#### **Approved Minutes**

#### **IEEE 802.3 Ethernet Working Group plenary**

#### Orlando, FL, USA

#### November 6 to 9, 2017

http://www.ieee802.org/3/minutes/nov17/index.html

#### MONDAY, 6 NOVEMBER, 2017

Minutes were taken by 802.3 Recording Secretary Pete Anslow.

#### **ADMINISTRATIVE MATTERS**

#### Call to order

Mr. Adam Healey, Vice-Chair of the IEEE 802.3 Ethernet Working Group, called the meeting to order at 10:00 am on behalf of Mr. David Law, Chair of the IEEE 802.3 Ethernet Working Group who was temporarily unavailable.

#### Welcome, introductions, and general announcements

Mr. Healey asked the attendees to introduce themselves and announce their affiliation. Mr. Healey 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 P802.3bs 200 Gb/s and 400 Gb/s Ethernet: John D'Ambrosia
- IEEE P802.3bt DTE Power via MDI over 4-Pair: Chad Jones
- 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 P802.3cg 10 Mb/s Single Twisted Pair Ethernet: George Zimmerman
- IEEE P802.3ch Multi-Gig Automotive Ethernet PHY: Steve Carlson

IEEE 802.3 Study Group chairs

• IEEE 802.3 Beyond 10 km optical PHYs Study Group: John D'Ambrosia

Mr. Healey announced that the meeting had quorum as it was being held in conjunction with a plenary session.

#### **Working Group Decorum**

Mr. Healey introduced the Working Group decorum as described in the opening report. Please see <u>http://www.ieee802.org/3/minutes/nov17/1117\_802\_3\_opening\_plenary.pdf</u>.

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

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

#### Review and approval of agenda

Mr. Healey noted that a soft copy of the draft agenda had been posted to the minutes section for this meeting. Mr. Healey gave the general minutes webpage for IEEE 802.3:

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

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

# MOTION #1

Approve the agenda.

S:

Procedural (> 50%)

M: S. Trowbridge

S: T. Baldwin

Passed by voice vote without opposition 6-Nov 2017, 10:13 am

#### Approval of July 2017 and September 2017 minutes

Please see <u>http://www.ieee802.org/3/minutes/jul17/0717\_minutes\_draft.pdf</u> and <u>http://www.ieee802.org/3/minutes/sep17/0917\_minutes\_draft.pdf</u>.

Mr. Healey asked if there were any additions or corrections to the July 2017 minutes which were posted on 31 July 2017. Mr. Healey also asked if there were any additions or corrections to the September 2017 minutes which were posted on 22 September 2017.

# MOTION #2

Approve July 2017 plenary meeting minutes and the September 2017 interim meeting minutes.

M: T. Baldwin

S: D. Chalupsky

Procedural (> 50%)

Passed by voice vote without opposition 6-Nov 2017, 10:14 am

# **Call for patents**

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

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

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

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

Mr. Healey reviewed the participation slide.

Please also see <u>http://www.ieee802.org/3/minutes/nov17/1117\_802\_3\_opening\_plenary.pdf</u>.

#### **General Working Group business**

Interim meetings since the July 2017 meeting

Please see http://www.ieee802.org/3/minutes/nov17/1117\_802\_3\_opening\_plenary.pdf.

11th to 15th September 2017, Charlotte, NC, USA

- IEEE 802.3 interim meeting series
- Hosted by Corning

5th October 2017, Teleconference

• IEEE P802.3cc 25 Gb/s Ethernet PMD(s) over single-mode fiber Task Force

9th October 2017, Teleconference

• IEEE P802.3bs 200 Gb/s and 400 Gb/s Ethernet Task Force

Mr. Healey 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. Healey 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 <u>http://ieee802.org/3/rules/index.html</u> 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://ieee802.org/3/minutes/nov17/1117\_imat.pdf.

Review of voting membership

Please see http://www.ieee802.org/3/minutes/nov17/1117\_voters.pdf.

Review of voters in peril

Please see http://www.ieee802.org/3/minutes/nov17/1117\_peril.pdf.

Mr. Healey 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.

#### Request for membership

Please see http://www.ieee802.org/3/minutes/nov17/1117\_potential.pdf.

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

Beruto, Piergiorgio Chang, Frank Goergen, Joel Klaus, Andrew Kochuparambil, Elizabeth Lee, Han Hyub Lim, Jane Pepper, Gerald Pham, Phong Schweitz, Laura Sprague, Edward Sun, Junqing Umeda, Daisuke Wang, Haifei Wechsler, Christoph Young, Adrian Zerna, Conrad

Mr. Healey 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/nov17/1117\_treasury.pdf.

