

# IEEE 802.1 Working Group

## 6-10 November 2017 Plenary Meeting

### Orlando, FL, USA

### Meeting Minutes

The 802.1 Chair, Glenn Parsons, presided.

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

<i>Last Name</i>	<i>First Name</i>	<i>Affiliation</i>
Andersdotter	Amelia	Article19
Arad	Carmi	Marvell Semiconductor, Inc.
Bao	Shenghua	HUAWEI
Bechtel	Gordon	Bechtel
Bierschenk	Jens	Robert Bosch GmbH
Bims	Harry	Bims Laboratories, Inc.
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
Cheng	Weiyang	Coriant
CHOI	changho	ETRI
Congdon	Paul	Tallac Networks; Huawei
DeLaOlivaDelgado	Antonio	Universidad Carlos III Madrid
Elbakoury	Hesham	Huawei Technologies Co. Ltd
Ellegaard	Lars	Microsemi Corporation
Fang	Yonggang	ZTE TX Inc
Farkas	Janos	Ericsson
Finn	Norman	Huawei Technologies Co. Ltd
Fontaine	Mickael	TransPacket
Garner	Geoffrey	Broadcom Corporation
Gravel	Mark	Hewlett Packard Enterprise
Gray	Eric W	Ericsson AB
Gunther	Craig	HARMAN INTERNATIONAL INDUSTRIES, INCORPORATED
Guo	Jianlin	Mitsubishi Electric Research Labs (MERL)
Gutierrez	Marina	TTTech Computertechnik AG
Haddock	Stephen	Stephen Haddock Consulting, LLC

Hamilton	Mark	Ruckus Wireless
Hantel	Mark	Rockwell Automation
Hasegawa	Akio	Advanced Telecommunications Research Institute International (ATR)
Hiertz	Guido	Ericsson AB
Holness	Marc	Ciena Corporation
Hotta	Yoshifumi	Mitsubishi Electric Corporation
Huang	Chun-hsiang	Nippon Telegraph and Telephone Corporation (NTT)
Inoue	Yasuhiko	NTT Communications
Itaya	Satoko	National Institute of Information and Communications Technology (NICT)
Jeffries	Timothy	Huawei R&D USA
Jones	Peter	Cisco Systems, Inc.
Kabra	Lokesh	Synopsys, Inc.
Kang	Taekyu	Electronics and Telecommunications Research Institute (ETRI)
Karl	Michael	Marvell Semiconductor, Inc.
Kehrer	Stephan	Hirschmann Automation and Control, Inc.
Kitazawa	Shoichi	Muroran IT
KOTO	Hajime	National Institute of Information and Communications Technology (NICT)
Levy	Joseph	InterDigital, Inc.
Mangin	Christophe	Mitsubishi Electric Corporation
Marks	Roger	EthAirNet Associates; Huawei
Maruhashi	Kenichi	NEC Corporation
McCann	Stephen	BlackBerry
McIntosh	James	Microsemi Corporation
McMillan	Larry	Western Digital Corporation
Messenger	John	ADVA Optical Networking Ltd.
Mustala	Tero	Nokia Networks
Nagai	Yukimasa	Mitsubishi Electric Research Labs (MERL)
Ohsawa	Tomoki	NICT
ohue	hiroshi	panasonic
Orlik	Philip	Mitsubishi Electric Research Labs (MERL)
Pannell	Donald R	NXP Semiconductors
Parsons	Glenn	Ericsson AB
Phatak	Aniruddha	Renesas Electronics Corporation
Pienciak	Walter	IEEE
Potts	Michael	General Motors Company
QIU	WEI	Huawei Technologies Co., Ltd
Rao	Raghu	Xilinx, Inc.
Regev	Alon	Ixia
Riegel	Maximilian	Nokia Networks

Rouyer	Jessy	Nokia
Sakata	Ren	TOSHIBA Corporation
Sato	Atsushi	Yokogawa Electric Corporation
Sato	Noriyuki	Oki Electric Industry Co., Ltd.
Seaman	Michael	Individual
Seewald	Maik	Cisco Systems, Inc.
Shen	Li	Huawei Technologies Co., Ltd
Sisto	John	Microchip Technology, Inc.
Slaats	Patrick	IEEE-SA
Specht	Johannes	University of Duisburg-Essen and General Motors Company
Sumi	Takenori	Mitsubishi Electric Corporation
Sun	Liyang	HUAWEI
Thaler	Patricia	Broadcom Limited
Ting	Ao	ZTE Corporation
Venkatesan	Ganesh	Intel Corporation
wang	haifei	Huawei Technologies Co. Ltd
Wang	Hao	Fujitsu Research & Development Center
Wang	Lei	Huawei R&D USA
Wang	Xinyuan	Huawei Technologies Co. Ltd
Weber	Karl	Beckhoff
Woods	Jordon	Innovasic, Inc.
XU	LI	Huawei Technologies Co., Ltd
Yamaura	Takahiro	Toshiba
Yano	Kazuto	Advanced Telecommunications Research Institute International (ATR)
Yi	Su	Fujitsu Research & Development Center
Yin	Yue	Huawei Technologies Co., Ltd
YU	XIANG	Huawei Technologies Co., Ltd
Yuda	Tetsuya	KYOCERA Corporation
Zein	Nader	NEC Corporation
Zerna	Conrad	Fraunhofer IIS
Zhuang	Yan	Huawei Technologies Co. Ltd

## 2 802.1 Officers and Management

<b>Glenn Parsons</b>	Working Group Chair
<b>John Messenger</b>	Working Group Vice-chair
<b>Mick Seaman</b>	Chair, Security Task Group
<b>Janos Farkas</b>	Chair, Time Sensitive Networking Task Group
<b>Craig Gunther</b>	Secretary, Time Sensitive Networking Task Group
<b>Pat Thaler</b>	Chair, Data Center Bridging Task Group
<b>Max Riegel</b>	Chair, OmniRAN Task Group
<b>Jessy Rouyer</b>	Working Group Secretary

## 3 Opening Plenary Meeting

Call to order: 6 November 2017, 10:30 AM.

