IEEE 802.1 Working Group 21-25 May 2018 Interim Meeting Pittsburgh, PA, USA Meeting Minutes

The 802.1 Vice-Chair, John Messenger, presided as acting 802.1 Chair. The 802.1 Recording Secretary, Jessy Rouyer, wrote the minutes in part based on input from 802.1 Task Group Chairs.

1 Attendance and affiliation

Last Name	First Name	Affiliation
An	Hongming	shawnee
Bechtel	Gordon	Bechtech
Bierschenk	Jens	Robert Bosch GmbH
Boiger	Christian	b-plus GmbH
Bottorff	Paul	Hewlett-Packard Development Company, L.P.
Canchi	Radhakrishna	Kyocera International Inc.
Chen	David	Nokia
Chen	Feng	Siemens AG
Congdon	Paul	Tallac Networks; Huawei
Cummings	Rodney	National Instruments Corporation
Dorr	Josef	Siemens AG
Elbakoury	Hesham	Huawei Technologies Co. Ltd
Ellegaard	Lars	Microsemi Corporation
Escudero- Sahuquillo	Jesus	University of Castilla-La Mancha
Farkas	Janos	Ericsson
Finn	Norman	Huawei Technologies Co. Ltd
Fontaine	Mickael	TransPacket
Garner	Geoffrey	Huawei Technologies Co. Ltd
Gilb	James	GA-ASI, USD, Gilb Consulting, Inc.
Gray	Eric W	Ericsson AB
Gunther	Craig	HARMAN INTERNATIONAL INDUSTRIES INCORPORATED
Gutierrez	Marina	TTTech Computertechnik AG
Haddock	Stephen	Stephen Haddock Consulting, LLC
Hantel	Mark	Rockwell Automation
Harima	Taro	Mitsubishi Electric Corporation
Hasegawa	Akio	Advanced Telecommunications Research Institute International (ATR)
Hemmer	David	International Electrotechnical Commission (IEC)

Uann,	loromo	Ciana Systema Ina
Henry	Jerome	Cisco Systems, Inc.
Holness	Marc	Ciena Corporation
Hotta	Yoshifumi	Mitsubishi Electric Corporation
Jackson	Thomas	CoMira Solutions, Inc.
Karl	Michael	Marvell Semiconductor, Inc.
Kehrer	Stephan	Hirschmann Automation and Control, Inc.
Kondo	Kenji	Yaskawa Electric Corp
Laubach	Mark	Broadcom Corporation
Mangin	Christophe	Mitsubishi Electric Corporation
Mansfield	Scott	Telefon AB LM Ericsson
Marks	Roger	EthAirNet Associates; Huawei
Messenger	John	ADVA Optical Networking Ltd.
Mustala	Tero	Nokia Networks
Nolan	John	Cavium
Nomizu	Takuma	Hitachi, Ltd.
Ohsawa	Tomoki	NICT
Ohue	Hiroshi	panasonic
Osagawa	Daisuke	Mitsubishi Electric Corporation
Pannell	Donald R	NXP Semiconductors
Potts	Michael	General Motors Company
Riegel	Maximilian	Nokia Networks
Rouyer	Jessy	Nokia
Sato	Atsushi	Yokogawa Electric Corporation
Seaman	Michael	Individual
Seewald	Maik	Cisco Systems, Inc.
Specht	Johannes	University of Duisburg-Essen and Genera Motors Company
Stanica	Marius	ABB AB
Stanica	Marius-Petru	ABB AB
Steindl	Guenter	Siemens AG
Sun	Wenhao	Huawei Technologies Co., Ltd
Tarui	Isao	Mitsubishi Electric Corporation
Thompson	Geoffrey	GraCaSI S.A.
Unbehagen	Paul	Avaya Inc.
Wamsser	Reiner	IEC SC65C MT9-Member
Wang	Haifei	Huawei Technologies Co. Ltd
Wang	Hao	Fujitsu Research & Development Center
Wang	Tongtong	Huawei Technologies Co. Ltd
Winkel	Ludwig	Siemens AG
Wood	Graeme	British Standards Institution (BSi), Rockwell Corp
Woods	Jordon	Analog Devices Inc.
Xu	Li	Huawei Technologies Co., Ltd
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Young	James	comms	
Yu	Xiang	Huawei Technologies Co., Ltd	
Zaim	Farjad	CoMira Solutions, Inc.	
Zein	Nader	NEC Europe (NLE)	
Zhou	Richard (Yujia)	Charter Communications	
Zuponcic	Steven	Rockwell Automation	