Mr. Healey asked if there was any objection to deferring the Executive Committee and other 802 PARS agenda items until Mr. Law was available. There was no objection.

# LIAISONS

#### **External Liaison reports**

ISO/IEC SC25/WG3 report – Alan Flatman

Please see <a href="http://www.ieee802.org/3/minutes/nov17/1117\_SC25\_WG3\_report\_to\_802d3.pdf">http://www.ieee802.org/3/minutes/nov17/1117\_SC25\_WG3\_report\_to\_802d3.pdf</a>.

TIA TR-42 report – Valerie Maguire

Please see <u>http://www.ieee802.org/3/minutes/nov17/1117\_TIA\_TR-42\_report\_to\_802d3.pdf</u>.

At this point, Mr. Law took over as chair of the meeting and the Executive Committee and other 802 PARS agenda items were discussed.

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

Please see http://www.ieee802.org/3/minutes/nov17/1117\_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/nov17/1117\_802\_3\_opening\_plenary.pdf.

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

Please see http://www.ieee802.org/3/minutes/nov17/1117\_agenda\_open.pdf.

Amendment project PAR

- IEEE P802.1CBcv Frame Replication and Elimination for Reliability YANG model <u>PAR</u> and <u>CSD</u>
- IEEE P802.15.10a Recommended Practice for Routing Packets in IEEE 802.15.4 Dynamically Changing Wireless Networks: Additional routing modes <u>PAR</u> and <u>CSD</u>

PAR Modification requests

- IEEE P802.11ax High Efficiency WLAN <u>PAR</u> and <u>CSD</u>
- IEEE P802.11az Enhancements for Positioning <u>PAR</u> and <u>CSD</u>

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/msg00729.html

#### **External Liaison letters (new)**

COBO: 8 & 16 lane on board optics specification D0.5 liaison letter and attachment

Mr. Law appointed the P802.3cd Task Force and the IEEE 802.3 Beyond 10 km Optical PHYs Study Group to review the letter and generate a response, if appropriate, for consideration at the closing plenary.

ISO/IEC JTC1 SC25 WG3: Liaison letter to IEEE 802.3 regarding 1-pair cabling

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

ITU-T SG15: Coherent 100 Gb/s DWDM interfaces liaison letter

Mr. Law appointed the IEEE 802.3 Beyond 10 km Optical PHYs Study Group to review the letter and generate a response, if appropriate, for consideration at the closing plenary.

*ITU-T SG15: Management Information/Data Models for OAM* <u>liaison letter</u> and <u>attachment</u>

Mr. Law appointed the P802.3.2 (IEEE 802.3cf) Task Force to review the letter and generate a response, if appropriate, for consideration at the closing plenary.

ITU-T SG15: Timing performance due to Ethernet PHY liaison letter

Mr. Law appointed Mr. Ran to chair an Ad Hoc to review the letter and generate a response, if appropriate, for consideration at the closing plenary.

TIA TR-42: Connectors and topologies for single pair applications liaison letter

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

# OIF 400ZR Interop project

Mr. Law further announced that a liaison letter was expected from the OIF on the 400ZR Interop project and that if it arrived in time he would appoint the IEEE 802.3 Beyond 10 km Optical PHYs Study Group to review the letter and generate a response, if appropriate, for consideration at the closing plenary.

# External Liaison letters (old)

*Ethernet Alliance: PoE certification program* <u>liaison letter</u>

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

IEC TC 65/SC 65C/JWG 10: Single pair Ethernet liaison letter and attachment

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

ITU-T SG15 Access Network Transport (ANT) Standards overview and work plan <u>liaison</u> <u>letter</u>

*ITU-T SG15 Home Network Transport (HNT) Standards overview and work plan* <u>liaison</u> <u>letter</u>

*ITU-T SG15 Optical Transport Network Technology (OTNT) Standardization work plan* <u>liaison letter</u> and <u>attachment</u> Consideration of the above three liaison letters was deferred from the July 2017 meeting due the alignment of the ITU-T SG15 and IEEE 802.3 meeting schedules. Mr. Law appointed Mr. Hajduczenia, Mr. Grow, and Mr. Trowbridge, respectively to review the three letters and generate responses, if appropriate, for consideration at the closing plenary.

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

NGMN Alliance: 5G End-to-End Architecture Framework liaison letter and attachment

Mr. Law noted that this letter was addressed to the whole of 802.

OIF: CEI-56G-VSR-PAM4 project liaison letter and attachment

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.

PI (PROFIBUS and PROFINET International): Liaison request letter

Mr. Law noted that this letter was addressed to the P802.3cg Task Force.

