

**Approved Minutes**  
**IEEE 802.3 Ethernet Working Group plenary**  
**San Antonio, TX, USA**  
**November 7 to 10, 2016**

<http://www.ieee802.org/3/minutes/nov16/index.html>

**MONDAY, 7 NOVEMBER, 2016**

Minutes were taken by 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 10:01 am. Mr. Law announced that the meeting had quorum as it was being held in conjunction with a plenary session.

Welcome, introductions, and general announcements

Mr. Law asked the attendees to introduce themselves and announce their affiliation. This included the following officers of the IEEE 802.3 Working Group:

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 P802.3bn EPON Protocol over Coax (EPoC): Mark Laubach
- IEEE P802.3bp 1000BASE-T1 PHY: Steve Carlson
- IEEE P802.3bq 25G/40GBASE-T: David Chalupsky
- IEEE P802.3bs 400 Gb/s Ethernet: John D'Ambrosia
- IEEE P802.3bt DTE Power via MDI over 4-Pair: Chad Jones
- IEEE P802.3bv Gigabit Ethernet Over Plastic Optical Fiber: Bob Grow
- IEEE P802.3bz 2.5G/5GBASE-T: David Chalupsky
- IEEE P802.3ca 25 Gb/s, 50 Gb/s, and 100 Gb/s EPON: Curtis Knittle
- IEEE P802.3cb 2.5 Gb/s and 5 Gb/s Backplane: Dan Smith
- IEEE P802.3cc 25 Gb/s Ethernet PMD(s) over single-mode fiber: David Lewis
- IEEE P802.3cd 50Gb/s, 100 Gb/s, and 200 Gb/s Ethernet: Mark Nowell
- IEEE P802.3.2 (IEEE 802.3cf) YANG data models: Yan Zhuang

IEEE 802.3 Study Group chairs

- IEEE 802.3 10 Mb/s Single Twisted Pair Ethernet Study Group: George Zimmerman

## Recognition

Mr. Law noted that Geoff Thompson had attended 100 consecutive IEEE 802 plenary sessions and Mr. Nikolich presented him with a commemorative plaque.

## Working Group Decorum

Mr. Law introduced the Working Group decorum as described in the opening report. Please see [http://www.ieee802.org/3/minutes/nov16/1116\\_802\\_3\\_opening\\_plenary.pdf](http://www.ieee802.org/3/minutes/nov16/1116_802_3_opening_plenary.pdf).

Mr. Law asked if anyone was attending from the press including those who would run a public blog on this meeting other than those limited to summarizing the meeting outcomes. 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 general minutes webpage for IEEE 802.3:

<http://www.ieee802.org/3/minutes/>

Mr. Law asked if there were any additions to the draft agenda. There was no response.

### **MOTION #1**

Approve the agenda.

M: M. Laubach

S: S. Trowbridge

Procedural (> 50%)

Passed by voice vote without opposition 7-November 2016, 10:21 am

## Approval of July 2016 and September 2016 minutes

Please see [http://www.ieee802.org/3/minutes/jul16/0716\\_minutes\\_draft.pdf](http://www.ieee802.org/3/minutes/jul16/0716_minutes_draft.pdf) and [http://www.ieee802.org/3/minutes/sep16/0916\\_minutes\\_draft.pdf](http://www.ieee802.org/3/minutes/sep16/0916_minutes_draft.pdf).

Mr. Law asked if there were any additions or corrections to the July 2016 minutes which were posted on 8 August 2016. Mr. Law also asked if there were any additions or corrections to the September 2016 minutes which were posted on 23 September 2016.

## **MOTION #2**

Approve July 2016 plenary meeting minutes and the September 2016 interim meeting minutes.

M: M. Laubach

S: D. Remein

Procedural (> 50%)

Passed by voice vote without opposition 7-November 2016, 10:23 am

## **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.

Please also see

[http://www.ieee802.org/3/minutes/nov16/1116\\_802\\_3\\_opening\\_plenary.pdf](http://www.ieee802.org/3/minutes/nov16/1116_802_3_opening_plenary.pdf).

## **General Working Group business**

### Working Group activities since the March 2016 meeting

Please see [http://www.ieee802.org/3/minutes/nov16/1116\\_802\\_3\\_opening\\_plenary.pdf](http://www.ieee802.org/3/minutes/nov16/1116_802_3_opening_plenary.pdf).

12th to 16th September 2016, Ft. Worth, TX, USA

- IEEE 802.3 interim meeting series
- Hosted by Ixia

10th October 2016, Santa Barbara, CA, USA

- IEEE 802.3bu 1-Pair Power over Data Lines (PoDL) Task Force
- Hosted by Linear Technology

20th October 2016, Milpitas, CA, USA

- IEEE 802.3cc 25 Gb/s Ethernet over Single-Mode Fiber Task Force
- Hosted by Cisco

Mr. Law expressed his thanks to the hosts of the various interim meetings. There was a round of applause.

### Attendance procedures, tool, books and e-mail list maintenance

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 to retain membership
- Maintain valid contact information
- Consistent declaration of affiliation

Please see <http://iee802.org/3/rules/index.html> for complete information.

