\_09/minutes\\_3cnct\\_01\\_0919\\_unapproved.pdf](http://www.ieee802.org/3/ct/public/19_09/minutes_3cnct_01_0919_unapproved.pdf)  
Moved: Tom Issenhuth  
Second: Steve Trowbridge  
Results: Approved by voice vote without opposition

Chair showed IEEE SA Participation slides.

Chair reviewed Task Force Decorum slide. Chair asked if there were any press in the room. Nobody identified themselves as representing the press.

Chair reviewed P802.3ct Task Force information and introduced the editorial team. Chair noted Pete Anslow's inclusion and recognized his contribution to the release of the Draft 1.0.

Chair noted attendance tools.

Chair presented the Patent Policy Slides for IEEE SA meetings.

Chair advised the Task Force of the following:

- 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 IEEE is not aware. Additionally, neither 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.

Chair noted

- That the foregoing information was provided and that slides 1 through 4 (and this slide 0, if applicable) were shown;
- That the chair or designee 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) of which the participant is personally aware and that may be essential for the use of that standard

There were no responses to the Chair's Call for Potentially Essential Patents

Chair reviewed IEEE SA Copyright Policy

Chair reviewed Ground rules and the role of the chair.

The Chair reviewed important bylaws, rules, & references, and gave an overview of the IEEE 802.3 Standards Process.

Chair reviewed goals for week –

- Respond to comments submitted against submitted PARs
  - Modified IEEE P802.3ct
  - Proposed IEEE P802.3cw
- Respond to comments submitted against IEEE P802.3ct D1.0
- Hear technical presentations / baseline proposals on 400BASE-ZR
  - Resolution of 75 GHz / 100 GHz spacing
  - Consider received liaisons

Chair reviewed liaisons:

- ITU-T SG15: 100 Gbit/s and 400 Gbit/s DWDM issues -  
[http://www.ieee802.org/3/minutes/nov19/incoming/1119\\_SG15-LS220\\_to\\_IEEE\\_802d3.pdf](http://www.ieee802.org/3/minutes/nov19/incoming/1119_SG15-LS220_to_IEEE_802d3.pdf)
- [OIF to IEEE P802.3ct regarding progress on OIF 400ZR project Attachment](#) (Password protected)

It was noted that the ITU-T and OIF would not be meeting until after the Jan 2020 Interim, so it was decided to defer communicating to the two groups about 400GBASE-ZR until the Jan 2020 Interim.

It was decided to forward D1.1 of IEEE P802.3ct to the ITU-T. Chair asked Steve Trowbridge to generate a proposed response for the Task Force to consider at Closing Business on Thursday.

Chair noted that comments from 802.11 had been submitted against the proposed modified IEEE P802.3ct PAR. Chair noted he had generated a proposed response.

Presentation #2 - Consideration of comments submitted against IEEE P802.3ct / P802.3cw PARs  
Presenter: John D'Ambrosia  
URL: [http://www.ieee802.org/3/ct/public/19\\_11/dambrosia\\_3ct\\_02a\\_1119.pdf](http://www.ieee802.org/3/ct/public/19_11/dambrosia_3ct_02a_1119.pdf)

Chair asked if there were any objections to the proposed response in the noted presentation. There were none.

Mr. Law was not available to modify the IEEE P802.3ct PAR after this presentation, so the group moved onto the next presentation.

Presentation #3 - P802.3ct Chief Editor's Opening Report  
Presenter: Tom Issenhuth  
URL: [http://www.ieee802.org/3/ct/public/19\\_11/issenhuth\\_3ct\\_01\\_1119.pdf](http://www.ieee802.org/3/ct/public/19_11/issenhuth_3ct_01_1119.pdf)

Presentation #4 - 802.3ct D1.0 Comment Resolution Agenda  
Presenter: Tom Issenhuth  
URL: [http://www.ieee802.org/3/ct/public/19\\_11/issenhuth\\_3ct\\_02b\\_1119.pdf](http://www.ieee802.org/3/ct/public/19_11/issenhuth_3ct_02b_1119.pdf)

Mr. Law, IEEE 802.3 WG Chair, arrived. The Chair worked offline with Mr. Law to update the PAR for the group to consider.

Comment resolution of D1.0 began at ≈ 9:00am. Chief Editor, Tom Issenhuth, ran the comment resolution.

At 9:50 the group considered the updated PAR. The Chair noted that an issue was found while updating the PAR. Based on a comment submitted by 802.11 against 802.3cx, “5.2B” needs to be changed to “5.2.b.”