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

Please see http://ieee802.org/3/minutes/nov17/1117\_maint\_open\_report.pdf.

Mr. Healey also reviewed the state of the IEEE 802.3 standard. Please see: <u>http://ieee802.org/3/minutes/nov17/1117\_state\_of\_std.pdf</u>.

# TASK FORCE AND STUDY GROUP REPORTS

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

Please see http://ieee802.org/3/minutes/nov17/1117\_bt\_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/nov17/1117\_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/nov17/1117\_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/nov17/1117\_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/nov17/1117\_cd\_open\_report.pdf.

Mr. Nowell announced that the P802.3cd Task Force would be holding a contingent outof-cycle teleconference interim meeting on Wednesday, 6 December 2017.

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

Please see http://ieee802.org/3/minutes/nov17/1117\_cf\_open\_report.pdf.

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

Please see http://ieee802.org/3/minutes/nov17/1117\_cg\_open\_report.pdf.

#### IEEE P802.3ch Multi-Gig Automotive Ethernet PHY Task Force – Steve Carlson

Please see http://www.ieee802.org/3/minutes/nov17/1117\_ch\_open\_report.pdf.

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

Please see http://ieee802.org/3/minutes/nov17/1117\_bs\_open\_report.pdf.

#### IEEE 802.3 Beyond 10 km Optical PHYs Study Group – John D'Ambrosia

Please see http://www.ieee802.org/3/minutes/nov17/1117\_b10k\_open\_report.pdf.

# IEEE 802.3 New Ethernet Applications Industry Connection Ad Hoc – John D'Ambrosia

Please see http://ieee802.org/3/minutes/nov17/1117\_NEA\_open\_report.pdf.

#### CALL FOR INTEREST

#### IEEE 802.3 10 Mb/s Backplane Ethernet call for interest – Jon Lewis

Please see http://ieee802.org/3/minutes/nov17/1117\_10M\_BP\_open\_report.pdf.

#### IEEE 802.3 Beyond 10km Optical 100 Gb/s PHYs call for interest – Mark Nowell

Please see http://ieee802.org/3/minutes/nov17/1117\_b10k\_100G\_open\_report.pdf.

# IEEE 802.3 100 Gb/s per Lane for Electrical Interfaces and PHYs call for interest – John D'Ambrosia

Please see http://ieee802.org/3/minutes/nov17/1117\_100G\_elec\_open\_report.pdf.

# IEEE 802.3 Next-generation 200 Gb/s and 400 Gb/s MMF fibre PHYs – Robert Lingle

Please see http://ieee802.org/3/minutes/nov17/1117\_NG\_MMF\_open\_report.pdf.

#### **ROOM ASSIGNMENTS, AND SUBGROUP SCHEDULES**

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

# ADJOURN

No other items of business were presented.

802.3 November 2017 Plenary

| MOTION #3                                                    |            |  |
|--------------------------------------------------------------|------------|--|
| Move to adjourn.                                             |            |  |
| M: J D'Ambrosia                                              | S: J Lewis |  |
| Procedural (> 50%)                                           |            |  |
| Passed by voice vote without opposition 6-Nov 2017, 12:04 pm |            |  |

# Approved Minutes IEEE 802.3 Ethernet Working Group plenary Orlando, FL, USA

# November 6 to 9, 2017

http://www.ieee802.org/3/minutes/nov17/index.html

#### THURSDAY, 9 NOVEMBER, 2017

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 1:01 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 <a href="http://www.ieee802.org/3/minutes/nov17/1117\_802\_3\_closing\_plenary.pdf">http://www.ieee802.org/3/minutes/nov17/1117\_802\_3\_closing\_plenary.pdf</a>.

#### Working Group Decorum

Mr. Law also introduced the Working Group decorum as described in his closing report. Please see <u>http://www.ieee802.org/3/minutes/nov17/1117\_802\_3\_closing\_plenary.pdf</u>.

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

| MOTION #1                     |             |
|-------------------------------|-------------|
| Motion to approve the agenda. |             |
| M: R. Grow                    | S: M. Dudek |
| Procedural (> 50%)            |             |

At this point there was a request to move the call for interest items earlier in the agenda.

Move to modify the agenda to discuss the call for interest items before the liaisons.

M: P. Kolesar

S: A. Ran

Procedural (> 50%)

Motion fails by voice vote 9-Nov 2017, 1:17 pm

# MOTION #1 resumed

Motion to approve the agenda.

M: R. Grow

S: M. Dudek

Procedural (> 50%)

Passed by voice vote without opposition 9-Nov 2017, 1:18 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/nov17/1117\_802\_3\_closing\_plenary.pdf.