Mr. Anslow reminded participants that the IEEE 802.3 Working Group would record meeting attendance using the IEEE-SA Meeting Attendance Tool and that declaration of affiliation is a requirement to obtain credit for meeting attendance. Mr. Anslow noted that a presentation giving details of the attendance procedure is available at: [http://iee802.org/3/minutes/nov16/1116\\_imat.pdf](http://iee802.org/3/minutes/nov16/1116_imat.pdf).

### Review of voting membership

Please see [http://www.iee802.org/3/minutes/nov16/1116\\_voters.pdf](http://www.iee802.org/3/minutes/nov16/1116_voters.pdf).

### Review of voters in peril

Please see [http://www.iee802.org/3/minutes/nov16/1116\\_peril.pdf](http://www.iee802.org/3/minutes/nov16/1116_peril.pdf).

Mr. Law pointed out that the list of voters in peril also showed "departing voters" who were voters with an attendance record such that they would not be voters after this session (none for this meeting).

### Request for membership

Please see [http://www.iee802.org/3/minutes/nov16/1116\\_potential.pdf](http://www.iee802.org/3/minutes/nov16/1116_potential.pdf).

Mr. Law went through the Potential Voters list. Mr. Anslow recorded the respondents:

Amason, Dale	Johnson, John	Parsons, Earl
Brandt, David	Kimber, Eric	Sparrowhawk, Bryan
Brownlee, Phillip	Kusano, Toshihiko	Srivastava, Atul
Guo, Yong	Le Cheminant, Greg	Takahara, Tomoo
Hegde, Rajmohan	Liu, Zhenyu	Tracy, Nathan
Hess, David	Lokhandwala, Moiz	Tremblay, David
Hoglund, David	Matheus, Kirsten	Zhong, Qiwen
Huang, Xi	Miguelz, Phil	Zinner, Helge
Ishibe, Kazuhiko	Muir, Ron	Zivny, Pavel

Mr. Law noted that 802.3 voters now have this status indicated on their badges and that those who had just requested membership should obtain a replacement badge prior to the closing plenary meeting.

### **IEEE 802.3 Treasurer's report – Valerie Maguire**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_treasury.pdf](http://ieee802.org/3/minutes/nov16/1116_treasury.pdf).

### **IEEE 802 Executive Committee report**

Please see [http://www.ieee802.org/3/minutes/nov16/1116\\_802\\_3\\_opening\\_plenary.pdf](http://www.ieee802.org/3/minutes/nov16/1116_802_3_opening_plenary.pdf).

#### EC Meetings for the week

Mr. Law reviewed the schedule of EC meetings for the plenary week.

Please see [http://www.ieee802.org/3/minutes/nov16/1116\\_802\\_3\\_opening\\_plenary.pdf](http://www.ieee802.org/3/minutes/nov16/1116_802_3_opening_plenary.pdf).

Proposed [additional slide](#) on existing IEEE-SA and IEEE 802 policies and guidance on participation in IEEE 802 individual based standards development projects

Mr. Law pointed out that an additional meeting slide is being proposed.

### **Other 802 PARs under consideration this week (comments due by 18:30 Tuesday)**

Please see [http://www.ieee802.org/3/minutes/nov16/1116\\_agenda\\_open.pdf](http://www.ieee802.org/3/minutes/nov16/1116_agenda_open.pdf).

#### New standard PAR

- IEEE P802.1CS Link-local Registration Protocol draft [PAR](#) and [CSD](#)
- IEEE P802.19.2 Amendment: Coexistence of Unlicensed Wireless Systems in an Automotive Environment draft [PAR](#) and [CSD](#)

#### Revision PAR

- IEEE P802.1AR Secure Device Identity draft [PAR](#) and [CSD](#)

#### Amendment project PARs

- IEEE P802.11 Amendment: Low-power wake-up radio operation draft [PAR](#) and [CSD](#)

#### PAR modification request

- IEEE P802c Amendment: Local Medium Access Control (MAC) Address Usage draft [PAR modification request](#)

Mr. Law announced that Mr. Grow had kindly offered to chair an Ad Hoc to review these PARs and submit comments on behalf of the Working Group. Mr. Grow had provided draft comments on some of the proposed PARs in:

[http://www.ieee802.org/3/email\\_dialog/msg00589.html](http://www.ieee802.org/3/email_dialog/msg00589.html)

## LIAISONS

### External Liaison reports

*ISO/IEC SC25/WG3 report – Alan Flatman*

Please see

[http://www.ieee802.org/3/minutes/nov16/1116\\_SC25\\_WG3\\_report\\_to\\_802d3.pdf](http://www.ieee802.org/3/minutes/nov16/1116_SC25_WG3_report_to_802d3.pdf).

*TIA TR-42 report – Valerie Maguire*

Please see

[http://www.ieee802.org/3/minutes/nov16/1116\\_TIA\\_TR-42\\_report\\_to\\_802d3.pdf](http://www.ieee802.org/3/minutes/nov16/1116_TIA_TR-42_report_to_802d3.pdf).

### External Liaison requests

*ISO TC22 SC32 Road vehicles - Electrical and electronic components and general system aspects [Category A liaison request](#)*

Mr. Law appointed the P802.3bv Task Force to review the letter and generate a response, if appropriate, for consideration at the closing plenary.

### External Liaison letters (new)

*Broadband Forum Low power modes for fibre backhaul for FTTdp [liaison letter](#)*

Mr. Law appointed John D'Ambrosia and Curtis Knittle to review the letter and generate a response, if appropriate, for consideration at the closing plenary.

