

**Approved Minutes**  
**IEEE 802.3 Ethernet Working Group interim**  
**Indianapolis, IN, USA**  
**12 September, 2019**

<http://www.ieee802.org/3/minutes/sep19/index.html>

**THURSDAY, 12 SEPTEMBER, 2019**

Minutes were taken by IEEE 802.3 Recording Secretary Pete Anslow.

**ADMINISTRATIVE MATTERS**

**Call to order**

Mr. David Law, Chair of the IEEE 802.3 Ethernet Working Group, called the meeting to order at 6:30 pm. Mr. Law announced that the meeting had quorum as it had been publicly announced at least 45 days in advance.

Welcome, introductions, and general announcements

Mr. Law asked the attendees to introduce themselves and announce their affiliation. Mr. Law also showed a list of officers of the IEEE 802.3 Working Group:

IEEE 802.3 Chair: David Law

IEEE 802.3 Vice-Chair: Adam Healey

IEEE 802.3 Secretary: Pete Anslow

IEEE 802.3 Executive Secretary: Steve Carlson

IEEE 802.3 Treasurer: Valerie Maguire

IEEE 802.3 Task Force chairs

- IEEE P802.3ca 25 Gb/s and 50 Gb/s EPON: Curtis Knittle
- IEEE P802.3cg 10 Mb/s Single Twisted Pair Ethernet: George Zimmerman
- IEEE P802.3ch Multi-Gig Automotive Ethernet PHY: Steve Carlson
- IEEE P802.3ck 100 Gb/s, 200 Gb/s, and 400 Gb/s Electrical Interfaces: Beth Kochuparambil
- IEEE P802.3cm 400 Gb/s over Multimode Fiber: Robert Lingle
- IEEE P802.3cn 50 Gb/s, 200 Gb/s, and 400 Gb/s over SMF: John D'Ambrosia
- IEEE P802.3cp Bidirectional 10 Gb/s, 25 Gb/s, and 50 Gb/s Optical Access PHYs: Frank Effenberger
- IEEE P802.3cq Power over Ethernet over 2 Pairs (Maintenance #13): Chad Jones
- IEEE P802.3cr Isolation (Maintenance #14): Jon Lewis
- IEEE P802.3cs Ethernet access PMDs for central office consolidation (Super-PON): Claudio DiSanti
- IEEE P802.3ct 100 Gb/s and 400 Gb/s over DWDM systems Task Force: John D'Ambrosia

- IEEE P802.3cu 100 Gb/s and 400 Gb/s over SMF at 100 Gb/s per Wavelength: Mark Nowell
- IEEE P802.3cv Power over Ethernet (Maintenance #15): Chad Jones

#### IEEE 802.3 Study Group chairs

- IEEE 802.3 Greater than 10 Gb/s Automotive Ethernet Electrical PHYs: Steve Carlson
- IEEE 802.3 Multi Gigabit Automotive PHY Optical: Bob Grow
- IEEE 802.3 Improving PTP Timestamping Accuracy on Ethernet Interfaces: Steve Gorshe
- IEEE 802.3 10 Mb/s Single Pair Ethernet Multidrop Enhancements: Chad Jones

#### **Announcements**

Mr. Law informed the meeting that a long-standing contributor to the IEEE 802.3 Working Group, Jonathan King, had sadly passed away since the July plenary meeting.

A one-minute silence was held in remembrance of Jonathan King.

Mr. Law also announced that Beth Kochuparambil and Margaret Johnston had given birth to a boy and a girl, respectively.

#### **Working Group Decorum**

Mr. Law introduced the Working Group decorum as described in the interim slides. Please see [http://www.ieee802.org/3/minutes/sep19/0919\\_802\\_3\\_interim.pdf](http://www.ieee802.org/3/minutes/sep19/0919_802_3_interim.pdf).

Mr. Law asked if anyone was attending from the press including those who would run a public blog on this meeting. There was no response.

Mr. Law noted that there should be no recording or photography without permission.

Mr. Law noted that participants are required to register for this meeting and pay the meeting fee. Mr. Law also noted that participants must wear their badges in public areas at all times.