Mr. Law reviewed the participation slide.

# 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/nov17/1117\_voters.pdf.

Review of voters in peril

Please see http://www.ieee802.org/3/minutes/nov17/1117\_peril.pdf.

Request for membership

Please see http://www.ieee802.org/3/minutes/nov17/1117\_potential.pdf.

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

| Conroy, Keith | Patel, Harsh   | Tellas, Ronald |
|---------------|----------------|----------------|
| Gardner, Mike | Ressl, Michael | Welch, Brian   |
| Liu, Dekun    | Shirao, Mizuki |                |

#### **IEEE 802 Executive Committee items**

Please see http://www.ieee802.org/3/minutes/nov17/1117\_802\_3\_closing\_plenary.pdf.

#### **IEEE 802 Task Force meeting**

Mr. Law summarized the IEEE 802 Task Force meeting.

#### IEEE 802.3 Working Group Chair and Vice-Chair elections

Mr. Law explained that the 802 LMSC Policies and Procedures document requires that elections for the IEEE 802.3 Working Group Chair and Vice-Chair positions must be held in the first plenary meeting of even numbered years.

Mr. Law reviewed the proposed election rules shown on slides 19 and 20 of <a href="http://www.ieee802.org/3/minutes/nov17/1117\_802\_3\_closing\_plenary.pdf#page=19">http://www.ieee802.org/3/minutes/nov17/1117\_802\_3\_closing\_plenary.pdf#page=19</a>

#### Motion #3

Adopt the election rules as shown in 1117\_802\_3\_closing\_plenary.pdf

M: S. Trowbridge

S: R. Grow

Procedural (> 50%)

Passed by voice vote without opposition 9-Nov 2017, 1:33 pm

#### Other IEEE 802 PARs

Mr. Grow briefly reported on the outcome of the Ad Hoc to review the 802 PARs. Please see: <u>http://ieee802.org/3/minutes/nov17/outgoing/1117\_PARs\_report.pdf</u>.

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.

#### Internal Liaison

At this point Mr. Law asked if there was any opposition to deferring the Internal Liaison agenda item until Mr. Parsons became available. There was no objection.

#### **Outgoing liaison letter**

Circulation of IEEE P802.3bs draft D3.5 to OIF, ITU-T, and T11

Mr. D'Ambrosia presented proposed liaison letters to ITU-T SG15, OIF, and INCITS T11.2. Please see: http://ieee802.org/3/minutes/nov17/outgoing/IEEE\_802d3\_to\_SG15\_3bs\_1117\_draft.pdf. http://ieee802.org/3/minutes/nov17/outgoing/IEEE\_802d3\_to\_OIF\_3bs\_1117\_draft.pdf. http://ieee802.org/3/minutes/nov17/outgoing/IEEE\_802d3\_to\_T11\_3bs\_1117\_draft.pdf.

# MOTION #4

Move that 802.3 approve: IEEE\_802d3\_to\_SG15\_bs\_1117\_draft.pdf IEEE\_802d3\_to\_OIF\_bs\_1117\_draft.pdf IEEE\_802d3\_to\_T11\_bs\_1117\_draft.pdf 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, OIF, and INCITS T11.2. M: J. D'Ambrosia S: P. Anslow

≥75%

Y: 99, N 0, A: 6

Passed 9-Nov 2017, 1:45 pm

#### **External liaison letters (new)**

COBO: 8 & 16 lane on board optics specification D0.5 liaison letter and attachment

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

ISO/IEC JTC1 SC25 WG3: Liaison letter to IEEE 802.3 regarding 1-pair cabling

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

ITU-T SG15: Coherent 100 Gb/s DWDM interfaces liaison letter

Mr. Law noted that this item would be covered as part of the IEEE 802.3 Beyond 10 km Optical PHYs Study Group closing plenary report.

# ITU-T SG15: Management Information/Data Models for OAM liaison letter and attachment

Mr. Law noted that this item would be covered as part of the P802.3.2 (IEEE 802.3cf) Task Force closing plenary report.

#### ITU-T SG15: Timing performance due to Ethernet PHY liaison letter

Mr. Ran reported on the activity of the IEEE 802.3 ITU-T SG15 Q13 liaison letter Ad Hoc. Mr. Law announced that he was re-chartering this Ad Hoc until the January 2018 meeting.

#### OIF: 400ZR Interop project liaison letter

Mr. Law noted that this liaison letter, which arrived after the opening plenary would be covered as part of the IEEE 802.3 Beyond 10 km Optical PHYs Study Group closing plenary report.