The 802.1 Chair, Glenn Parsons, presided.

The 802.1 Recording Secretary, Jessy Rouyer, wrote the minutes.

The Chair presented the *Opening Agenda* slides available at <http://www.ieee802.org/1/files/public/minutes/2017-11-opening-plenary-slides.pdf>.

During this presentation, the Chair:

- Showed the agenda on slide 2 stressing that IEEE 802.1 is using as a trial a new format for this meeting. The agenda was approved.
- Showed slides 3 through 8 (reproducing slides 0 through 4 of the IEEE-SA PatCom Patent Slides for Standards Development Meetings, separately available at <http://standards.ieee.org/about/sasb/patcom/materials.html>).

The Chair:

- Presented information on these slides, which included:
  - Instructions for the WG Chair (and TG Chairs);
  - Participants, Patents and Duty to Inform;
  - Patent Related Links;
  - Call for Potentially Essential Patents; and
  - Other Guidelines for IEEE WG Meetings.
- Advised WG attendees that:
  - The IEEE's patent policy is described in Clause 6 of the IEEE-SA Standards Board Bylaws;
  - Early identification of patent claims which may be essential for the use of standards under development is strongly encouraged;

- There may be Essential Patent Claims of which the IEEE is not aware. Additionally, neither the IEEE, the WG, nor the WG chair can ensure the accuracy or completeness of any assurance or whether any such assurance is, in fact, of a Patent Claim that is essential for the use of the standard under development.
- Made the “Call for Potentially Essential Patents” thereby providing an opportunity for participants to identify patent claim(s)/patent application claim(s) and/or the holder of patent claim(s)/patent application claim(s) of which the participant is personally aware and that may be essential for the use of that standard.  
There were no responses to the call.
- Reminded 802.1 TG Chairs of their daily obligations (per slide 8) with respect to presenting the IEEE-SA PatCom Patent Slides for Standards Development Meetings and making the “Call for Potentially Essential Patents”.
- Reviewed general administrative information including:
  - Meeting “Decorum” or rules, including the policies on public reporting, and on photography or recording (slide 9);
  - Participation in IEEE 802 meetings on an individual basis (slide 10);
  - Hotel and meeting room security (slide 11);
  - General information on 802.1 (slide 12), including information on newcomers orientation available at <http://www.ieee802.org/1/files/public/docs2017/tsn-farkas-intro-0317-v01.pdf> (noting there was no newcomers orientation at this meeting), information on 802.1 operation available at <http://www.ieee802.org/1/files/public/minutes/802-1-general-info-v3.pdf>, a reminder that contributions are to be uploaded before presentation, how to access meeting minutes and schedule, and how to report meeting session attendance;
  - Meeting logistics (slide 13).
- Introduced 802.1 officers and provided 802.1 website information (slide 14).
- Reviewed the list of 802.1 voters (slide 15), including information about individuals who have lost (slide 16), will lose (slides 17 and 20), will gain (slide 18), or could gain (slide 19) 802.1 voting membership. The Chair reminded individual participants about 802.11 reciprocal credit, which was continued at this meeting (slide 21).
- Introduced phased updates to a new 802.1 website at <http://1.ieee802.org>, which was to be reviewed on Friday morning (slide 22).
- Reviewed the schedule for future interim meetings (slide 23), which included:
  - January 22-26, 2018 in Geneva, Switzerland
    - The Chair presented related information about this future interim meeting and on both an ITU-T SG15 & IEEE 802.1/802.3 Workshop to be held January 27, 2018, and a YANG meeting with ITU-T Q14/15 to be held January 28, 2018 (slide 24).
  - May 21-25, 2018 in Pittsburgh, PA, USA
    - John d’Ambrosia presented [http://www.ieee802.org/1/files/public/docs2017/admin-dambrosia-EA\\_May2018Announcement\\_1017.pdf](http://www.ieee802.org/1/files/public/docs2017/admin-dambrosia-EA_May2018Announcement_1017.pdf).
  - September 10-14, 2018 in Oslo, Norway
    - The Chair indicated he would have a motion to change the dates of this future interim meeting to cover the September 10-14 period.
  - January 2019 in Japan (exact dates and location to be defined)
  - May 2019 in North America (exact dates and location to be defined)
    - John d’Ambrosia presented [http://www.ieee802.org/1/files/public/docs2017/admin-dambrosia-EA\\_OfferToHost\\_May2019\\_1017.pdf](http://www.ieee802.org/1/files/public/docs2017/admin-dambrosia-EA_OfferToHost_May2019_1017.pdf).
  - September 2019
    - Hosts welcome
      - ADVA Optical Networking offered to explore a hosting offer for Edinburgh, UK.