*ISO/IEC JTC1/SC25/WG3 Elevated temperature operation of cabling [liaison letter](#)*

Mr. Law appointed the P802.3bt Task Force to review the letter and generate a response, if appropriate, for consideration at the closing plenary.

*ISO/IEC JTC1/SC25/WG3 2.5/5GBASE-T and 25GBASE-T [liaison letter](#)*

Mr. Law appointed Dave Chalupsky to review the letter and generate a response, if appropriate, for consideration at the closing plenary.

*ITU-T SG15 Access Network Transport (ANT) Standardization Work Plan [liaison letter](#)*

*ITU-T SG15 Home Network Transport (HNT) Standardization Work Plan [liaison letter](#)*

*ITU-T SG15 Optical Transport Network Technology (OTNT) Standardization Work Plan [liaison letter](#) and [attachment](#)*

*ITU-T SG15 Latest versions ANT and HNT Standards Overview and Work Plans [liaison letter](#)*

Consideration of the above four liaison letters was deferred until the May 2017 meeting due the alignment of the ITU-T SG15 and IEEE 802.3 meeting schedules.

*ITU-T SG15 Generic & Transport Technology Specific Management Information Models [liaison letter](#) and [attachment](#)*

*ITU-T SG15 Reply to Liaison “NetConf(NC)/YANG management for PON” [liaison letter](#)*

Mr. Law appointed the IEEE P802.3.2 YANG data models Task Force to review the above two liaison letters and generate a response, if appropriate, for consideration at the closing plenary.

*TIA TR-42 1-pair cabling and applications* [liaison letter](#)

Mr. Law appointed the IEEE 802.3 10 Mb/s Single Twisted Pair Ethernet Study Group to review the letter and generate a response, if appropriate, for consideration at the closing plenary.

*TIA TR-42 Elevated temperature operation of cabling* [liaison letter](#)

Mr. Law appointed the P802.3bt Task Force to review the letter and generate a response, if appropriate, for consideration at the closing plenary.

*COBO progress update* [liaison letter](#) and [attachment](#)

Mr. Law appointed the P802.3bs and P802.3cd Task Forces to review the letter and generate a response, if appropriate, for consideration at the closing plenary.

### **External Liaison letters (new, information item)**

*OIF: Progress on OIF CEI-56G Projects* [liaison letter](#) and [attachments](#)

Mr. Law noted that this letter was addressed to the P802.3bs and P802.3cd Task Forces and copied to the 802.3 Working Group.

### **Internal Liaison**

*Potential IEEE 802 5G Industry Connection activity*

Mr. D'Ambrosia was temporarily unavailable, so this item was deferred until later in the agenda.

### **IEEE 802.3 Rules – Adam Healey**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_rules\\_open\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_rules_open_report.pdf).

### **IEEE 802.3 Maintenance – Adam Healey**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_maint\\_open\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_maint_open_report.pdf).

Mr. Healey also noted that the state of the IEEE 802.3 standard is posted. Please see: [http://ieee802.org/3/minutes/nov16/1116\\_state\\_of\\_std.pdf](http://ieee802.org/3/minutes/nov16/1116_state_of_std.pdf).

## **TASK FORCE AND STUDY GROUP REPORTS**

### **IEEE P802.3bn EPON Protocol over Coax (EPoC) Task Force –Mark Laubach**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_bn\\_open\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_bn_open_report.pdf).

### **Internal Liaison**

*Potential IEEE 802 5G Industry Connection activity*

At this point this agenda item was considered.

Mr. D'Ambrosia gave an update on a potential Industry Connections activity in IEEE 802.1, addressing architecture aspects targeting "5G".

**IEEE P802.3bs 400 Gb/s Ethernet Task Force – John D'Ambrosia**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_bs\\_open\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_bs_open_report.pdf).

**IEEE P802.3bt DTE Power via MDI over 4-Pair Task Force – Chad Jones**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_bt\\_open\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_bt_open_report.pdf).

**IEEE P802.3bu 1-Pair Power over Data Lines (PoDL) Task Force – George Zimmerman on behalf of Dan Dove**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_bu\\_open\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_bu_open_report.pdf).

At this point Mr. Law asked Mr. Healey to temporarily take over as chair of the meeting.

**IEEE P802.3bv Gigabit Ethernet Over Plastic Optical Fiber Task Force – Bob Grow**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_bv\\_open\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_bv_open_report.pdf).

**IEEE P802.3bz 2.5G/5GBASE-T Task Force – Dave Chalupsky**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_bz\\_open\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_bz_open_report.pdf).

**IEEE P802.3ca 25 Gb/s, 50 Gb/s and 100 Gb/s EPON Task Force – Curtis Knittle**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_ca\\_open\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_ca_open_report.pdf).

**IEEE P802.3cb 2.5Gb/s and 5 Gb/s Backplane Task Force – Dan Smith**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_cb\\_open\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_cb_open_report.pdf).

**IEEE P802.3cc 25 Gb/s Ethernet over single-mode fiber Task Force – David Lewis**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_cc\\_open\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_cc_open_report.pdf).

**IEEE P802.3cd 50 Gb/s, 100 Gb/s, and 200 Gb/s Ethernet Task Force – Mark Nowell**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_cd\\_open\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_cd_open_report.pdf).