TIA TR-42: Connectors and topologies for single pair applications liaison letter

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

#### PI (PROFIBUS and PROFINET International): Liaison request letter

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

At this point Mr. Parsons was available, so the Internal Liaison agenda item was considered.

#### **Internal Liaison**

Potential joint IEC/IEEE 802.1 project: IEEE 802.1 TSN profile for industrial networks

Mr. Parsons explained the proposal for an IEC/IEEE joint working group.

Please see: http://www.ieee802.org/3/minutes/nov17/1117\_IEC\_IEEE\_JWG\_for\_802d3.pdf.

#### **External liaison letters (old)**

Ethernet Alliance: PoE certification program liaison letter

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

#### IEC TC 65/SC 65C/JWG 10: Single pair Ethernet liaison letter and attachment

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

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

Mr. Hajduczenia presented a proposed liaison response to ITU-T SG15. Please see: http://ieee802.org/3/minutes/nov17/outgoing/IEEE\_802d3\_to\_SG15\_ANT\_1117\_draft.pdf.

Mr. Grow presented a proposed liaison response to ITU-T SG15. Please see: http://ieee802.org/3/minutes/nov17/outgoing/IEEE 802d3 to SG15 HNT 1117 draft.pdf.

Mr. Trowbridge presented a proposed liaison response to ITU-T SG15. Please see: http://ieee802.org/3/minutes/nov17/outgoing/IEEE\_802d3\_to\_SG15\_OTNT\_1117\_draft.pdf.

Minor changes were made to the text of the three draft liaisons.

# MOTION #5

Move that 802.3 approve: IEEE\_802d3\_to\_SG15\_ANT\_1117\_draft.pdf IEEE\_802d3\_to\_SG15\_HNT\_1117\_draft.pdf IEEE\_802d3\_to\_SG15\_OTNT\_1117\_draft.pdf 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.

M: M. Hajduczenia

S: R. Grow

 $\geq 75\%$ 

Y: 95, N 0, A: 3

Passed 9-Nov 2017, 2:07 pm

#### **Future meetings – Steve Carlson**

Mr. Carlson reviewed the details of upcoming meetings including an update on the May 2018 meeting. Please see:

http://www.ieee802.org/3/minutes/nov17/1117\_meetings\_close.pdf.

http://www.ieee802.org/3/minutes/nov17/1117\_EA\_update\_may\_2018.pdf.

Mr. Carlson reviewed the details of an offer to host for the May 2019 meeting from the Ethernet Alliance. Please see:

http://www.ieee802.org/3/minutes/nov17/1117\_EA\_offer\_to\_host\_may\_2019.pdf.

Move that IEEE 802.3 accept the Ethernet Alliance offer for the May 2019 interim as detailed in 1117\_EA\_offer\_to\_host\_may\_2019.pdf.

M: J. D'Ambrosia

S: S. Carlson

Procedural (>50%)

Passed by voice vote without opposition 9-Nov 2017, 2:19pm

At this point two straw polls were taken.

Straw poll #1 Would you return to this venue? Yes: 93, No: 20 9-Nov 2017, 2:24pm

# Straw poll #2

Did you enjoy the social? Yes: 110, No: 5, Did not attend: 21 9-Nov 2017, 2:25pm

# REPORTS

# IEEE 802.3 Maintenance – Adam Healey

Please see http://ieee802.org/3/minutes/nov17/1117\_maint\_close\_report.pdf.

# MOTION #7 Progress the IEEE P802.3 draft to IEEE 802 LMSC sponsor ballot. M: A. Healey on behalf of the Task Force Technical (≥75%) Y: 107, N: 0, A: 0

Passed 9-Nov 2017, 2:30 pm

Mr. Healey presented a proposed liaison response to ISO/IEC JTC 1/SC 6. Please see: http://ieee802.org/3/minutes/nov17/outgoing/IEEE 802d3 to ISOIEC JTC1 SC6 1117 draft.pdf.

Approve IEEE\_802d3\_to\_ISOIEC\_JTC1\_SC6\_1117\_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 ISO/IEC JTC 1/SC 6.

M: A. Healey

S: M. Hajduczenia

Technical (≥75%)

Y: 106, N: 0, A: 1

Passed 9-Nov 2017, 2:38 pm

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

Please see <a href="http://ieee802.org/3/minutes/nov17/1117\_bt\_close\_report.pdf">http://ieee802.org/3/minutes/nov17/1117\_bt\_close\_report.pdf</a>.

Mr. Jones reviewed a proposed liaison response to the Ethernet Alliance. Please see: <u>http://ieee802.org/3/minutes/nov17/outgoing/IEEE\_802d3\_to\_EA\_1117\_draft.pdf</u>.