- Reviewed the schedule for future plenary meetings (slide 25), which included:
  - March 4-9, 2018 in Chicago, IL, USA
  - July 9-13, 2018 in San Diego, CA, USA
  - November 12-16, 2018 in Bangkok, Thailand
  - March 10-15, 2019 in Vancouver, BC, Canada
  - July 14-19, 2019 in Vienna, Austria
  - November 10-15, 2019 in Waikoloa, HI, USA
- Proposed that 802.1 continue its 5-day meeting trial at its January and March 2018 meetings trials (slide 26)
  - The Chair indicated he would have a motion for continuing the current plenary meeting format in March 2018.
- Reminded that 802 elections take place in March 2018 (slide 27).
  - Individuals wishing to run for elected or appointed positions were invited to talk to currently elected or appointed individuals for further details.
  - The current 802 Chair, 802.1 Chair and 802.1 Vice Chair are planning to stand for re-election, the last time to announce a run is on the third day of the March 2018 plenary.
  - Patricia Thaler noted she would not seek to retain her 802 Vice Chairmanship.
- Reported the following items out of the 802 Executive Committee (EC) executive session (slide 28):
  - Duties
    - Affiliation requirements ([EC-17-171](#))
    - Standards withdrawal ([EC-17-191](#)) – 802.1D & ISO/IEC 15802-1/3?
  - 802 Task Force
    - Open source ([EC-17-182](#))
    - Tools discussion (executive session)
  - P&P, WG & CG change proposals ([EC-17-199](#))
    - Tutorials do not require registration/badges
    - New: ICAID approval process, visa request process
    - Update Sponsor P&P (and then WG P&P) in 2018
  - Venues ([EC-17-198](#))
  - Treasurer ([EC-17-190](#))
    - Projected 2017 budget - \$150k loss (reserve to \$1.5M)
    - Orlando budget \$7k loss
  - 802.11
    - TG MD will respond to security vulnerabilities
    - 802.11aq comments from RAC ([11-17-1730](#))
- Reviewed the list of 802 EC meetings to be held this week (slide 29).
- Provided an update on myProject (slide 30) and on the IEEE open source offering (slide 31).
  - The Chair encouraged participation to the session dedicated to open source offering at this meeting on Thursday.
- Provided information about public review (slide 32) and indicated there were no email ballot (ePoll) since the last plenary (slide 33).
- Pointed out PARs and CSDs that are up for vote at this IEEE 802 meeting (slide 34).
  - The Chair suggested PARs and CSDs from WGs other than 802.1 be reviewed in the Maintenance TG if there is interest.
- Introduced the 802.1 Industry Connections activity (slide 35) and the tutorials to be held 6 November 2017 6:00 - 8:50 PM (slide 36).
  - The Chair solicited volunteers to lead the *IEEE 802 network enhancements for the next decade* ICAID.

- Reviewed the list of liaisons within 802 (joint and standing committee meetings, 802 task force) for which meetings were to be held during this 802 plenary week (slide 37), and the list of liaisons incoming to 802.1 to be handled by the TSN TG (slides 38-39), Maintenance TG and the 802.1 plenary (slide 39).
  - It was noted 1588 on slide 38 should be listed without “v3”.
- Discussed “official liaisons” and clarified the various liaison types available for 802 WGs to use (slide 40).
  - The Chair indicated 802.1 should continue using liaison statements and given the JWG, need not designate a liaison official for interaction with IEC SC65C.
- Provided an update on the IEC/IEEE Joint Working Group (slide 41)
  - Jodi Haasz presented *IEC/IEEE Dual Logo Agreement Joint Development* <http://www.ieee802.org/1/files/public/docs2017/admin-haasz-iec-joint-development-1117-v1.pdf>, the Chair clarifying that “Joint Working Group” is a misnomer: in IEEE parlance, it corresponds to a PAR for a new project, which in the context of the IEC/IEEE JWG, would be under the responsibility of the TSN TG.
  - The Chair presented *IEC/IEEE JWG proposal* <https://mentor.ieee.org/802-ec/dcn/17/ec-17-0169-00-INTL-iec-ieee-jwg-proposal.pdf>.
- Provided his anticipation of next actions with respect to projects in the current WG’s workload asking editors to review for correctness (slide 42) and discussed the requirements for editors (slide 43) as well as promotion of the work that the WG is doing (slide 44).
  - The 802.1 TSN TG Chair noted that the upcoming IEEE Communications Standards magazine will have a “TSN feature topic”.
  - The 802.1 Vice Chair encouraged input on a TSN vertical for medical applications.
- Noted that Standards Project Awards are being prepared (slide 45).
- Provided TG Chairs with motions requirement for the midweek plenary (slide 46).
- Showed the 802.1 plenary schedule/agenda for this meeting, which was tacitly approved (slide 47).
- Listed 802.1 management meetings (slide 48).
- Provided information about the meetings and status of the YANGsters group (slide 49-51).
- Requested the 802.1 TG Chairs to introduce their TG agenda (slide 52):
  - Mick Seaman presented the Security TG agenda (slides 53-54).
  - János Farkas presented the TSN TG agenda (slide 55).
  - Maximilian Riegel presented the OmniRAN TG agenda (slides 56-57).
  - John Messenger presented the Maintenance TG agenda for 7 November 2017 (slide 58).
  - Patricia Thaler presented the DCB TG agenda (slide 59).
- Introduced the 802 Network Enhancements Industry Connections activity (slide 60).

There was no other business to discuss (slide 61) and the opening plenary meeting was adjourned at 12:43 PM.

## 4 Task Group Meetings

### 4.1 Data Center Bridging

The Data Center Bridging (DCB) Task Group Chair, Patricia Thaler presided. Paul Congdon wrote the minutes.

At the beginning of the meetings on Wednesday and Thursday, Patricia Thaler presented the IEEE-SA PatCom Patent Slides for Standards Development Meetings <https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.pdf>, presented the IEEE 802 Participation slide, and made the Call for Potentially Essential Patents. There were no responses to the calls prior to the end of the week's session.