**IEEE P802.3.2 (IEEE 802.3cf) YANG data models Task Force – Yan Zhuang**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_cf\\_open\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_cf_open_report.pdf).

**IEEE 802.3 10 Mb/s Single Twisted Pair Ethernet Study Group – George Zimmerman**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_10M\\_stp\\_open\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_10M_stp_open_report.pdf).



**IEEE 802.3 Next Generation Enterprise/Campus/Data Center Ethernet Industry Connection Ad Hoc – John D’Ambrosia**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_NG\\_ECDC\\_open\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_NG_ECDC_open_report.pdf).

At this point Mr. Law resumed the chair.

**CALL FOR INTEREST**

**IEEE 802.3 Multi-Gig Automotive Ethernet PHY Call for Interest – Steve Carlson**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_multi\\_gig\\_open\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_multi_gig_open_report.pdf).

**ROOM ASSIGNMENTS, AND SUBGROUP SCHEDULES**

Mr. Carlson provided details of the rooms for the Ad Hocs and noted that the room assignments were available via the 802.3 web page.

**ADJOURN**

No other items of business were presented.

**MOTION #3**

Move to adjourn.

M: S. Trowbridge

S: J. D’Ambrosia

Procedural (> 50%)

Passed by voice vote without opposition 7-November 2016, 12:06 pm

**Approved Minutes**  
**IEEE 802.3 Ethernet Working Group plenary**  
**San Antonio, TX, USA**  
**November 7 to 10, 2016**

<http://www.ieee802.org/3/minutes/nov16/index.html>

**THURSDAY, 10 NOVEMBER, 2016**

Minutes were taken by 802.3 Recording Secretary Pete Anslow.

**ADMINISTRATIVE MATTERS & GENERAL BUSINESS**

**Call to order**

Mr. David Law, Chair of the IEEE 802.3 Ethernet Working Group, called the meeting to order at 1:00 pm. Mr. Law announced that the meeting had quorum as it was being held in conjunction with a plenary session.

**Welcome, introductions, and general announcements**

Mr. Law showed a list of the officers of the Working Group. Please see [http://www.ieee802.org/3/minutes/nov16/1116\\_802\\_3\\_closing\\_plenary.pdf](http://www.ieee802.org/3/minutes/nov16/1116_802_3_closing_plenary.pdf).

**Working Group Decorum**

Mr. Law also introduced the Working Group decorum as described in his closing report. Please see [http://www.ieee802.org/3/minutes/nov16/1116\\_802\\_3\\_closing\\_plenary.pdf](http://www.ieee802.org/3/minutes/nov16/1116_802_3_closing_plenary.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.

Mr. Law emphasized that attendees should observe proper decorum in meetings.

**Approval of the Agenda**

Mr. Law asked if there were any additions to the draft agenda. Mr. D'Ambrosia asked for an item on Potential IEEE 802.5G Industry Connection activity to be added.

## **MOTION #1**

Motion to approve the agenda as modified.

M: J. D' Ambrosia

S: C. Jones

Procedural (> 50%)

Passed by voice vote without opposition 10-November 2016, 1:13 pm

## **Call for patents**

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

Mr. Law asked if anyone had not seen the patent slides during the meeting week. No one responded.

Mr. Law asked if anyone had or was aware of any essential IP or had a letter of assurance, and no one came forth. Mr. Law asked Mr. Anslow to record that:

- No letters of assurance were submitted
- 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. and showed the slides. Please see

[http://www.ieee802.org/3/minutes/nov16/1116\\_802\\_3\\_closing\\_plenary.pdf](http://www.ieee802.org/3/minutes/nov16/1116_802_3_closing_plenary.pdf).

## **GENERAL WORKING GROUP BUSINESS**

### Membership and Attendance

Mr. Law reminded participants that attendance is recorded via the IEEE-SA Meeting Attendance tool. Mr. Law noted that attendance must be logged for the afternoon closing plenary session to get credit for the Thursday meeting.

### Review of voting membership

Please see [http://www.ieee802.org/3/minutes/nov16/1116\\_voters.pdf](http://www.ieee802.org/3/minutes/nov16/1116_voters.pdf).

### Review of voters in peril

Please see [http://www.ieee802.org/3/minutes/nov16/1116\\_peril.pdf](http://www.ieee802.org/3/minutes/nov16/1116_peril.pdf).

### Request for membership

Please see [http://www.ieee802.org/3/minutes/nov16/1116\\_potential.pdf](http://www.ieee802.org/3/minutes/nov16/1116_potential.pdf).

Mr. Law went through the Potential Voters list. Mr. Anslow recorded the respondents:

Cheng, Weiying

Kim, Yong

Traverso, Matthew

Ingham, Jonathan

Shrikhande, Kapil

Diminico, Chris

## IEEE 802 Executive Committee items

Please see [http://www.ieee802.org/3/minutes/nov16/1116\\_802\\_3\\_closing\\_plenary.pdf](http://www.ieee802.org/3/minutes/nov16/1116_802_3_closing_plenary.pdf).

### Other IEEE 802 PARs

Mr. Grow reported on the outcome of the Ad Hoc to review the 802 PARs.