#### **Review and approval of agenda**

Mr. Law noted that a soft copy of the draft agenda had been posted to the minutes section for this meeting. Mr. Law gave the minutes webpage for this meeting:

<http://www.ieee802.org/3/minutes/sep19/index.html>

#### **MOTION #1**

Approve the agenda.

M: K. Lusted

S: J. D'Ambrosia

Procedural (> 50%)

Passed by voice vote without opposition 12-Sep 2019, 6:48pm

## **Call for patents**

Please see <http://standards.ieee.org/board/pat/pat-slideset.pdf>.

Mr. Law asked if anyone was unfamiliar with the IEEE patent policy. No one responded.

Mr. Law asked if anyone had or was aware of any essential IP or had a letter of assurance. There was no response.

Mr. Law asked that Mr. Anslow record that:

- No letters of assurance were submitted
- The patent policy, per the latest PatCom slide set, was shown
- Anyone wishing to submit a letter of assurance can do so at any time by contacting Mr. Law or the PatCom administrator

Mr. Law reminded the group of inappropriate topics that should not be discussed. These included territory, market share, price, ongoing litigation, threatened litigation, etc.

Mr. Law reviewed the participation slide.

Please see [http://www.ieee802.org/3/minutes/sep19/0919\\_802\\_3\\_interim.pdf](http://www.ieee802.org/3/minutes/sep19/0919_802_3_interim.pdf).

## **General Working Group business**

### Membership and attendance recording

Mr. Law explained the membership requirements (gaining and retaining)

- 75% attendance at 2 of last 4 plenary meetings (a qualifying interim may be substituted for one plenary)
- Request to become member during IEEE 802.3 potential voter agenda item
- Participate in 2 of last 3 WG ballots
- Maintain valid contact information
- Consistent declaration of affiliation

Please see <http://ieee802.org/3/rules/index.html> for complete information.

### Review of voting membership

Please see [http://www.ieee802.org/3/minutes/sep19/0919\\_voters.pdf](http://www.ieee802.org/3/minutes/sep19/0919_voters.pdf).

Mr. Law reminded participants that the IEEE 802.3 Working Group would record meeting attendance using the IEEE-SA Meeting Attendance Tool.

Mr. Law pointed out that a document containing details of whether WG members have voted on recent WG ballots is available at:

[http://www.ieee802.org/3/ballots/ballot\\_returns.pdf](http://www.ieee802.org/3/ballots/ballot_returns.pdf).

## **IEEE 802.3 Editors reflector**

Mr. Law announced that he had set up an “editors” e-mail reflector to “Facilitate discussion and exchange of information concerning the editing of IEEE 802.3 draft standards such as editing using FrameMaker the IEEE 802.3 FrameMaker template.”

## LIAISONS

### External Liaison letters (old)

*ITU-T JCA-IMT2020: Invitation to update the IMT2020 roadmap* [liaison letter](#)

Consideration of the above liaison letter was deferred from the July 2019 meeting due the alignment of the ITU-T JCA-IMT2020 and IEEE 802.3 meeting schedules.

Mr. Hajduczenia presented a proposed liaison response to ITU-T JCA-IMT2020 developed by the P802.3ca Task Force. Please see:

[http://iee802.org/3/minutes/sep19/outgoing/IEEE\\_802d3\\_to\\_JCA\\_IMT2020\\_0919\\_draft.pdf](http://iee802.org/3/minutes/sep19/outgoing/IEEE_802d3_to_JCA_IMT2020_0919_draft.pdf).

### MOTION #2

Move that 802.3 approve:

IEEE\_802d3\_to\_JCA\_IMT2020\_0919\_draft.pdf

with editorial license granted to the Chair (or his appointed agent) as a liaison communication from the IEEE 802.3 Working Group to ITU-T JCA-IMT2020.