#### **Wednesday 8 November 2017 8:30 AM-12:30PM 4:00PM-6:00 PM**

Call to order: 8 November 2017, 8:30 AM

The agenda for each day was reviewed and approved as follows:

1. Wed AM1 & AM2
  - a. Convene at 8:30 AM
  - b. Administration: Agenda approval, Patent & affiliation slides, secretary
  - c. P802.1Qcn comment resolution – Paul Bottorff
2. Wed PM2
  - a. Wireless Broadband Alliance (WBA) liaison on IEEE Roaming OUI
  - b. P802.11aq local address space comments – Roger Marks
  - c. P802.1CQ - Proposal for Local MAC address protocol - Ao Ting
3. Thursday or earlier
  - a. Design team discussion of topics for Congestion Isolation – Paul Congdon
  - b. Simulation Analysis of Congestion Isolation – Kevin Shen
  - c. Discussion of project creation for Congestion Isolation – Paul Congdon
  - d. 802.1Qcn next steps

Paul Bottorff, P802.1Qcn editor, led the resolution of comments received on <http://www.ieee802.org/1/files/private/cn-drafts/d1/802-1qcn-d1-0.pdf>.

- Ballot passed and a WG recirculation will be the next step with conditional approval to go to Sponsor ballot.
- For a WG recirculation ballot, all the background text that was kept in place to help the IETF review needs to be removed.
- Lots of discussion around using should for TLV parameters that aren't valid for NV03.
- PICs rogue comment was added.

**Disposition:** Ballot comment resolution recorded in <http://www.ieee802.org/1/files/private/cn-drafts/d1/802-1Qcn-d1-0-dis-v02.pdf>

Paul Congdon led a review of Congestion Isolation Design team material (<http://ieee802.org/1/files/public/docs2017/new-dcb-congdon-congestion-isolation-1117-v01.pdf>)

**Disposition:** Continued in a later session.



Roger Marks led the review of a draft of the outgoing liaison letter (<https://mentor.ieee.org/802-ec/dcn/17/ec-17-0208-04-00EC-draft-response-to-wba-liaison.docx>) prepared in response to the incoming liaison letter regarding IEEE Roaming OUI from Wireless Broadband Alliance (<http://www.ieee802.org/1/files/public/docs2017/liaison-WBA-Roaming-OUI-1017.pdf>).

- The incoming liaison letter was addressed to IEEE 802, 802.1 and 802.11, but the proposal was to have a single response from IEEE 802.
- Address has some structure and still clarity about the format as described by Wi-Fi Alliance and 802.11.

**Disposition:** See slide 56 in

<http://www.ieee802.org/1/files/public/minutes/2017-11-closing-plenary-slides.pdf>

Roger Marks led a discussion of the Pre-Association Random Address proposal discussed in the 802.1 midweek plenary meeting.

- Personal opinions were expressed on the 802.11 proposal in the meeting. No 802.1 position has been provided yet.
- There does not appear to be much of an issue if the address is just used for discovery, but if one keeps the address for associated state, then the chance of collision is too high.

**Disposition:** More discussion needed.

#### **Thursday 9 November 2017 8:30 AM-12:30 PM**

Call to order: 9 November 2017, 8:30 AM

Paul Congdon presented *Congestion Isolation – Design Team Update*

<http://ieee802.org/1/files/public/docs2017/new-dcb-congdon-congestion-isolation-1117-v01.pdf>

**Disposition:** More discussion needed.

Kevin Shen presented *Simulation Analysis of Congestion Isolation*

<http://ieee802.org/1/files/public/docs2017/new-dcb-shen-congestion-isolation-simulation-1117-v00.pdf>

- Switching delay should be included, not just link delay
- Buffer size needs to be varied and the sensitivity needs to be understood. To be apples-to-apples, the amount of memory should be the same with or without Congestion Isolation (CI). Fix the memory and carve it up into traffic classes with and without CI. Then vary that and understand how much change there is.
- Having Mice and Elephant separation in the simulation causes some concern because the CI proposal currently does not include three queues, but only two.
- Using a flow table that looks at all flows is also a difference in how people might implement the solution. The CI proposal currently states congested flows would be identified by sampling; not looking at all flows on ingress.
- It was good to see that using an ideal flow table algorithm did not make a big difference.
- Likely to want a simulation that accurately models the current CI proposal.

**Disposition:** Action: two-queue model; no mice/elephant, memory sensitivity, depth of congested flow table, graph of queue depth over the course of the simulation or CDF of the queue depth. Consider ECN+CI without PFC (not lossless).

Paul Congdon presented *Project for Improved Congestion Management*

<http://ieee802.org/1/files/public/docs2017/new-dcb-congdon-congestion-project-1117-v01.pdf>

**Disposition:**

- Updated motion will be provided
- Agreed to schedule two calls before the January 2018 interim meeting; 12 December 2017, 5:00 PM Pacific, 9 Jan 2018, 5:00 PM Pacific

Paul Bottorff, P802.1Qcn editor, reviewed next steps for P802.1Qcn.

**Disposition:** Proposed schedule:

- First WG recirculation starts on 28 November 2017, closes on 13 December 2017
- Hold a call to process first WG recirculation on 2 January 2018, at 5:00 PM Pacific
- Second WG recirculation starts on 5 January 2018, closes on 20 January 2018
- Process second WG recirculation comments in the January 2018 interim meeting and proceed to Sponsor ballot

It was agreed a P802.1CQ informal group would discuss proposals (including *Local MAC Address Protocol* <http://www.ieee802.org/1/files/public/docs2017/cq-ao-LAAP-Proposal-1117-V1.pptx>) offline.