Mr. Law noted that, since there was no further input offered from the Working Group (beyond the comments generated by the Ad Hoc chaired by Mr. Grow), he would vote on the PARs considered by the EC this week based on the discussion at the EC meeting.

### External Liaison requests

Category A liaison request from ISO TC22 SC32 Road vehicles - Electrical and electronic components and general system aspects

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

### External liaison letters (new)

Broadband Forum Low power modes for fibre backhaul for FTTdp liaison letter

Mr. D'Ambrosia reviewed the proposed liaison to Broadband Forum. Please see: [http://ieee802.org/3/minutes/nov16/outgoing/IEEE\\_802d3\\_to\\_BBF\\_EEE\\_1116\\_draft.pdf](http://ieee802.org/3/minutes/nov16/outgoing/IEEE_802d3_to_BBF_EEE_1116_draft.pdf)

#### **MOTION #2**

Move that the IEEE 802.3 Working Group approve IEEE\_802d3\_to\_BBF\_EEE\_1116\_draft.pdf with editorial license granted to the Chair (or his appointed agent) as liaison communication from the IEEE 802.3 Working Group to Broadband Forum.

M: J. D'Ambrosia

S: C. Jones

Technical ( $\geq 75\%$ )

Passed by voice vote without opposition 10-November 2016, 1:45 pm

ISO/IEC JTC1/SC25/WG3 Elevated temperature operation of cabling liaison letter

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

ISO/IEC JTC1/SC25/WG3 2.5/5GBASE-T and 25GBASE-T liaison letter

Mr. Chalupsky reported that no response was necessary.

ITU-T SG15 Generic & Transport Technology Specific Management Information Models liaison letter and attachment

ITU-T SG15 Reply to Liaison “NetConf(NC)/YANG management for PON” liaison letter

Mr. Law noted that these items would be covered as part of the P802.3.2 Task Force closing plenary report.

OIF: Start of 400ZR Interop Project liaison letter

A liaison from OIF was received after the close of the Working Group meeting informing the IEEE 802.3 Working Group of the start of a new project.

Mr. D’Ambrosia reviewed the proposed liaison response to OIF. Please see:  
[http://ieee802.org/3/minutes/nov16/outgoing/IEEE\\_802d3\\_to\\_OIF\\_400zr\\_1116\\_draft.pdf](http://ieee802.org/3/minutes/nov16/outgoing/IEEE_802d3_to_OIF_400zr_1116_draft.pdf)

**MOTION #3**

Move that the IEEE 802.3 Working Group approve IEEE\_802d3\_to\_OIF\_400zr\_1116\_draft.pdf with editorial license granted to the Chair (or his appointed agent) as liaison communication from the IEEE 802.3 Working Group to OIF.

M: J. D’Ambrosia

S: S. Trowbridge

Technical ( $\geq 75\%$ )

Passed by voice vote without opposition 10-November 2016, 1:54 pm

TIA TR-42 1-pair cabling and applications liaison letter

Mr. Law noted that these items would be covered as part of the IEEE 802.3 10 Mb/s Single Twisted Pair Ethernet Study Group closing plenary report.

TIA TR-42 Elevated temperature operation of cabling liaison letter

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

Potential IEEE 802 5G Industry Connection activity

Mr. D’Ambrosia gave an update on the potential Industry Connections activity in IEEE 802.1, addressing architecture aspects targeting “5G”.

**Future meetings – Steve Carlson**

Mr. Carlson reviewed the details of upcoming meetings including an update on the January 2017 meeting. Please see

[http://www.ieee802.org/3/minutes/nov16/1116\\_meetings\\_close.pdf](http://www.ieee802.org/3/minutes/nov16/1116_meetings_close.pdf)

[http://www.ieee802.org/3/minutes/nov16/1116\\_CME\\_update\\_jan\\_2017.pdf](http://www.ieee802.org/3/minutes/nov16/1116_CME_update_jan_2017.pdf).

Mr. D'Ambrosia provided the details of a hosting offer for May 2018. Please see [http://www.ieee802.org/3/minutes/nov16/1116\\_EA\\_offer\\_to\\_host\\_may\\_2018.pdf](http://www.ieee802.org/3/minutes/nov16/1116_EA_offer_to_host_may_2018.pdf).

**MOTION #4**

Move that IEEE 802.3 accept the Ethernet Alliance offer for the May 2018 interim as detailed in 1116\_EA\_offer\_to\_host\_may\_2018.pdf.

M: J. D'Ambrosia

S: S. Carlson

Procedural (>50%)

Passed by voice without opposition 10-November 2016, 2:12 pm

Mr. Swanson provided the details of a hosting offer for September 2017. Please see [http://www.ieee802.org/3/minutes/nov16/1116\\_Corning\\_offer\\_to\\_host\\_sept\\_2017](http://www.ieee802.org/3/minutes/nov16/1116_Corning_offer_to_host_sept_2017).

**MOTION #5**

Move that IEEE 802.3 accept the Corning offer for the September 2017 interim as detailed in 1116\_Corning\_offer\_to\_host\_sept\_2017.pdf.

M: S. Swanson

S: S. Carlson

Procedural (>50%)

Passed by voice without opposition 10-November 2016, 2:13 pm

**REPORTS**

**IEEE 802.3 Rules – Adam Healey**

Mr. Healey gave an update on the activity in the rules meeting.