M: M. Hajduczenia

S: K. Lusted

Technical ( $\geq 75\%$ )

Y: 63, N: 0, A: 0

Passed 12-Sep 2019, 7:00pm

### External Liaison letters (new)

*ITU-T SG15: ANT and HNT documents* [liaison letter](#)

*ITU-T SG15: ANT Standards Overview and Work Plan* [liaison letter](#)

*ITU-T SG15: HNT Standards Overview and Work Plan* [liaison letter](#)

Consideration of the above three liaison letters was deferred to the January 2020 meeting due the alignment of the ITU-T SG15 and IEEE 802.3 meeting schedules.

*ISO/IEC JTC 1/SC 25: Single pair cabling* [liaison letter](#) and [attachment](#)

*ISO/IEC JTC 1/SC 25WG3: Update on SPE connectors* [liaison letter](#)

Mr. Law noted that this item would be covered as part of the P802.3cg Task Force report.

*OIF: 400ZR Interop Project* [liaison letter](#) and [attachment](#)

Mr. D'Ambrosia presented a proposed liaison to OIF and ITU-T SG15. Please see: [http://iee802.org/3/minutes/sep19/outgoing/IEEE\\_802d3\\_to\\_ITU\\_OIF\\_3ct\\_0919.pdf](http://iee802.org/3/minutes/sep19/outgoing/IEEE_802d3_to_ITU_OIF_3ct_0919.pdf).

Minor changes were made to the text of the draft liaison.

Mr. D'Ambrosia presented a second proposed liaison to ITU-T SG15. Please see: [http://iee802.org/3/minutes/sep19/outgoing/IEEE\\_802d3\\_to\\_ITU\\_3ct\\_0919\\_draft.pdf](http://iee802.org/3/minutes/sep19/outgoing/IEEE_802d3_to_ITU_3ct_0919_draft.pdf).

### **MOTION #3**

Move that the IEEE 802.3 Working Group approve  
IEEE\_802d3\_to\_ITU\_OIF\_3ct\_0919\_draft  
IEEE\_802d3\_to\_ITU\_3ct\_0919\_draft  
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 and OIF and to  
ITU-T SG15, respectively.

M: J. D'Ambrosia

S: S. Trowbridge

Technical ( $\geq 75\%$ )

Y: 56, N: 0, A: 2

Passed 12-Sep 2019, 7:08pm

*ODVA: Request for latest draft of IEEE P802.3cg [liaison letter](#)*

Mr. Law noted that this item would be covered as part of the P802.3cg Task Force report.

### **Status update on IEEE 802/IEEE 802.3 teleconferencing support – John D'Ambrosia**

Please see [http://ieee802.org/3/minutes/sep19/0919\\_teleconf\\_report.pdf](http://ieee802.org/3/minutes/sep19/0919_teleconf_report.pdf).

### **IEEE P802.3cg 10 Mb/s Single Pair Ethernet Task Force – George Zimmerman**

Please see [http://www.ieee802.org/3/minutes/sep19/0919\\_cg\\_report.pdf](http://www.ieee802.org/3/minutes/sep19/0919_cg_report.pdf).

Mr. Zimmerman presented a proposed liaison to ODVA. Please see:  
[http://ieee802.org/3/minutes/sep19/outgoing/IEEE\\_802d3\\_to\\_ODVA\\_0919\\_draft.pdf](http://ieee802.org/3/minutes/sep19/outgoing/IEEE_802d3_to_ODVA_0919_draft.pdf).

Minor changes were made to the text of the draft liaison.

### **MOTION #4**

Move that the IEEE 802.3 Working Group approve IEEE\_802d3\_to\_ODVA\_0919\_draft  
with editorial license granted to the Chair (or his appointed agent) as a liaison  
communication from the IEEE 802.3 Working Group to ODVA.

M: G. Zimmerman

S: J. Lewis

Technical ( $\geq 75\%$ )

Passed by voice vote without opposition 12-Sep 2019, 7:25pm

Mr. Zimmerman presented a proposed liaison to ISO/IEC JTC1 SC25 WG3. Please see:  
[http://ieee802.org/3/minutes/sep19/outgoing/IEEE\\_802d3\\_to\\_ISOIEC\\_SC25\\_WG3\\_0919\\_draft.pdf](http://ieee802.org/3/minutes/sep19/outgoing/IEEE_802d3_to_ISOIEC_SC25_WG3_0919_draft.pdf).