## 4.2 Maintenance

The Maintenance Task Group minutes are incorporated in these minutes by reference and are available at <http://www.ieee802.org/1/files/public/maint/2017-11-maintenance-meeting-v2.pdf>.

## 4.3 OmniRAN

OmniRAN Task Group meeting minutes are incorporated into these minutes by reference and are available at <https://mentor.ieee.org/omniran/dcn/17/omniran-17-0091-00-00TG-nov-2017-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>.

## 4.4 Security

Call to order: 7 November 2017 11:15 AM. The Security Task Group met the morning of Tuesday 7 November 2017 starting at 11:15 AM following the Maintenance TG meeting and a joint session with the TSN TG on YANG, the afternoon of Tuesday 7 November 2017 starting at 3:30 PM following attendance at the JTC1 SC6 SC, and the morning of Wednesday 8 November 2017 from 9:00 AM to 10:45 AM. Having concluded the agenda items the TG did not meet the afternoon of Wednesday 8 November 2017.

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

At the beginning of the meetings on Tuesday and Wednesday, Mick Seaman presented the IEEE-SA PatCom Patent Slides for Standards Development Meetings, and the IEEE 802 Participation slide. 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.

See the TSN TG and the JTC1 SC6 SC minutes for minutes of those sessions.

Participants:

- Rad Canchi, Kyocera International [Tuesday AM]
- Eric Gray [Tuesday AM part]
- Marc Holness [Tuesday AM, PM]
- Sue Leicht, National Security Agency [Wednesday AM]
- James McIntosh [Tuesday AM, PM; Wednesday AM]
- Glenn Parsons [Tuesday PM part]
- Mick Seaman [Tuesday AM, PM; Wednesday AM]

Mick Seaman proposed the following agenda (based on presentation in the 802.1 opening plenary) for the Security Task Group meeting week:

1. P802.1Xck (*Port-Based Network Access Control – YANG Data Model*)
  - Finalize D1.1 WG Ballot Resolution *Tuesday following YANG, Tuesday pm 2*
2. P802.1AR-Rev (*Secure Device Identity*)
  - Initial Sponsor Ballot of D2.2 resolution continued. *Wednesday am, Wednesday pm*
3. JTC1 SC6 SC participation *Tuesday pm1*
4. A.O.B
5. Further meetings/teleconferences

This agenda was approved at the start of Tuesday's Security TG session.

Minutes of the discussions of these agenda items follow.

### **1. P802.1Xck (Port-Based Network Access Control: YANG Data Model)**

Marc Holness, P802.1Xck editor, reviewed the (non-final) disposition of comments received in the Working Group ballot on <http://www.ieee802.org/1/files/private/ck-drafts/d1/802-1Xck-d1-1.pdf>: <http://www.ieee802.org/1/files/private/xck-drafts/d1/802-1Xck-d1-1-dis-v01.pdf>

This disposition had been reviewed during the 25 October 2017 Security TG teleconference, the present review served as a final check. The review was facilitated by reference to interim draft 1.2: <http://www.ieee802.org/1/files/private/xck-drafts/d1/802-1Xck-d1-2.pdf>

The editor had updated subclause 14.4.2 "Relationship to the Interface Management YANG model" to address the issue underlying comment 6. The group welcomed the changes and reviewed the text in detail. A consistent approach to ifTypes for stacks that could be realized by either "explicit" interfaces (where a YANG interface represents a single shim or sublayer in an interface stack) or by "augmented" or "compressed" interfaces (where a single YANG interface is augmented, possibly multiple times, by attributes that allow it to represent stacked shims or sublayers) would require that the ifType represent the top-most shim/augmentation in the stack. This change of ifType cannot be carried out simply by the process of creating/enabling the augmentation, and in any case, that might raise difficulties when multiple augmentations of a single interface are applied (an individual augmentation model would not necessarily know the appropriate order of other yet to be defined augmentations). However, the manager of the interface could make the appropriate changes, and that would be noted in the text.

The results of the meeting's review were captured in a final disposition of comments prepared by the editor (<http://www.ieee802.org/1/files/private/xck-drafts/d1/802-1Xck-d1-1-dis-v02.pdf>) and in a draft incorporating the corresponding changes for off-line editorial review (<http://www.ieee802.org/1/files/private/xck-drafts/d1/802-1Xck-d1-3.pdf>).

Mick Seaman took as an action item to initiate a Working Group recirculation ballot on draft 1.3 (or on an editorial update of that draft) by 22 November 2017 to close by 13 December 2017.

The Sponsor Ballot pool formation process has been initiated with the expectation that approval to proceed to Sponsor Ballot will be requested at the next 802 plenary meeting in March 2018.

## **2. P802.1AR-Rev (Secure Device Identity)**

The TG reviewed the proposed changes to Clause 9 “DevID signature suites” (<http://www.ieee802.org/1/files/private/ar-rev-drafts/d2/802-1AR-rev-d2-4-clause-9.pdf>) resulting from the consideration of comments 49 and 50 in the BRC teleconference held 1 November 2017. The proposed revised text in interim draft 2.4 (<http://www.ieee802.org/1/files/private/ar-rev-drafts/d2/802-1AR-rev-d2-4.pdf>) was shown as were the strikeout/insert version (<http://www.ieee802.org/1/files/private/ar-rev-drafts/d2/802-1AR-rev-d2-4-changes.pdf>) and a markup of the “clean” text with some rationale for changes/organization (both for current information and for future reference should the TG need to revisit the topic).