**IEEE 802.3 Maintenance – Adam Healey**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_maint\\_close\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_maint_close_report.pdf).

Mr. Healey summarized the ballot statistics for the 802.3-2015/Cor1 draft.

**MOTION #6**

Progress the IEEE Std 802.3-2015/Cor 1 draft to IEEE 802 LMSC sponsor ballot.

M: A. Healey on behalf of the Task Force

Technical ( $\geq 75\%$ )

Y: 107, N: 0, A: 3

Passed 10-November 2016, 2:32 pm

Mr. Healey reviewed the proposed liaison to ISO/IEC JTC 1/SC 6. Please see:

[http://ieee802.org/3/minutes/nov16/outgoing/IEEE\\_802d3\\_to\\_ISOIEC\\_JTC1\\_SC6\\_1116\\_draft.pdf](http://ieee802.org/3/minutes/nov16/outgoing/IEEE_802d3_to_ISOIEC_JTC1_SC6_1116_draft.pdf)

**MOTION #7**

Approve IEEE\_802d3\_to\_ISOIEC\_JTC1\_SC6\_1116\_draft.pdf with editorial license granted to the Chair (or his appointed agent) as liaison communication from the IEEE 802.3 Working Group to ISO/IEC JTC 1/SC 6.

M: A. Healey

S: S. Carlson

Technical ( $\geq 75\%$ )

Y: 96, N: 0, A: 2

Passed 10-November 2016, 2:40 pm

**MOTION #8**

Submit IEEE Std 802.3br-2016 and IEEE Std 802.3bz-2016 to ISO/IEC JTC 1/SC 6 for ratification under the PSDO agreement.

M: A. Healey on behalf of the Task Force

Technical ( $\geq 75\%$ )

Y: 102, N: 0, A: 1

Passed 10-November 2016, 2:43 pm

**IEEE P802.3bp 1000BASE-T1 PHY Task Force – Steve Carlson**

Mr. Law recognized Mr. Carlson for his contribution to the development of IEEE Std 802.3bp-2016.

Mr. Carlson in turn recognized several other 802.3 WG members for their contributions to the IEEE P802.3bp project.

**IEEE P802.3bq 25G/40GBASE-T Task Force – Dave Chalupsky**

Mr. Law recognized Mr. Chalupsky for his contribution to the development of IEEE Std 802.3bq-2016.

Mr. Chalupsky in turn recognized several other 802.3 WG members for their contributions to the IEEE P802.3bq project.

**IEEE P802.3br Interspersing Express Traffic Task Force – Ludwig Winkel**

Mr. Law recognized Mr. Winkel for his contribution to the development of IEEE Std 802.3br-2016.

Mr. Winkel in turn recognized several other 802.3 WG members for their contributions to the IEEE P802.3br project.

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Break at approximately 3:00 pm. Restarted at approximately 3:17 pm.

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**IEEE P802.3bs 400 Gb/s Ethernet Task Force – John D’Ambrosia**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_bs\\_close\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_bs_close_report.pdf).

Mr. D’Ambrosia reviewed the unsatisfied comments against the P802.3bs draft.

**MOTION #9**

Move that the IEEE 802.3 Working Group re-affirm the CSD responses in <https://mentor.ieee.org/802-ec/dcn/16/ec-16-0057-00-ACSD-802-3bs.pdf> and request conditional approval to progress the IEEE P802.3bs draft to IEEE 802 LMSC sponsor ballot once the Working Group ballot process has been successfully completed.

M: J. D’Ambrosia

S: P. Anslow

Technical ( $\geq 75\%$ )

Y: 73, N: 0, A: 1

Passed 10-November 2016, 3:25 pm

**IEEE P802.3bt DTE Power via MDI over 4-Pair Task Force – Chad Jones**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_bt\\_close\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_bt_close_report.pdf).

Mr. Jones reviewed a proposed liaison response to ISO/IEC SC25 WG3. Please see: [http://ieee802.org/3/minutes/nov16/outgoing/IEEE\\_802d3\\_to\\_ISOIEC\\_SC25\\_WG3\\_1116\\_draft.pdf](http://ieee802.org/3/minutes/nov16/outgoing/IEEE_802d3_to_ISOIEC_SC25_WG3_1116_draft.pdf).



**MOTION #10**

Move that the IEEE 802.3 Working Group approve IEEE\_802d3\_to\_ISOIEC\_SC25\_WG3\_1116\_draft.pdf with editorial license granted to the Chair (or his appointed agent) as liaison communication from the IEEE 802.3 Working Group to SC 25 WG3.

M: G. Zimmerman

S: J. Heredia

Technical ( $\geq 75\%$ )

Passed by voice vote without opposition 10-November 2016, 3:29 pm

Mr. Jones reviewed a proposed liaison response to TIA TR42. Please see:

[http://iee802.org/3/minutes/nov16/outgoing/IEEE\\_802d3\\_to\\_TIA\\_on\\_POE\\_1116\\_draft.pdf](http://iee802.org/3/minutes/nov16/outgoing/IEEE_802d3_to_TIA_on_POE_1116_draft.pdf).

**MOTION #11**

Move that the IEEE 802.3 Working Group approve IEEE\_802d3\_to\_TIA\_on\_POE\_1116\_draft.pdf with editorial license granted to the Chair (or his appointed agent) as liaison communication from the IEEE 802.3 Working Group to TIA TR42.