Minor changes were made to the text of the draft liaison.

**MOTION #5**

Move that the IEEE 802.3 Working Group approve IEEE\_802d3\_to\_ISOIEC\_SC25\_WG3\_0919\_draft with editorial license granted to the Chair (or his appointed agent) as a liaison communication from the IEEE 802.3 Working Group to ISO/IEC JTC1 SC25 WG3.

M: G. Zimmerman

S: J. Lewis

Technical ( $\geq 75\%$ )

Passed by voice vote without opposition 12-Sep 2019, 7:28pm

Mr. Zimmerman reviewed the ballot statistics and the unsatisfied negative comments for the P802.3cg draft.

**MOTION #6**

Move that the IEEE 802.3 Working Group re-affirm the CSD responses in <https://mentor.ieee.org/802-ec/dcn/18/ec-18-0079-00-ACSD-802-3cg.pdf> and request conditional approval to progress the IEEE P802.3cg draft to RevCom once the IEEE Standards Association ballot process has been successfully completed.

M: G. Zimmerman

S: J. Lewis

Technical ( $\geq 75\%$ )

Y: 52, N: 4, A: 2

Passed 12-Sep 2019, 7:41pm

Mr. Zimmerman announced an IEEE P802.3cg contingent interim teleconference on 14 October 2019.

**IEEE P802.3cn 50 Gb/s, 200 Gb/s, and 400 Gb/s over SMF Task Force –John D’Ambrosia**

Please see [http://www.ieee802.org/3/minutes/sep19/0919\\_cn\\_report.pdf](http://www.ieee802.org/3/minutes/sep19/0919_cn_report.pdf).

Mr. D’Ambrosia reviewed the ballot statistics and the unsatisfied negative comment for the P802.3cn draft.

**MOTION #7**

Move that the IEEE 802.3 Working Group re-affirm the CSD responses in <https://mentor.ieee.org/802-ec/dcn/18/ec-18-0248-00-ACSD-p802-3cn.pdf> and request approval to progress the IEEE P802.3cn draft to RevCom.

M: J. D'Ambrosia

S: P. Anslow

Technical ( $\geq 75\%$ )

Y: 47, N: 3, A: 16

Passed 12-Sep 2019, 8:02pm

Mr. D'Ambrosia announced an IEEE P802.3cn contingent interim teleconference on 24 September 2019.

**IEEE P802.3cp Bidirectional 10Gb/s, 25 Gb/s, and 50Gb/s optical access PHYs Task Force – Mark Laubach on behalf of Frank Effenberger**

Mr. Laubach presented a proposed liaison to ITU-T SG15 Q2. Please see:

[http://ieee802.org/3/minutes/sep19/outgoing/IEEE\\_802d3\\_to\\_SG15\\_Bidi\\_0919\\_draft.pdf](http://ieee802.org/3/minutes/sep19/outgoing/IEEE_802d3_to_SG15_Bidi_0919_draft.pdf).

Minor changes were made to the text of the draft liaison.

**MOTION #8**

Move that the IEEE 802.3 Working Group approve IEEE\_802d3\_to\_SG15\_Bidi\_0919\_draft with editorial license granted to the Chair (or his appointed agent) as a liaison communication from the IEEE 802.3 Working Group to ITU-T SG15.

M: M. Laubach

S: M. Hajduczenia

Technical ( $\geq 75\%$ )

Y: 53, N: 0, A: 2

Passed 12-Sep 2019, 8:08pm

**IEEE P802.3cu 100 Gb/s and 400 Gb/s over SMF at 100 Gb/s per Wavelength Task Force – Mark Nowell**

Please see [http://www.ieee802.org/3/minutes/sep19/0919\\_cu\\_report.pdf](http://www.ieee802.org/3/minutes/sep19/0919_cu_report.pdf).