The TG was satisfied with the proposed changes. It was agreed to keep the explicit object identifiers (the possibility of their removal was raised in the markup of Clause 9).

Mick Seaman, P802.1AR-Rev editor, briefly reviewed the outstanding comments in <http://www.ieee802.org/1/files/private/ar-rev-drafts/d2/802-1AR-rev-d2-2-sponsor-pdis1.pdf>.

The responses to John Messenger’s comments i-71 through i-91 (submitted with a Disapprove vote) had been checked with him. The proposed response to William Byrd’s comment i-1 had been sent to the commenter in an email asking if the proposed response was clear, inviting the commenter to this meeting, and also asking if the TG had understood the comment correctly. The plan was for Brian Weis to run the responses to Russell Housley’s comments (submitted with a Disapprove vote) by the latter during the IETF meeting the following week. The one remaining comment submitted with a Disapprove vote was on a punctuation issue and no additional communication was believed to be necessary. Following this meeting’s discussion, and regarding the yet-to-be-addressed comments related to Russell Housley’s comments i-41 and i-42 through i-48 suggesting reorganization of Clause 8 to place the Extensions in a separate (sub)clause, it was agreed that, if it was practical to do this editorial change, it should be done.

It was agreed the next action would be Sponsor Ballot recirculation. In view of the number of comments received the TG would not attempt to get conditional approval to proceed to RevCom.

## **3. JTC1 SC6 SC participation**

Mick Seaman, 802.1AEcg editor, took as an action item to draft a response to the comments received on the FDIS pre-ballot of IEEE Std 802.1AEcg 2017. This response was completed and reviewed by TG members, with a final review check in the Wednesday morning TG meeting, and posted as <http://www.ieee802.org/1/files/public/docs2017/aecg-seaman-iso-pre-ballot-responses-1117v01.txt> for approval by the closing 802.1 WG plenary meeting.

## **4. A.O.B**

No new items arised at this meeting.

## 5. Future meeting/teleconference planning

The usual motion to approve teleconferences was to be presented to the closing 802.1 WG plenary meeting.

## 4.5 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 (including the pre-meeting), 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. The agenda for each day was reviewed and approved.

### Monday 6 November 2017 8:00 AM-10:00AM, 1:30PM-6:00 PM

Call to order: 6 November 2017, 8:00 AM

János Farkas presented the agenda for the TSN Task Group meeting week: <http://ieee802.org/1/files/public/docs2017/admin-TSN-agenda-1117-v01.pdf>, with a more detailed agenda:

<https://docs.google.com/spreadsheets/d/1ZyVUGq-nYU4mw-bAgn2sonWhnH8L-aLf2d-JHSOaRFA>.

**Disposition:** Administrative

Geoff Garner, P802.1AS-Rev editor, presented *Status of 802.1AS-Rev/D5.1 and Questions on Several Items Needing Resolution* <http://www.ieee802.org/1/files/public/docs2017/as-garner-802-1as-d5-1-status-and-several-items-needing-resolution-1117-v01.pdf>.

**Disposition:** Editor's presentation of open items related to ongoing project

János Farkas explained the 3GPP RAN3 incoming liaison letter in

<http://www.ieee802.org/1/files/public/docs2017/liaison-3GPP-RAN3-173354-0917.zip>

**Disposition:** Incoming liaison letter, response postponed

Glenn Parsons explained the MEF incoming liaison letters in:

- [http://www.ieee802.org/1/files/public/docs2017/liaison-MEF-L00268\\_MEF\\_10.4\\_AD1\\_0917.pdf](http://www.ieee802.org/1/files/public/docs2017/liaison-MEF-L00268_MEF_10.4_AD1_0917.pdf)  
**Disposition:** Incoming liaison letter, response postponed
- [http://www.ieee802.org/1/files/public/docs2017/liaison-MEF\\_L00273\\_on\\_FrameDelay\\_1117.pdf](http://www.ieee802.org/1/files/public/docs2017/liaison-MEF_L00273_on_FrameDelay_1117.pdf)  
**Disposition:** Incoming liaison letter, for information
- [http://www.ieee802.org/1/files/public/docs2017/liaison-MEF\\_L00274\\_on\\_MBH\\_MEF\\_22.3\\_1117.pdf](http://www.ieee802.org/1/files/public/docs2017/liaison-MEF_L00274_on_MBH_MEF_22.3_1117.pdf)  
**Disposition:** Incoming liaison letter, response postponed
- [http://www.ieee802.org/1/files/public/docs2017/liaison-MEF-L00267\\_MEF5GWork\\_0917.pdf](http://www.ieee802.org/1/files/public/docs2017/liaison-MEF-L00267_MEF5GWork_0917.pdf)  
**Disposition:** Incoming liaison letter, for information

János Farkas presented the NGMN incoming liaison letters in:

- [http://www.ieee802.org/1/files/public/docs2017/liaison-NGMN-5G\\_E2E\\_architecture\\_1017.zip](http://www.ieee802.org/1/files/public/docs2017/liaison-NGMN-5G_E2E_architecture_1017.zip)  
**Disposition:** Incoming liaison letter, for information
- [http://www.ieee802.org/1/files/public/docs2017/liaison-NGMN-RAN\\_functional\\_split+xhaul-1017.pdf](http://www.ieee802.org/1/files/public/docs2017/liaison-NGMN-RAN_functional_split+xhaul-1017.pdf)  
**Disposition:** Incoming liaison letter, response covered by <http://www.ieee802.org/1/files/public/docs2017/liaison-response-NGMN-RAN-functional-split-1117-v01.pdf>