Presentation #5 - Updated IEEE P802.3ct PAR  
Presenter - David Law  
URL: [http://www.ieee802.org/3/ct/public/19\\_11/P802\\_3ct\\_PAR\\_131119.pdf](http://www.ieee802.org/3/ct/public/19_11/P802_3ct_PAR_131119.pdf)

Motion #3 Move to adopt: the PAR response to #8.1 in P802\_3ct\_PAR\_131119.pdf  
Mover Tom Issenhuth  
Second Peter Stassar  
Technical (>=75%)  
Results (all) y/n/a 26 / 0 / 0  
Motion Passes

Comment Resolution continued  
Break @ 10am

Reconvened at 10:22am

Comment resolution continued.

During consideration of “Definitions” D’Ambrosia presented.

Presentation #6 - Terminology Input In Support of Comments #47, 48, 49, 51, 53, 56  
Presenter - John D’Ambrosia  
URL: [http://www.ieee802.org/3/ct/public/19\\_11/dambrosia\\_3ct\\_01\\_1119.pdf](http://www.ieee802.org/3/ct/public/19_11/dambrosia_3ct_01_1119.pdf)

Break for lunch @ 12:00pm  
Reconvened at 1:00pm

Comment resolution continued.

During consideration of “Editing – Comment #9” Bruckman presented.

Presentation #7 - In support of comment #9  
Presenter - Leon Bruckman  
URL: [http://www.ieee802.org/3/ct/public/19\\_11/bruckman\\_3ct\\_01\\_1119.pdf](http://www.ieee802.org/3/ct/public/19_11/bruckman_3ct_01_1119.pdf)

During consideration of “SC-FEC – Comments #14-15” Maniloff presented.

Presentation #8 - Comments 14 – 15, Bit-error monitoring for FEC protected interfaces  
Presenter - Eric Maniloff  
URL: [http://www.ieee802.org/3/ct/public/19\\_11/maniloff\\_3ct\\_01\\_1119.pdf](http://www.ieee802.org/3/ct/public/19_11/maniloff_3ct_01_1119.pdf)

Attendance Strawpolls

- Attend Jan 2020 Interim, Geneva, Switzerland
- Y: 15 N: 2 M: 10
- Attend Mar 2020 Plenary, Atlanta, GA, USA
- Y: 17 N: 0 M: 10

Break @ 3:00pm  
Reconvened @ 3:23pm

Comment resolution continued.

Comment resolution against comments submitted against D1.0 ended.

Presentation #9 - Filling in Clause 153 TBDs  
Presenter - Steve Trowbridge  
URL: [http://www.ieee802.org/3/ct/public/19\\_11/trowbridge\\_3ct\\_01\\_1119.pdf](http://www.ieee802.org/3/ct/public/19_11/trowbridge_3ct_01_1119.pdf)

There was general discussion about the presentation.  
After consideration by the group a comment (#59) from the floor was accepted. Matt Schmitt was giving the following presentation on behalf of John DeAndrea who could not attend.

Presentation #9 - In support of Clause 154, Table 154.8, Transmitter Parameters, 100GBASE ZR  
Presenter - Matt Schmitt  
URL: [http://www.ieee802.org/3/ct/public/19\\_11/deandrea\\_3ct\\_01a\\_1119.pdf](http://www.ieee802.org/3/ct/public/19_11/deandrea_3ct_01a_1119.pdf)

There was general discussion about the presentation.

A request was made to the group to see if anyone wished to remove any comments from the bucket. No one came forward at that time.

Chair noted that Chief Editor would post comment responses at that time. Participants were asked to review comments and in the morning, individuals would be given the opportunity to have any comment responses reviewed.

Break for the day @ 4:44pm.

Meeting reconvened at 8:03am, Thursday.

Call for Potentially Essential Patents was made. No one came forward.

Chair asked if anyone wished to have any comment responses reviewed. No one came forward.

Chen noted that he had made updates to the presentation, beyond editorial / addition of supporters. Chair asked if there was any opposition to hearing the presentation. There was none. Chair noted that individuals with new content should send to the Chair for review prior to giving presentation.

Presentation #10 - Suggestion on grid spacing of 400GbE  
Presenter - Song Chen  
URL: Update – [http://www.ieee802.org/3/ct/public/19\\_11/chen\\_3ct\\_01a\\_1119.pdf](http://www.ieee802.org/3/ct/public/19_11/chen_3ct_01a_1119.pdf)

In discussion of the presentation, it was noted that the ITU document referenced in the presentation was not available to the public. It was also noted that there was a bullet in the presentation pointing to this document. Due to the inclusion of this content, the Chair noted the presentation would be removed until the document reference and bullet was removed. Update to presentation noted above.