2 802.1 Officers and Management

Glenn Parsons	Working Group Chair
John Messenger	Working Group Vice-chair and acting Chair at this meeting, Maintenance Task Group Chair
Jessy Rouyer	Working Group Secretary
János Farkas	Time Sensitive Networking Task Group Chair
Craig Gunther	Time Sensitive Networking Task Group Secretary
Mick Seaman	Security Task Group Chair
Max Riegel	OmniRAN Task Group Chair
Roger Marks	NEND ICA Chair
Ludwig Winkel	IEC/IEEE 60802 Joint Project Chair
Jordon Woods	IEC/IEEE 60802 Joint Project Secretary
Paul Unbehagen	Website Maintenance
Hal Keen	Email Maintenance

3 Task Group Meetings

3.1 Maintenance

Maintenance Task Group meeting minutes are incorporated into these minutes by reference and are available at http://www.ieee802.org/1/files/public/maint/2018-05-maintenance-meeting-v1.pdf.

3.2 OmniRAN

OmniRAN Task Group meeting minutes are incorporated into these minutes by reference and are available at https://mentor.ieee.org/omniran/dcn/18/omniran-18-0047-01-00TG-may-2018-f2f-meeting-minutes.docx.

Current status of OmniRAN Task Group activities (including future meeting announcements, past meeting and conference call minutes) is available via a wiki located at https://mentor.ieee.org/omniran/bp/StartPage.

3.3 Security

Call to order: Monday March 21, 2018 at 2.00 PM.

The Security Task Group met:

- Monday May 21, 2018: 2.00 PM 5.00 PM.
- Tuesday May 6, 2018: 10.00 AM 12.30 PM, 2.00 PM 5.15 PM.
- Wednesday March 7, 2018: 9.00 AM 12.15 PM, 3.00 PM 4.00 PM.

The Security TG Chair, Mick Seaman, presided and wrote the minutes.

At the beginning of each day's meetings, Mick Seaman presented the IEEE-SA PatCom Patent Slides for Standards Development Meetings

(https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.pdf) and the IEEE 802 Participation slide (https://mentor.ieee.org/802-ec/dcn/17/ec-17-0093-05-0PNP-ieee-802-participation-slide-ppt.ppt). Mick Seaman made the "Call for Potentially Essential Patents" on each of these occasions. There were no responses to the calls prior to the end of the week's meetings.

Participants:

- Eric Gray, Ericsson [Monday AM, PM, Tuesday AM, PM, Wednesday AM]
- Jerome Henry, Cisco [Monday PM, Tuesday AM, PM (part), Wednesday AM (part), PMI
- Tom Jackson, CoMira Inc [Tuesday AM, PM, Wednesday AM]
- Mick Seaman, Mick Seaman
- Farjad Zaim, CoMira Inc [Tuesday AM (part), PM, Wednesday AM (part)]

Apologies for absence were received from James McIntosh and Brian Weis.

The draft agenda posted on the 802.1 website at https://l.ieee802.org/security/security-task-group-agenda/ was reviewed by the TG chair at the beginning of Monday's meeting. This agenda was approved as follows:

- P802.1Xck Port-Based Network Access Control YANG Data model
 The initial Sponsor Ballot was not yet closed (due 31st May), so there would be no discussion at this meeting.
- P802.1AE-Rev MAC Security (roll-up and maintenance revision)
 The initial Sponsor Ballot had closed and passed. Comments would be resolved during the meeting.
- 3. P802E Privacy (Recommended Practice ... for IEEE 802 ...)
 Draft D0.8, and in particular the changes suggested during the March 2018 meeting and now incorporated by the editor, would be discussed.
- 4. A.O.B.

5. Future meetings/teleconferences

The date/time of the P802E teleconference, proposed during the March meeting, would be decided upon taking into account the results of Doodle poll announced to the 802.1 and the ECSG Privacy reflectors.

Minutes of the discussions of these agenda items follow.

1. P802.1Xck (Port-based Network Access Control - YANG Data Model)

There was no discussion of P802.1Xck at this meeting.