# MOTION #9

Move that the IEEE 802.3 Working Group approve IEEE\_802d3\_to\_EA\_1117\_draft.pdf with editorial license granted to the Chair (or his appointed agent) as liaison communication from the IEEE 802.3 Working Group to Ethernet Alliance.

M: C. Jones

S: G. Zimmerman

Technical (≥75%)

Passed by voice vote without opposition 9-Nov 2017, 2:45 pm

Mr. Jones explained the following motion with reference to the draft liaison letter to IEEE SCC18 (see below).

# MOTION #10

Move that the IEEE 802.3 Working Group grant the IEEE 802.3 SCC18 adhoc the authority to give guidance by Dec 22, 2017 to the SCC18 External Representatives for support/opposition on NEC PIs 71, 414, 1012, 1920, 1921, and 1922 pending the proposed resolution by the CMP3 TG.

M: C. Jones

S: M. Shariff

Technical (≥75%)

Y: 104, N: 0, A: 1

Passed 9-Nov 2017, 2:58 pm

Mr. Jones reviewed a proposed liaison response to IEEE SCC18. Please see: http://ieee802.org/3/minutes/nov17/outgoing/IEEE\_802d3\_to\_SCC18\_1117\_draft.pdf.

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

# MOTION #11

Move that the IEEE 802.3 Working Group approve IEEE\_802d3\_to\_SCC18\_1117\_draft.pdf with editorial license granted to the Chair (or his appointed agent) as liaison communication from the IEEE 802.3 Working Group to SCC18.

M: C. Jones

S: J. Goergen

Technical (≥75%)

Y: 100, N: 0, A: 2

Passed 9-Nov 2017, 3:01 pm

Mr. Jones reviewed a proposed liaison response to the NFPA Standards Council. Please see:

http://ieee802.org/3/minutes/nov17/outgoing/IEEE\_802d3\_to\_NPCASC\_1117\_draft.pdf.

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

# MOTION #12

Move that the IEEE 802.3 Working Group approve IEEE\_802d3\_to\_NFPA-SC\_1117\_draft.pdf with editorial license granted to the Chair (or his appointed agent) as liaison communication from the IEEE 802.3 Working Group to the NFPA Standards Council.

M: C. Jones

S: J. Goergen

Technical (≥75%)

Y: 100, N: 0, A: 2

Passed 9-Nov 2017, 3:07 pm

Break at approximately 3:10 pm. Restarted at approximately 3:25 pm.

#### 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/nov17/1117\_ca\_close\_report.pdf.

Mr. Knittle reviewed a proposed liaison to ITU-T SG15. Please see: http://ieee802.org/3/minutes/nov17/outgoing/IEEE\_802d3\_to\_SG15\_Q2\_0717\_draft.pdf.

Move that the IEEE 802.3 Working Group approve: IEEE\_802d3\_to\_SG15\_Q2\_0717\_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 Study Group 15.

M: C. Knittle

S: M. Laubach

Technical (≥75%)

Y: 87, N: 0, A: 0

Passed 9-Nov 2017, 3:33 pm

Mr. Law asked if there was any objection to adding an item to the agenda for the IEEE P802.3cb 2.5Gb/s and 5 Gb/s Backplane Task Force. There was no objection.

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

Please see http://ieee802.org/3/minutes/nov17/1117\_cb\_close\_report.pdf.

Mr. Smith announced that the P802.3cb Task Force would be holding a contingent outof-cycle teleconference interim meeting on Monday, 18 December 2017.

# 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/nov17/1117\_cd\_close\_report.pdf.

Mr. Nowell reviewed the unsatisfied negative comments against the P802.3cd draft and the changes made to the P802.3cd draft.

# MOTION #14

Move that the IEEE 802.3 Working Group re-affirm the CSD responses in <u>https://mentor.ieee.org/802-ec/dcn/16/ec-16-0060-02-ACSD-802-3cd.pdf</u> and request approval to progress the IEEE P802.3cd draft to IEEE 802 LMSC sponsor ballot.

M: M. Nowell

S: M. Brown

Technical (≥75%)

Y: 101, N: 1, A: 0

Passed 9-Nov 2017, 3:46 pm

Mr. Nowell reviewed proposed liaison responses to OIF and COBO. Please see: <u>http://ieee802.org/3/minutes/nov17/outgoing/IEEE\_802d3\_to\_OIF\_CEI\_1117\_draft.pdf</u> <u>http://ieee802.org/3/minutes/nov17/outgoing/IEEE\_802d3\_to\_COBO\_1117\_draft.pdf</u>.