Jessy Rouyer presented the BBF incoming liaison letters in:

- <http://www.ieee802.org/1/files/public/docs2017/liaison-bbf2017.525.01-SOAM YANG-0717.pdf>
- <http://www.ieee802.org/1/files/public/docs2017/liaison-BBF-84-CFM YANG-0917.zip>

**Disposition:** Incoming liaison letters, response covered by <http://www.ieee802.org/1/files/public/docs2017/liaison-response-BBF-84-1117-v01.pdf>

Jessy Rouyer presented the ITU-T SG15-LS68 incoming liaison letter in

[http://www.ieee802.org/1/files/public/docs2017/liaison-SG15-LS68\\_CFM\\_OAM\\_1017.zip](http://www.ieee802.org/1/files/public/docs2017/liaison-SG15-LS68_CFM_OAM_1017.zip)  
**Disposition:** Incoming liaison letter, response covered by <http://www.ieee802.org/1/files/public/docs2017/liaison-response-ITU-T-SG15-LS68-1117-v01.pdf>

János Farkas presented the IEEE 802.3cg incoming liaison letter in

[http://www.ieee802.org/1/files/public/docs2017/liaison-IEEE\\_802d3cg\\_mutidrop\\_and\\_TSN\\_0917.pdf](http://www.ieee802.org/1/files/public/docs2017/liaison-IEEE_802d3cg_mutidrop_and_TSN_0917.pdf)

**Disposition:** Incoming liaison letter, no response needed due to joint session

János Farkas presented the IEEE 1588 incoming liaison letter in

[http://www.ieee802.org/1/files/private/1588-drafts/IEEE%201588-2017\\_DRAFT\\_STANDARD\\_D1.2-diff-marks-from-2008.pdf](http://www.ieee802.org/1/files/private/1588-drafts/IEEE%201588-2017_DRAFT_STANDARD_D1.2-diff-marks-from-2008.pdf)

**Disposition:** Incoming liaison letter, for information

János Farkas presented the EtherCAT Technology Group incoming liaison letter in

[http://www.ieee802.org/1/files/public/docs2017/liaison-ETG\\_802.1\\_liaison\\_request-1017.pdf](http://www.ieee802.org/1/files/public/docs2017/liaison-ETG_802.1_liaison_request-1017.pdf)

**Disposition:** Incoming liaison letter, response covered by

<http://www.ieee802.org/1/files/public/docs2017/liaison-response-ETG-1117-v01.pdf>

János Farkas presented the IEC SC65C incoming liaison letter in

[http://www.ieee802.org/1/files/public/docs2017/liaison-IEC-SC65C-formal\\_liaison\\_request-1017.txt](http://www.ieee802.org/1/files/public/docs2017/liaison-IEC-SC65C-formal_liaison_request-1017.txt)

**Disposition:** Incoming email, 802.1 WG Chair will provide email response

János Farkas presented the PROFIBUS/PROFINET incoming liaison letter in

<http://www.ieee802.org/1/files/public/docs2017/liaison-PI-IEEE802-1117.pdf>

**Disposition:** Incoming liaison letter, response covered by

<http://www.ieee802.org/1/files/public/docs2017/liaison-response-PI-1117-v01.pdf>

János Farkas presented *IEEE Communications Standards Magazine - TSN feature topic*

<http://www.comsoc.org/comstandardsmag/cfp/time-sensitive-networking-standards>

**Disposition:** Promotion update

János Farkas, P802.1CM editor, presented:

- *P802.1CM – D1.0 Editor's Report* <http://ieee802.org/1/files/public/docs2017/cm-farkas-editor-report-d1-0-1117-v02.pdf>.
- *Standard Development Process (High Level)* as found on slide 17 of <http://www.ieee802.org/1/files/public/docs2017/tsn-farkas-intro-0517-v01.pdf>.
- A proposal of to-date changes to D1.1 as shown in <http://www.ieee802.org/1/files/private/cm-drafts/d1/802-1CM-d1-1-a-trk.pdf>.

János Farkas then led the resolution of comments received on <http://www.ieee802.org/1/files/private/cm-drafts/d1/802-1CM-d1-0.pdf>.

**Disposition:** Ballot comment resolution recorded in <http://www.ieee802.org/1/files/private/cm-drafts/d1/802-1CM-d1-0-dis-v03.pdf>

## **Tuesday 7 November 2017 10:30 AM-1:30 PM, 3:30 PM-6:00 PM**

Call to order: 7 November 2017, 10:30 AM

Marc Holness, P802.1Qcp editor, led the resolution of comments received on <http://www.ieee802.org/1/files/private/cp-drafts/d1/802-1Qcp-d1-4.pdf>

**Disposition:** Ballot comment resolution recorded in <http://www.ieee802.org/1/files/private/cp-drafts/d1/802-1Qcp-d1-4-dis-v01.pdf>

Jessy Rouyer presented *Support of P802.1Xck, and more, on non-IEEE 802-specified interfaces* <http://www.ieee802.org/1/files/public/docs2017/xck-pauwels-PTM-interfaces-support-1117-v02.pdf>

**Disposition:** New proposal; more discussion needed

János Farkas led the review of TSN TG consent agenda motions as finalized starting on slide 20 in

<http://www.ieee802.org/1/files/public/minutes/2017-11-midweek-plenary-slides.pdf>

**Disposition:** Motions reviewed

Tae-kyu Kang presented *Scheduled Traffic State Machines to Support 802.1Qbu Frame Preemption* <http://www.ieee802.org/1/files/public/docs2017/q-rev-kang-comment-bv-state-mahchine-1117-v01.pdf>