2. P802.1AE-Rev (MAC Security, roll-up and maintenance revision)

Mick Seaman, P802.1AE-Rev editor, led the review of comments received in the initial Sponsor Ballot on draft 1.2. This ballot closed Friday May 18, 2018 with a 96% approval rate, and a 81% response rate. There were two Disapproves. The comments received (downloaded from IEEE MyProject during the meeting review) are at

http://www.ieee802.org/1/files/private/ae-rev-drafts/d1/802-1AE-rev-d1-2-pdis0.pdf.

Disposition: All the Technical Required, Editorial Required, and General Required comments were reviewed by the TG. Other technical and editorial comments raising points of principle or significance were also reviewed. The remaining comments (a substantial fraction) were purely editorial and responses were left to the editor to complete after a general discussion. A sponsor recirculation ballot would occur once the responses were complete and the draft updated.

[The complete disposition of comments was made available post-meeting at http://www.ieee802.org/1/files/private/ae-rev-drafts/d1/802-1AE-rev-d1-2-dis.pdf, with an updated D1.3 draft at http://www.ieee802.org/1/files/private/ae-rev-drafts/d1/802-1AE-rev-d1-3-sponsor-recirc1.pdf.]

3. P802E Privacy (Recommended Practice for Privacy Considerations for IEEE 802 Technologies)

Jerome Henry, P802E editor, led a discussion of http://www.ieee802.org/1/files/private/802-e-drafts/d0/802E-d0-8.pdf.

Discussion points included:

- a) The term "Personal identifiable information" (PII) might confuse readers new to the area. In the context of this standard (at least), PII is used to mean information identifying a person ('personal identifying information'?) rather than information about the person. The definition (3.12) makes this clear. A similar and accepted misuse of language is the use of the term 'suspicious person' when 'suspect person' is meant (the 'suspicious person(s)' are those curious about the suspect).
- b) The title of clause 8 (Recommendations) should probably be changed to something more focused, since the entire document is a 'Recommended' Practice.
- c) Refer to 'Clause' or 'Annex' in, or when discussing, an IEEE Standard, rather than to 'Section'.
- d) Initial steps in drafting privacy material for IEEE Std 802.1AS suggest that the questions asked in 8.2 would be best answered in an informative Annex. This is because the answers to these questions would take the form of a commentary on the standard itself, rather than normative provisions or information about their effect. Such 'meta-comment' material is often added to standards as a way of letting the holders of divergent points of view 'have their say' without actually changing what the standard prescribes/proscribes, but can obscure those normative provisions and should be actively discouraged. General observations, useful commentary, and description of the history of a standards development all have their place in informative annexes. A recommendation ("should") in an informative annex is less likely to be misinterpreted

as a conformance requirement of the main body of the standard, whereas use of conformance terms in the main body (in most 802.1 standards at least) can only relate to a claim of conformance relating to equipment (in general) being provided by a supplier to a customer.

- e) The focus of the text of 8.2 of draft 0.8 could be refined further to provoke thought and elicit relevant answers from standards developers.
- f) Clause 8.2 seems to duplicate much of what has already been said in 8.1. Could we not use just the 8.2 material, with the briefest of introductions (perhaps based on the first paragraph of 8.1.1) in its own clause (suitably titled, 'Questions for standard developers' perhaps). A further clause might then address the standards developers' own development of advice to be passed to implementers and network designers. The nesting of clauses (4 levels) in Clause 8 seems excessive.
- g) We may have to be careful how we phrase some of the questions to standards developers. Some of them appear close to 'are you an idiot' presuming that it is common to introduce largely unnecessary identifiers in protocol design.
- h) Most of the discussion and questions appear to assume a wireless (802.11 or 802.15) model. Wired (802.3) communication does not pass through the same "stages". Where low-level security (802.1AE MACsec) is used, there is little if any communication prior to authentication as even neighbor discovery can benefit from a degree of trust in the information received. Discussion of subsequent exposure leads naturally to a point made in prior discussions: where is the attacker positioned and what access is afforded to that attacker (distinguishing for example between "on the medium" and "in the access point", with possible 'in the clear' access to data encrypted on the medium and with knowledge of access rights and bandwidth profiles granted.
- i) The current discussion doesn't fully disclose the attack potential of machine learning and its use to discover non-obvious correlations and hence PII, nor does it discuss the use of packet/frame length and packet transmission timing patterns as part of correlation and fingerprinting. Attackers will not restrict the information they collect and correlate to a particular 'layer' or technology in the communications stack. Some communication requirements have to be met by reserving bandwidth and timing transmissions, with policing information necessarily shared with service providing devices (intentionally and obviously facilitating packet to flow assignment).