Move that the IEEE 802.3 Working Group approve: IEEE\_8023\_to\_OIF\_CEI\_1117\_draft.pdf IEEE\_8023\_to\_COBO\_1117\_draft.pdf with editorial license granted to the Chair (or his appointed agent) as liaison communications from the IEEE 802.3 Working Group to OIF and COBO.

M: M. Nowell

S: K. Lusted

Technical (≥75%)

Passed by voice vote without opposition 9-Nov 2017, 3:51 pm

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

Please see http://ieee802.org/3/minutes/nov17/1117\_cf\_close\_report.pdf.

Ms. Zhuang reviewed a proposed liaison to ITU-T SG15. Please see: http://ieee802.org/3/minutes/nov17/outgoing/IEEE\_802d3\_to\_SG15\_YANG\_1117\_draft.pdf.

# MOTION #16

Move that the IEEE 802.3 Working Group approve IEEE\_802d3\_to\_SG15\_YANG\_1117\_draft.pdf with editorial license granted to the Chair (or his appointed agent) as liaison communication from the IEEE 802.3 Working Group to ITU-T SG15

M: D. Remein

S: M. Hajduczenia

Technical (≥75%)

Y: 95, N: 0, A: 0

Passed 9-Nov 2017, 3:59 pm

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

Please see <u>http://ieee802.org/3/minutes/nov17/1117\_cg\_close\_report.pdf</u>.

Mr. Zimmerman reviewed a proposed liaison to IEC SC65 JWG10. Please see: http://ieee802.org/3/minutes/nov17/outgoing/IEEE\_802d3\_to\_IEC\_SC65JWG10\_1117\_draft.pdf.

Minor changes were made to the draft liaison.

Move that the IEEE 802.3 Working Group approve:

IEEE\_802d3\_to\_IEC\_SC65JWG10\_1117\_draft

with editorial license granted to the Chair (or his appointed agent) as liaison communications from the IEEE 802.3 Working Group to IEC SC65 JWG10.

M: G. Zimmerman S: J. Lewis

Technical ( $\geq$ 75%)

Passed by voice vote without opposition 9-Nov 2017, 4:13 pm

Mr. Zimmerman reviewed a proposed liaison to TIA TR42. Please see: http://ieee802.org/3/minutes/nov17/outgoing/IEEE\_802d3\_to\_TIA\_TR42\_1117\_draft.pdf.

Minor changes were made to the draft liaison.

# MOTION #18

Move that the IEEE 802.3 Working Group approve:

IEEE\_802d3\_to\_TIA\_TR42\_1117\_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. Lewis

Technical (≥75%)

Passed by voice vote without opposition 9-Nov 2017, 4:17 pm

Mr. Zimmerman reviewed a proposed liaison to ISO IEC SC25 WG3. Please see: http://ieee802.org/3/minutes/nov17/outgoing/IEEE\_802d3\_to\_ISOIEC\_SC25\_WG3\_1117\_draft.pdf.

Minor changes were made to the draft liaison.

# MOTION #19

Move that the IEEE 802.3 Working Group approve:

IEEE\_802d3\_to\_ISOIEC\_SC25\_WG3\_1117\_draft

with editorial license granted to the Chair (or his appointed agent) as liaison communications from the IEEE 802.3 Working Group to ISO IEC SC25 WG3.

M: G. Zimmerman

S: J. Lewis

Technical (≥75%)

Passed by voice vote without opposition 9-Nov 2017, 4:19 pm

#### IEEE P802.3ch Multi-Gig Automotive Ethernet PHY Task Force – Steve Carlson

Please see <u>http://ieee802.org/3/minutes/nov17/1117\_ch\_close\_report.pdf</u>.

# IEEE 802.3 Beyond 10 km Optical PHYs Study Group – Mark Nowell on behalf of John D'Ambrosia

Please see <u>http://ieee802.org/3/minutes/nov17/1117\_b10k\_close\_report.pdf</u>.

Mr. Anslow reviewed proposed liaison responses to ITU-T SG15 and OIF. Please see: http://ieee802.org/3/minutes/nov17/outgoing/IEEE\_802d3\_to\_SG15\_B10k\_1117\_draft.pdf http://ieee802.org/3/minutes/nov17/outgoing/IEEE\_802d3\_to\_OIF\_400ZR\_1117\_draft.pdf.

# MOTION #20

Move that the IEEE 802.3 Working Group approve: IEEE\_802d3\_to\_SG15\_B10k\_1117\_draft IEEE\_802d3\_to\_OIF\_400ZR\_1117\_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 SG 15 and OIF.