M: G. Zimmerman

S: J. Heredia

Technical ( $\geq 75\%$ )

Passed by voice vote without opposition 10-November 2016, 3:31 pm

**MOTION #12**

Move that the IEEE 802.3 Working Group endorse the nomination of David Tremblay and Chad Jones as members of IEEE SCC 18.

M: G. Zimmerman

S: D. Abramson

Technical ( $\geq 75\%$ )

Y: 94, N: 0, A: 0

Passed 10-November 2016, 3:35 pm

**IEEE P802.3bu 1-Pair Power over Data Lines (PoDL) Task Force – George Zimmerman on behalf of Dan Dove**

Please see [http://iee802.org/3/minutes/nov16/1116\\_bu\\_close\\_report.pdf](http://iee802.org/3/minutes/nov16/1116_bu_close_report.pdf).

**MOTION #13**

Move that the IEEE 802.3 Working Group re-affirm the CSD responses in [http://iee802.org/3/bu/P802d3bu\\_5C.pdf](http://iee802.org/3/bu/P802d3bu_5C.pdf) and request approval to submit the IEEE P802.3bu draft to RevCom.

M: G. Zimmerman

S: H. Stewart

Technical ( $\geq 75\%$ )

Y: 92, N: 0, A: 0

Passed 10-November 2016, 3:40 pm

**IEEE P802.3bv Gigabit Ethernet Over Plastic Optical Fiber Task Force – Bob Grow**

Please see [http://iee802.org/3/minutes/nov16/1116\\_bv\\_close\\_report.pdf](http://iee802.org/3/minutes/nov16/1116_bv_close_report.pdf).

**MOTION #14**

The IEEE 802.3 Working group approves the formation of the category A liaison between IEEE 802.3 and ISO TC22 SC32 Road vehicles - Electrical and electronic components and general system aspects.

M: R. Grow on behalf of the Task Force

Technical ( $\geq 75\%$ )

Y: 92, N: 0, A: 1

Passed 10-November 2016, 3:45 pm

Mr. Grow presented a proposed liaison response to ISO TC22 SC32. Please see: [http://iee802.org/3/minutes/nov16/outgoing/IEEE\\_802d3\\_to\\_ISO\\_TC22\\_SC32\\_1116\\_draft.pdf](http://iee802.org/3/minutes/nov16/outgoing/IEEE_802d3_to_ISO_TC22_SC32_1116_draft.pdf).

Minor changes were made to the draft liaison.

**MOTION #15**

Move that the IEEE 802.3 Working Group approve IEEE\_802d3\_to\_ISO\_TC22\_SC32\_1116\_draft.pdf with editorial license granted to the Chair (or his appointed agent) as liaison communication from the IEEE 802.3 Working Group to ISO TC22 SC32.

M: R. Grow

S: R. Pérez de Aranda

Technical ( $\geq 75\%$ )

Passed by voice without opposition 10-November 2016, 3:49pm

Mr. Grow presented an overview of the unsatisfied comments on the P802.3bv draft.

**MOTION #16**

Move that the IEEE 802.3 Working Group re-affirm the CSD responses in [http://www.ieee802.org/3/bv/CSD\\_GEPOF\\_1114.pdf](http://www.ieee802.org/3/bv/CSD_GEPOF_1114.pdf) and request conditional approval to progress the IEEE P802.3bv draft to RevCom once the Sponsor ballot process has been successfully completed.

M: R. Grow on behalf of the Task Force

Technical ( $\geq 75\%$ )

Y: 70, N: 0, A: 12

Passed 10-November 2016, 3:58 pm

**IEEE P802.3by 25Gb/s Ethernet Task Force – Mark Nowell**

Mr. Law recognized Mr. Nowell for his contribution to the development of IEEE Std 802.3by-2015.

Mr. Nowell in turn recognized several other 802.3 WG members for their contributions to the IEEE P802.3by project.

**IEEE P802.3bz 2.5G/5GBASE-T Task Force – Dave Chalupsky**

Mr. Law recognized Mr. Chalupsky for his contribution to the development of IEEE Std 802.3bq-2016.

Mr. Chalupsky in turn recognized several other 802.3 WG members for their contributions to the IEEE P802.3bq project.

**IEEE P802.3ca 25 Gb/s, 50 Gb/s and 100 Gb/s EPON Task Force – Curtis Knittle**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_ca\\_close\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_ca_close_report.pdf).

**IEEE P802.3cb 2.5Gb/s and 5 Gb/s Backplane Task Force – Dan Smith**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_cb\\_close\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_cb_close_report.pdf)

Due to the temporary unavailability of Mr. Lewis, the P802.3cc agenda item was deferred until after the next item.

**IEEE P802.3cd 50 Gb/s, 100 Gb/s, and 200 Gb/s Ethernet Task Force – Mark Nowell**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_cd\\_close\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_cd_close_report.pdf).

**IEEE P802.3cc 25 Gb/s Ethernet over single-mode fiber Task Force – David Lewis**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_cc\\_close\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_cc_close_report.pdf)

Mr. Lewis reviewed the changes made to the P802.3cc draft compared to the preview version.

**MOTION #17**

Move that the IEEE 802.3 Working Group progress the IEEE P802.3cc draft to Working Group ballot.