Way noted that the following presentation had been updated with new supporters. Chair directed Way to send him the presentation for uploading to the meeting webpage.

Presentation #11 - 400GBASE-ZR EVM Pass/Fail Criteria  
Presenter - Winston Way  
URL: [http://www.ieee802.org/3/ct/public/19\\_11/way\\_3ct\\_01b\\_1119.pdf](http://www.ieee802.org/3/ct/public/19_11/way_3ct_01b_1119.pdf)

There was general conversation about the presentation.

Chair noted that he was announcing the formation of the EVM Methodologies Ad hoc. The ad hoc will meet on December 5 at the Task Force Interim Teleconference Meeting.

Presentation #12 - 75GHz-spaced MUX/DMUX Test Results Based on 3-Channel 400GBase-ZR Signals  
Presenter - Winston Way  
URL: [http://www.ieee802.org/3/ct/public/19\\_11/way\\_3ct\\_02a\\_1119.pdf](http://www.ieee802.org/3/ct/public/19_11/way_3ct_02a_1119.pdf)

There was general conversation about the conversation.

Presentation #13 - 75GHz rectangular AWG for 400G-ZR without Nyquist shaping  
Presenter - Daisuke Ogawa  
URL: [http://www.ieee802.org/3/ct/public/19\\_11/ogawa\\_3ct\\_01\\_1119.pdf](http://www.ieee802.org/3/ct/public/19_11/ogawa_3ct_01_1119.pdf)

There was general conversation about the conversation.

Chair showed Strawpoll #2 from Sept 2019 meeting. Based on presentations heard today, the chair wanted to retake the strawpoll to see if there was any change in Task Force consensus.

Strawpoll #1 - For the grid for 400 GbE objective I would support

- Keeping the currently adopted 100 GHz spacing only
- Add 75 GHz spacing to currently adopted 100 GHz spacing
- Replacing the 100 GHz spacing with 75 GHz spacing
- Need more information

#### Results

- A. 0
- B. 7
- C. 16
- D. 8

Motion #4                      Move to  
                                      • Adopt remaining proposed responses to “bucket” comments detailed on Slide 7 of  
  issenhuth\_3ct\_02b\_1119.pdf  
                                      • Generate Draft 1.1 for Task Force review from Draft 1.0 and closed comments

Mover                             Steve Trowbridge  
Second                            Peter Stassar  
Technical (>=75%)  
Results (all) y/n/a             29 / 0 / 1  
Motion                            Passes

Chair displayed proposed liaison by Steve Trowbridge to ITU-T, which was reviewed and modified by the Task Force.

Presentation #14 - Proposed Liaison to ITU-T  
Presenter - Steve Trowbridge  
URL: [http://www.ieee802.org/3/ct/public/19\\_11/IEEE\\_802d3\\_to\\_ITU\\_3ct\\_1119.pdf](http://www.ieee802.org/3/ct/public/19_11/IEEE_802d3_to_ITU_3ct_1119.pdf)

Motion #5                      Move that the IEEE P802.3ct Task Force approve:  
  IEEE\_802d3\_to\_ITU\_3ct\_1119  
                                      • with editorial license granted to the Chair (or his appointed agent) as liaison communications  
  from the IEEE 802.3 Working Group to ITU-T SG15

Mover                             Steve Trowbridge  
Second                            Steve Gorshe  
Technical (>=75%)  
Results (all) y/n/a             Approved by voice vote without objection  
Motion                            Passes

Chair announced Future Face-to-Face meetings

- Jan 2020
  - Week of Jan 20<sup>th</sup>
  - Geneva, CH
- Mar 2020
  - Week of March 16<sup>th</sup>
  - Hilton Atlanta
  - Atlanta, GA, USA
- May 2020
  - Week of May 18<sup>th</sup>
  - The Westin Pasadena
  - Pasadena, CA, USA
- July 2020
  - Week of July 13<sup>th</sup>
  - Sheraton Montreal
  - West Montreal, QC, Canada
- Sept 2020
  - Week of Sept 20<sup>th</sup>
  - Location / Venue TBD
- Nov 2020
  - Week of Nov 9<sup>th</sup>
  - Bangkok Marriott Marquis Queen's Park
  - Bangkok, Thailand