Disposition: A rough 'work in progress' markup of the draft, used by the editor during the course of discussion (and including additional points) has been retained at http://www.ieee802.org/1/files/private/802-e-drafts/d0/e-henry-d0-8-discussion-may-2018-interim.pdf. A further draft 0.9 draft will be distributed prior to the June teleconference.

4. A.O.B

No new items arising at this meeting.

5. Future meeting/teleconference planning

The proposed June teleconference to discuss P802E was scheduled for June 26, 2018 at 9:00 AM Pacific Time and an announcement sent to the 802.1 and ECSG Privacy email reflectors with dial-in and WebEx details.

3.4 Time-Sensitive Networking

The Time-Sensitive Networking (TSN) Task Group Chair, János Farkas presided. Craig Gunther wrote the minutes.

At the beginning of the meetings on Monday, Tuesday, Wednesday, Thursday and Friday, János Farkas presented the IEEE-SA PatCom Patent Slides for Standards Development Meetings https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.pdf, and made the Call for Potentially Essential Patents. There were no responses to the calls prior to the end of the week's session.

Monday 21 May 2018

9:00 AM (call to order by János Farkas) to 6:30 PM, with a 1-hour lunch break

János Farkas presented the participation slide https://mentor.ieee.org/802-ec/dcn/17/ec-17-0093-05-0PNP-ieee-802-participation-slide-ppt.ppt, and the agenda for the TSN Task Group meeting week http://www.ieee802.org/1/files/public/docs2018/admin-TSN-agenda-0518-v01.pdf.

Disposition: The agenda was reviewed and approved.

Geoff Garner, P802.1AS-Rev editor, presented *P802.1AS-Rev/D7.0 Editor's Report* http://www.ieee802.org/1/files/public/docs2018/as-garner-802-1AS-Rev-d7-0-wg-ballot-editors-report-05-18-v01.pdf, and led the resolution of the remaining comments received on http://www.ieee802.org/1/files/private/as-rev-drafts/d7/802-1AS-rev-d7-0.pdf.

Disposition: Continued in a later session.

Paul Congdon presented *IEEE P802.1Qcz Congestion Isolation* http://www.ieee802.org/1/files/public/docs2018/cz-congdon-ci-update-0518-v1.pdf. **Disposition**: Update on proposed new project.

Jesus Escudero-Sahuquillo presented *Responses to Qcz analysis in March* http://www.ieee802.org/1/files/public/docs2018/cz-escuderosahuquillo-CIAnalysis-response-0518-v01.pdf.

Disposition: Update on proposed new project.

Tuesday 22 May 2018

9:45 AM (call to order by János Farkas) to 6:00 PM, with a 1-hour lunch break

János Farkas, P802.1CM editor, presented *P802.1CM Editor's Report*http://www.ieee802.org/1/files/public/docs2018/cm-farkas-editor-report-0518-v01.pdf. **Disposition**: Editor's update on ongoing project and proposal for new 802.1CM amendment.

Rodney Cummings, P802.1Qcc editor, discussed the outcome of the Sponsor recirculation ballot on http://www.ieee802.org/1/files/private/cc-drafts/d2/802-1Qcc-d2-3.pdf. **Disposition**: Ballot disposition recorded in http://www.ieee802.org/1/files/private/cc-drafts/d2/802-1Qcc-d2-3-dis-v1.pdf.

Norman Finn, P802.1CS editor, led the resolution of comments received on http://www.ieee802.org/1/files/private/cs-drafts/d1/802-1CS-d1-4.pdf.

Disposition: Continued in a later session.

Johannes Specht, P802.1Qcr editor, led the review of the PAR modifications proposed in http://www.ieee802.org/1/files/public/docs2018/cr-specht-parmodification-0518-v05.pdf **Disposition**: Continued in a later session.

Johannes Specht, P802.1Qcr editor, presented *P802.1Qcr-D0.4 – Restructuring Contents of PSFP and ATS* http://www.ieee802.org/1/files/public/docs2018/cr-specht-d04-0518-v03.pdf and led the resolution of comments received on http://ieee802.org/1/files/private/cr-drafts/d0/802-1Qcr-D0-4.pdf.

Disposition: Continued in a later session.

Wednesday 23 May 2018

8:00 AM (call to order by János Farkas) to 10:00 AM

The minutes of this session are incorporated into these minutes by reference and are available at http://www.ieee802.org/1/files/public/60802/2018-05-60802-meeting-v1.pdf.