M: D. Lewis

S: K. Tamura

Technical ( $\geq 75\%$ )

Passed by voice vote without opposition 10-November 2016, 4:40 pm

**IEEE P802.3.2 (IEEE 802.3cf) YANG Data models Task Force – Yan Zhuang**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_YANG\\_close\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_YANG_close_report.pdf).

**IEEE 802.3 10 Mb/s Single Twisted Pair Ethernet Study Group – George Zimmerman**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_10M\\_stp\\_close\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_10M_stp_close_report.pdf).

Mr. Zimmerman presented the IEEE P802.3cg 10 Mb/s Single Twisted Pair Ethernet proposed objectives.

**MOTION #18**

Move that 802.3 approve the IEEE P802.3cg 10 Mb/s Single Twisted Pair Ethernet objectives, as per slides 5 and 7 of 1116\_10M\_stp\_close\_report.pdf

M: G. Zimmerman

S: P. Jones

Technical ( $\geq 75\%$ )

Passed by voice without opposition 10-November 2016, 4:55 pm

Mr. Zimmerman presented the IEEE P802.3cg 10 Mb/s Single Twisted Pair Ethernet proposed PAR.

**MOTION #19**

Move that 802.3 approve the IEEE P802.3cg 10 Mb/s Single Twisted Pair Ethernet PAR, in [http://www.ieee802.org/3/10SPE/public/Nov2016/P8023cg\\_par\\_091116.pdf](http://www.ieee802.org/3/10SPE/public/Nov2016/P8023cg_par_091116.pdf)

M: G. Zimmerman

S: L. Winkel

Technical ( $\geq 75\%$ )

Y: 79, N: 0, A: 0

Passed 10-November 2016, 5:00 pm

Mr. Zimmerman presented the IEEE P802.3cg 10 Mb/s Single Twisted Pair Ethernet proposed CSD responses.

**MOTION #20**

Move that 802.3 approve the 10 Mb/s SPE (P802.3cg) CSD “Managed Objects”, “Coexistence”, “Broad Market Potential”, “Compatibility”, “Distinct Identity”, “Technical Feasibility”, and “Economic Feasibility” responses, as per 1116\_10M\_stp\_close\_report.pdf

M: G. Zimmerman

S: M. McCarthy

Technical ( $\geq 75\%$ )

Y: 81, N: 0, A: 1

Passed 10-November 2016, 5:03 pm

Mr. Law noted that this is the first extension of the Study Group

**MOTION #21**

Move that the IEEE 802.3 Working Group request the extension of the 10 Mb/s Single Twisted Pair Ethernet Study Group.

M: G. Zimmerman on behalf of the Study Group

>50%

Y: 83, N: 0, A: 0

Passed 10-November 2016, 5:04 pm

Mr. Law announced that should the Task Force be approved, he will appoint Mr. Zimmerman to be chair of the Task Force.

**IEEE 802.3 Next Generation Enterprise/Campus/Data Center Ethernet Industry Connection Ad Hoc – John D’Ambrosia**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_NG\\_ECDC\\_close\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_NG_ECDC_close_report.pdf).

Mr. D’Ambrosia reviewed the proposed changes to the ICAID.

## **MOTION #22**

Move:

- IEEE 802.3 WG endorse the ICAID modification  
[http://www.ieee802.org/3/ad\\_hoc/ngrates/public/16\\_11/ICAID\\_16\\_0902\\_update\\_16\\_1110.pdf](http://www.ieee802.org/3/ad_hoc/ngrates/public/16_11/ICAID_16_0902_update_16_1110.pdf)
- Submit to the IEEE 802 EC for endorsement

M: J. D'Ambrosia

S: S. Carlson

>50%

Y: 74, N: 0, A: 1

Passed 10-November 2016, 5:15 pm

## **CALL FOR INTEREST**

### **IEEE 802.3 Multi-Gig Automotive Ethernet PHY Call for Interest – Steve Carlson**

Please see [http://ieee802.org/3/minutes/nov16/1116\\_multi\\_gig\\_close\\_report.pdf](http://ieee802.org/3/minutes/nov16/1116_multi_gig_close_report.pdf).

Mr. Carlson presented the results of the consensus meeting.

## **MOTION #23**

Move that the IEEE 802.3 Working Group request the formation of a Study Group to develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for Multi-Gig Automotive Ethernet PHY.

M: S. Carlson

S: J. D'Ambrosia

> 50%

Y: 82, N: 0, A: 1

Passed 10-November 2016, 5:20 pm

Mr. Law announced that, should the Study Group be approved, he will appoint Mr. Carlson to be chair of the Study Group.

## **OTHER BUSINESS**

No further business was discussed.

## ADJOURN

### MOTION #24

Move to adjourn.

M: J. D' Ambrosia

S: D. Remein

Procedural (> 50%)

Passed by voice vote without opposition 10-November 2016, 5:22 pm

Adjourned.

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

[http://iee802.org/3/minutes/nov16/1116\\_attendance\\_san\\_antonio.pdf](http://iee802.org/3/minutes/nov16/1116_attendance_san_antonio.pdf)

The next meeting of the IEEE 802.3 Working Group will be on Thursday 12th January 2017, at the Waterfront Beach Hilton, Huntington Beach, CA, USA.