M: M. Nowell

S: A. Ran

Technical (≥75%)

Y: 97, N:0, A: 0

Passed 9-Nov 2017, 4:40 pm

Mr. Law explained the need for a motion to re-charter the Beyond 10 km Optical PHYs Study Group for 50Gb/s, 200 Gb/s, and 400Gb/s Ethernet in case the new Study group for Beyond 10 km Optical PHYs for 50Gb/s, 100Gb/s, 200 Gb/s, and 400Gb/s Ethernet is not successfully formed.

# MOTION #21

Move that the IEEE 802.3 Working Group request the re-chartering of the Beyond 10 km Optical PHYs Study Group for 50Gb/s, 200 Gb/s, and 400Gb/s Ethernet, unless the formation of a new study group for Beyond 10 km Optical PHYs for 50Gb/s, 100Gb/s, 200 Gb/s, and 400Gb/s Ethernet is approved.

M: M. Nowell

S: S. Trowbridge

Technical (≥75%)

Y: 97, N:0, A: 0

Passed 9-Nov 2017, 4:43 pm

# IEEE 802.3 New Ethernet Applications Industry Connection Ad Hoc – David Law on behalf of John D'Ambrosia

Please see http://ieee802.org/3/minutes/nov17/1117\_NEA\_close\_report.pdf.

#### IEEE 802.3 SCC18 Ad Hoc – Chad Jones

Mr. Jones stated that everything related to this Ad Hoc had already been covered under the P802.3bt agenda item.

#### IEEE 802.3 Isolation Ad Hoc – Jon Lewis

Please see http://ieee802.org/3/minutes/nov17/1117\_isolation\_close\_report.pdf.

#### CALL FOR INTEREST

#### IEEE 802.3 10 Mb/s Backplane Ethernet call for interest – Jon Lewis

Please see http://ieee802.org/3/minutes/nov17/1117\_10M\_BP\_close\_report.pdf.

Mr. Lewis presented the results of the consensus meeting.

#### MOTION #22

Request that the IEEE 802.3 WG form a study group to develop PAR and CSD modifications to IEEE P802.3cg to add 10 Mb/s Backplane Ethernet to that project.

M: J. Lewis S: P. Jones > 50% Y: 90, N: 0, A: 7 Passed 9-Nov 2017, 4:56 pm

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

#### IEEE 802.3 Beyond 10 km Optical 100 Gb/s PHYs call for interest – Mark Nowell

Please see http://ieee802.org/3/minutes/nov17/1117\_b10k\_100G\_close\_report.pdf.

Mr. Nowell presented the results of the consensus meeting.

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 Beyond 10 km Optical PHYs for 50 Gb/s, 100 Gb/s, 200 Gb/s, and 400 Gb/s Ethernet.

M: M. Nowell

S: J. Lewis

> 50%

Y: 89, N: 0, A: 7

Passed 9-Nov 2017, 5:05 pm

Mr. Law announced that, should the Study Group be approved, he will appoint John D'Ambrosia as the chair of the Study Group.

# IEEE 802.3 100 Gb/s per Lane for Electrical Interfaces and PHYs call for interest – Beth Kochuparambil

Please see http://ieee802.org/3/minutes/nov17/1117\_100G\_elec\_close\_report.pdf.

Ms. Kochuparambil presented the results of the consensus meeting.

# MOTION #24

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 "100Gb/s per Lane for Electrical Interfaces and Electrical PHYs".

M: E. Kochuparambil S: K. Lusted

> 50%

Y: 93, N: 0, A: 5

Passed 9-Nov 2017, 5:07 pm

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

# IEEE 802.3 Next-generation 200 Gb/s and 400 Gb/s MMF fibre PHYs – Robert Lingle

Please see http://ieee802.org/3/minutes/nov17/1117\_NG\_MMF\_close\_report.pdf.

Mr. Lingle presented the results of the consensus meeting.

Move that the IEEE 802.3 Ethernet Working Group authorizes the formation of a study group to develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for "Next-generation 200 Gb/s and 400 Gb/s PHYs over fewer MMF pairs than in existing Ethernet projects and standards."

M: R. Lingle

S: P. Kolesar

> 50%

Y: 90, N: 2, A: 13

Passed 9-Nov 2017, 5:12 pm

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

#### OTHER BUSINESS

No further business was discussed.

# ADJOURN

MOTION #26 Move to adjourn. M: D. Remein S: G. Thompson Procedural (> 50%) Passed by voice vote without opposition 9-Nov 2017, 5:14 pm

Adjourned.

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

http://ieee802.org/3/minutes/nov17/1117\_attendance\_orlando.pdf

The next meeting of the IEEE 802.3 Working Group will be on Thursday 25th January 2018, at the ITU Headquarters and CICG Geneva, Switzerland.