10:30 AM to 12:30 PM

Marc Holness, P802.1Qcp editor, presented FINAL DISPOSITION OF SPONSOR BALLOT COMMENTS ON IEEE Draft P802.1Qcp/D2.2

http://www.ieee802.org/1/files/private/cp-drafts/d2/802-1Qcp-d2-2-dis-v03.pdf.

Disposition: Editor's update on ongoing project.

Marc Holness, P802.1Qcx editor, presented *IEEE 802.1Qcx (CFM) Data Model Update* http://www.ieee802.org/1/files/public/docs2018/cx-mholness-YANG-Model-0518-v01.pdf. **Disposition**: Editor's update on ongoing project.

Scott Mansfield, P802.1ABcu editor, presented *Draft YANG 802.1ABcu* http://www.ieee802.org/1/files/public/docs2018/cu-mansfield-draft-YANG-0518-v01.pdf. **Disposition**: Editor's update on ongoing project.

Scott Mansfield presented *YANGsters Status* http://www.ieee802.org/1/files/public/docs2018/yangsters-smansfield-status-0518-v01.pdf. **Disposition**: For information.

Norman Finn, P802.1CS editor, continued the resolution of comments received on http://www.ieee802.org/1/files/private/cs-drafts/d1/802-1CS-d1-4.pdf and presented *Resolving issues in P802.1CS D1.4 with making TCP connections and exchanging Hellos* http://www.ieee802.org/1/files/public/docs2018/cs-finn-hello-tcp-connect-0518-v01.pdf. Disposition: Continued in a later session.

1:45 PM to 6:00 PM

Norman Finn, P802.1CS editor, continued the resolution of comments received on http://www.ieee802.org/1/files/private/cs-drafts/d1/802-1CS-d1-4.pdf.

Disposition: Ballot comment resolution recorded in

http://www.ieee802.org/1/files/private/cs-drafts/d1/802-1CS-d1-4-pdis-v3.pdf.

Johannes Specht, P802.1Qcr editor, continued the resolution of comments received on http://ieee802.org/1/files/private/cr-drafts/d0/802-1Qcr-D0-4.pdf.

Disposition: Continued in a later session.

Paul Bottorff, P802.1Qcy editor, led the resolution of comments received on http://www.ieee802.org/1/files/private/cy-drafts/d2/802-1qcy-d2-1.pdf.

Disposition: Continued in a later session.

Thursday 24 May 2018

8:00 AM (call to order by János Farkas) to 6:00 PM, with a 1-hour lunch break

Stephen Haddock, P802.1AX-Rev editor, led the resolution of comments received on http://www.ieee802.org/1/files/private/ax-rev-drafts/d0/802-1AX-Rev2-d0-3.pdf. Disposition: Proposed ballot comment resolution recorded in http://www.ieee802.org/1/files/private/ax-rev-drafts/d0/802-1AX-Rev-d0-3-pdis-v01.pdf.

Paul Bottorff, P802.1Qcy editor, continued the resolution of comments received on http://www.ieee802.org/1/files/private/cy-drafts/d2/802-1qcy-d2-1.pdf.

Disposition: Ballot comment resolution recorded and made available post-meeting in http://www.ieee802.org/1/files/private/cy-drafts/d2/802-1Qcy-d2-1-dis-v1.pdf.

Feng Chen used New PAR for Resource Allocation Protocol - an amendment to 802.1Q http://www.ieee802.org/1/files/public/docs2018/new-chen-resource-allocation-protocol-PAR-0318-v02.pdf in support of the development of a new PAR http://www.ieee802.org/1/files/public/docs2018/new-chen-RAP-PAR-0518-v04.pdf) and CSD (http://www.ieee802.org/1/files/public/docs2018/new-chen-resource-allocation-protocol-CSD-0518-v02.pdf) for a proposed Resource Allocation Protocol (RAP). https://www.ieee802.org/1/files/public/docs2018/new-chen-resource-allocation-protocol-CSD-0518-v02.pdf) for a proposed Resource Allocation Protocol (RAP). https://www.ieee802.org/1/files/public/docs2018/new-chen-resource-allocation-protocol-CSD-0518-v02.pdf) for a proposed Resource Allocation Protocol (RAP). https://www.ieee802.org/1/files/public/docs2018/new-chen-resource-allocation-protocol-CSD-0518-v02.pdf) for a proposed Resource Allocation Protocol (RAP).