**MOTION #9**

Move that the IEEE 802.3 Working Group approve the IEEE P802.3cu 100 Gb/s and 400 Gb/s over SMF at 100 Gb/s per Wavelength Task Force objective change, as per 0919\_cu\_report.pdf.

M: M. Nowell

S: K. Jackson

Technical ( $\geq 75\%$ )

Passed by voice vote without opposition 12-Sep 2019, 8:13pm

**IEEE 802.3 Multi Gigabit Automotive Optical PHY Study Group – Bob Grow****MOTION #10**

Move to change the Multi Gigabit Automotive Optical PHY Study Group charter from:  
“a Study Group to develop the Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for Multi Gigabit Automotive Optical PHY” to:  
“a Study Group to develop the Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for Multi Gigabit Automotive Optical PHYs”.

M: R. Grow

S: G. Zimmerman

Procedural ( $> 50\%$ )

Y: 62, N: 0, A: 1

Passed 12-Sep 2019, 8:17pm

**IEEE 802.3 10SPE Multidrop Enhancements Study Group – Chad Jones**

Mr. Jones presented a proposed liaison to ISO/IEC JTC1/SC25 WG3. Please see:  
[http://ieee802.org/3/minutes/sep19/outgoing/IEEE\\_802d3\\_to\\_SC25\\_0919\\_draft.pdf](http://ieee802.org/3/minutes/sep19/outgoing/IEEE_802d3_to_SC25_0919_draft.pdf).

**MOTION #11**

Move that the IEEE 802.3 Working Group approve IEEE\_802d3\_to\_SC25\_0919\_draft with editorial license granted to the Chair (or his appointed agent) as liaison communication from the IEEE 802.3 Working Group to ISO/IEC JTC1/SC25 WG3.

M: C. Jones

S: G. Zimmerman

Technical ( $\geq 75\%$ )

Passed by voice vote without opposition 12-Sep 2019, 8:21pm

### **Future meetings – David Law on behalf of Steve Carlson**

Mr. Law reviewed the details of upcoming meetings including the announcement of an IEEE P802.3ch contingent interim teleconference on 15 October 2019. Please see:

[http://www.ieee802.org/3/minutes/sep19/0919\\_meetings\\_report.pdf](http://www.ieee802.org/3/minutes/sep19/0919_meetings_report.pdf).

Mr. McSorley reviewed the details of the May 2020 meeting and an offer for an interim meeting hosted by the Ethernet Alliance in May 2021. Please see:

[http://www.ieee802.org/3/minutes/sep19/0919\\_EA\\_update\\_may\\_2020.pdf](http://www.ieee802.org/3/minutes/sep19/0919_EA_update_may_2020.pdf).

[http://www.ieee802.org/3/minutes/sep19/0919\\_EA\\_offer\\_to\\_host\\_may\\_2021.pdf](http://www.ieee802.org/3/minutes/sep19/0919_EA_offer_to_host_may_2021.pdf).

#### **MOTION #12**

Move that IEEE 802.3 accept the Ethernet Alliance offer for the May 2021 interim as detailed in 0919\_EA\_offer\_to\_host\_may\_2021.pdf.

M: G. Zimmerman

S: R. Grow

Procedural (>50%)

Passed by voice vote without opposition 12-Sep 2019, 8:31pm

#### **Announcements**

None.

#### **Other business**

Mr. Law announced that Mr. Anslow was retiring and expressed his thanks for Mr. Anslow's contribution to the work of IEEE 802.3. There was a standing ovation.

#### **ADJOURN**

#### **MOTION #13**

Move to adjourn.

M: J. D'Ambrosia

S: M. Hajduczenia

Procedural (> 50%)

Passed by voice vote without opposition 12-Sep 2019, 8:35pm

Adjourned.

The list of participants for this meeting (including employers and affiliations) can be found at:

[http://ieee802.org/3/minutes/sep19/0919\\_WG\\_attendance.pdf](http://ieee802.org/3/minutes/sep19/0919_WG_attendance.pdf)

The next meeting of the IEEE 802.3 Working Group will be on Monday 11th November 2019, at the Hilton Waikoloa Village, Waikoloa Village, HI, USA.