Chair announced future Interim Teleconference Meetings

- 05-Dec-2019, 10:00am to 12:00pm ET – EVM Methodology Ad hoc will be meeting
- 12-Dec-2019, 10:00am to 12:00pm ET
- 19-Dec-2019, 10:00am to 12:00pm ET
- 09-Jan-2020, 10:00am to 12:00pm ET

Motion#6	Motion to Adjourn
Mover	Ali Ghiasi
Second	Nathan Tracy
Results	Motion passed by voice vote without opposition
Motion	Passes

Meeting adjourned 11:07am

## Attendees

Last Name	First Name	Employer	Affiliations	Wed	Thurs
Abbott	John	Corning	Corning	x	
Brooks	Paul	Viavi Solutions	Viavi Solutions	x	
Brown	Matt	Huawei	Huawei	x	x
Bruckman	Leon	Huawei	Huawei	x	x
Chang	Frank	Source Photonics	Source Photonics	x	
Chen	Chan Chih	AOI	AOI		x
Chuang	Keng Hua	HP Enterprise	HP Enterprise	x	x
Cole	Chris	II-VI	II-VI	x	x
Conroy	Keith	Acacia	Acacia	x	x
D'Ambrosia	John	Futurewei, subsidiary of Huawei	Futurewei, subsidiary of Huawei	x	x
Effenberger	Frank	Huawei	Huawei		x
Estes	Dave	Spirent Communications	Spirent Communications		x
Ghiasi	Ali	Ghiasi Quantum	Ghiasi Quantum, Inphi		x
Gorshe	Steve	Microchip	Microchip	x	
Hutchins	Jeff	Ranovus	Ranovus	x	
Isono	Hideki	Fujitsu Optical Components	Fujitsu Optical Components	x	x
Issenhuth	Tom	Issenhuth Consulting	Issenhuth Consulting, Huawei	x	x
Jackson	Kenneth	Sumitomo	Sumitomo	x	x
Kihong	Kim	Hirose	Hirose		x
Kimber	Mark	Semtech	Semtech	x	
Kolesar	Paul	CME Consulting	CommScope		x
Law	David	HPE	HPE	x	
Lewis	David	Lumentum	Lumentum	x	x
Lewis	Jon	Dell EMC	Dell EMC		x
Liu	Hai-Feng	HG Genuine	HG Genuine	x	x
Lyubomirsky	Ilya	Inphi	Inphi	x	x
Maki	Jeffery	Juniper Networks	Juniper Networks	x	
Malicoat	David	Malicoat Networking Solutions	Malicoat Networking Solutions / Senko		x
Maniloff	Eric	Ciena	Ciena	x	x
Nakamoto	Edward	Spirent Communications	Spirent Communications		x
Nering	Ray	Cisco	Cisco		x

Nicholl	Gary	Cisco	Cisco	x	x
Nicholl	Shawn	Xilinx	Xilinx	x	
Nowell	Mark	Cisco	Cisco	x	
Ogawa	Daisuke	NTT Electronics	NTT Electronics	x	x
Parthasarathay	Vasudevan	Broadcom	Broadcom	x	
Pittala	Fabio	Huawei	Huawei	x	x
Rechtman	Zvi	Mellanox	Mellanox		x
Ryo	Okabe	Fujitsu Optical Components	Fujitsu Optical Components	x	x
Sambasivan	Sam	AT&T	AT&T	x	
Schmitt	Matt	Cablelabs	Cablelabs	x	x
Shariff	Masood	Commscope	Commscope	x	
Song	Chen	ZTE	ZTE	x	
Sorbara	Massimo	Global Foundries	Global Foundries	x	x
Sprague	Ted	Infinera	Infinera	x	x
Srivastava	Atul	NEL-America	NEL-America	x	x
Stassar	Peter	Huawei	Huawei	x	x
Takahara	Tomoo	Fujitsu	Fujitsu	x	x
Tan	Kan	Tektronix	Tektronix	x	
Terada	Masaru	OFS	OFS	x	x
Tooyserkani	Pirooz	Cisco	Cisco	x	x
Tracy	Nathan	TE Connectivity	TE Connectivity	x	x
Trowbridge	Steve	Nokia	Nokia	x	x
Ulrichs	Ed	Source Photonics	Source Photonics		x
Wang	Roy	Hewlett Packard Enterprise	Hewlett Packard Enterprise		x
Way	Winston	NeoPhotonics	NeoPhotonics	x	x
Weaver	James	Arista Networks	Arista Networks		x
Xu	Yu	Huawei	Huawei	x	
Zhang	Kevin	Renesas	Renesas	x	