Barak Gafni presented *Need For Advanced Congestion Mitigation In Modern Networks* http://www.ieee802.org/1/files/public/docs2018/cz-gafni-ci-need-0518-v1.pdf **Disposition**: Update on proposed new project.

Sam Sun presented *New Simulation Results of Congestion Isolation (CI)* http://www.ieee802.org/1/files/public/docs2018/cz-sun-ci-simulation-update-0518-v01.pdf **Disposition:** Update on proposed new project.

Paul Congdon presented *P802.1Qcz PAR and CSD Review* http://www.ieee802.org/1/files/public/docs2018/cz-congdon-PAR-CSD-review-0522-v1.pdf
Disposition: New PAR targeted for pre-circulation for consideration for approval at the July plenary meeting.

Johannes Specht, P802.1Qcr editor, continued the PAR modifications proposed in http://www.ieee802.org/1/files/public/docs2018/cr-specht-parmodification-0518-v05.pdf **Disposition**: Modified PAR targeted for pre-circulation for consideration for approval at the July plenary meeting.

Johannes Specht, P802.1Qcr editor, continued the resolution of comments received on http://ieee802.org/1/files/private/cr-drafts/d0/802-1Qcr-D0-4.pdf.

Disposition: Ballot comment resolution recorded in

http://www.ieee802.org/1/files/private/cr-drafts/d0/802-1Qcr-d0-4-dis-v00.pdf.

Norman Finn presented *IEEE P802.1DC/contrib. Suggested text for Draft Standard for Local and metropolitan area networks* — *Quality of Service Provision by Network Systems* http://www.ieee802.org/1/files/public/docs2018/dc-finn-proposed-text-0518-v01.pdf.

Disposition: Related to new project; more discussion needed.

Don Pannell presented QUALITY OF SERVICE FOR PLCA

http://www.ieee802.org/1/files/public/docs2018/new-TSN-pannell-QoS-for-PLCA-0518-v02.pdf **Disposition:** More discussion needed.

Geoff Garner, P802.1AS-Rev editor, continued the resolution of comments received on http://www.ieee802.org/1/files/private/as-rev-drafts/d7/802-1AS-rev-d7-0.pdf and presented Possible Resolution of Comments 54, 55, 56, 57, and 83 Against 802.1ASRev/D7.0 http://www.ieee802.org/1/files/public/docs2018/as-garner-possible-resolution-of-several-comments-for-802-1as-d7-0518.pdf.

Disposition: Continued in a later session.

Friday 25 May 2018

8:00 AM (call to order by János Farkas) to 12:00 PM

The minutes of this session are incorporated into these minutes by reference and are available at http://www.ieee802.org/1/files/public/60802/2018-05-60802-meeting-v1.pdf.

1:00 PM to 3:00 PM

Feng Chen continued using New PAR for Resource Allocation Protocol - an amendment to 802.1Q http://www.ieee802.org/1/files/public/docs2018/new-chen-resource-allocation-protocol-PAR-0318-v02.pdf in support of the development of a new PAR (http://www.ieee802.org/1/files/public/docs2018/new-chen-RAP-PAR-0518-v04.pdf) and CSD (http://www.ieee802.org/1/files/public/docs2018/new-chen-resource-allocation-protocol-CSD-0518-v02.pdf) for a proposed Resource Allocation Protocol (RAP). Disposition: New PAR targeted for pre-circulation for consideration for approval at the July plenary meeting.

Geoff Garner, P802.1AS-Rev editor, continued the resolution of comments received on http://www.ieee802.org/1/files/private/as-rev-drafts/d7/802-1AS-rev-d7-0.pdf and presented Possible Resolution of Comments 54, 55, 56, 57, and 83 Against 802.1ASRev/D7.0 http://www.ieee802.org/1/files/public/docs2018/as-garner-possible-resolution-of-several-comments-for-802-1as-d7-0518.pdf.

Disposition: Ballot comment resolution recorded in http://www.ieee802.org/1/files/private/as-rev-drafts/d7/802-1AS-rev-d7-0-pdis-v01.pdf.

4 IEC/IEEE 60802 Joint Project

The IEC/IEEE 60802 Joint Project meeting minutes are incorporated into these minutes by reference and are available at http://www.ieee802.org/1/files/public/60802/2018-05-60802-meeting-v1.pdf.

5 Next meeting

9-14 July 2018, San Diego, CA, USA