**Disposition:** Supports ballot comments

John Messenger, P802.1Q-Rev editor, led the resolution of comments received on <http://www.ieee802.org/1/files/private/q-REV-drafts/d2/802-1Q-rev-d2-0-with-mibs.pdf>

**Disposition:** Ballot comment resolution recorded in <http://www.ieee802.org/1/files/private/q-REV-drafts/d2/802-1Q-rev-d2-0-pdis-v4.pdf>

János Farkas, P802.1CM editor, continued Monday's resolution of comments received on <http://www.ieee802.org/1/files/private/cm-drafts/d1/802-1CM-d1-0.pdf> and presented *Strict Priority in P802.1CM* <http://www.ieee802.org/1/files/public/docs2017/cm-farkas-strict-priority-1117-v01.pdf>.

**Disposition:** Ballot comment resolution recorded in <http://www.ieee802.org/1/files/private/cm-drafts/d1/802-1CM-d1-0-dis-v03.pdf>

**Tuesday 7 November 2017 1:30 PM-3:30 PM**

An **802.1 TSN TG - 802.3cg TF joint meeting** was called to order at 1:30 PM. The TSN TG Chair, János Farkas, presided. Craig Gunther wrote the minutes.

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 call prior to the end of the joint meeting.

George Zimmerman presented *802.3cg Overview 10 MB/S Single Pair Ethernet* [http://www.ieee802.org/3/cg/public/Nov2017/zimmerman\\_3cg\\_01\\_1117.pdf](http://www.ieee802.org/3/cg/public/Nov2017/zimmerman_3cg_01_1117.pdf)

**Disposition:** For information

Piergiorgio Beruto presented *IEEE802.3cg TF PLCA overview* [http://www.ieee802.org/3/cg/public/Nov2017/8023cg\\_plca\\_overview\\_revA.pdf](http://www.ieee802.org/3/cg/public/Nov2017/8023cg_plca_overview_revA.pdf)

**Disposition:** For information

Craig Gunther presented *TSN for 802.3cg* <http://www.ieee802.org/1/files/public/docs2017/tsn-cgunther-tsn-for-802-3cg-1117-v02.pdf>

**Disposition:** For information

Michael Rentschler presented *Time Synchronized Collision Avoidance in Multidrop Networks* [http://www.ieee802.org/3/cg/public/Nov2017/TSCA\\_rentschler\\_microchip\\_3cg\\_01a\\_1017.pdf](http://www.ieee802.org/3/cg/public/Nov2017/TSCA_rentschler_microchip_3cg_01a_1017.pdf)

**Disposition:** For information

There was no other business to discuss and the joint meeting was adjourned at 3:30 PM.

**Wednesday 8 November 2017 8:00 AM-12:30PM, 4:00-5:15 PM, 5:45 PM-6:00 PM**

Call to order: 8 November 2017, 8:00 AM

János Farkas presented *P802.1CBcv FRER YANG & MIB PAR* <http://www.ieee802.org/1/files/public/docs2017/cv-draft-PAR-1017-v03.pdf>  
<http://www.ieee802.org/1/files/public/docs2017/cv-draft-CSD-0917-v01.pdf>  
<http://www.ieee802.org/1/files/public/docs2017/cv-draft-PAR-history-1017-v01.pdf>

**Disposition:** PAR status update

Johannes Specht, P802.1Qcr editor, led the discussion on the outcome of the TG ballot conducted on <http://www.ieee802.org/1/files/private/cr-drafts/d0/802-1Qcr-d0-2.pdf>

**Disposition:** Ballot comment outcome recorded in <http://www.ieee802.org/1/files/private/cr-drafts/d0/802-1Qcr-d0-2-dis-v00.pdf>

Johannes Specht presented *YANG module proposal for ATS and PSFP* <http://www.ieee802.org/1/files/public/docs2017/cr-specht-yang-1117-v01.pdf>

**Disposition:** Related to ongoing project; proposal will be added to P802.1Qcr

Norman Finn, P802.1CS editor, presented <http://www.ieee802.org/1/files/private/cs-drafts/d1/802-1CS-d1-1.pdf>

**Disposition:** Editor's presentation on ongoing project's draft



Karl Weber presented *Layering with TSN and EtherCAT*

<http://ieee802.org/1/files/public/docs2017/liaison-ETG-streamAdaption-1117.pdf>

**Disposition:** Related to incoming liaison letter

Feng Chen presented *RAP White Paper Update*

<http://ieee802.org/1/files/public/docs2017/new-chen-RAP-white-paper-update-1117-v02.pdf>

that introduced *Resource Allocation Protocol (RAP) based on LRP for Distributed Configuration of Time-Sensitive Streams* <http://ieee802.org/1/files/public/docs2017/tsn-chen-RAP-whitepaper-1117-v02.pdf>.

**Disposition:** Related to new project; more discussion needed

Karl Weber presented *Additional features needed in RAP*

<http://ieee802.org/1/files/public/docs2017/new-tsn-weber-RAP-structuring-1117-v02.pdf>

**Disposition:** Related to new project; more discussion needed

Christophe Mangin presented *Generic Stream Identification functions: way forward*

<http://ieee802.org/1/files/public/docs2017/new-mangin-generic-stream-id-1117-v00.pdf>

**Disposition:** Proposes new project; more discussions needed

Eric Gray presented *Draft YANG For CFM P802.1Qcx*

<http://www.ieee802.org/1/files/public/docs2017/cx-mansfield-draft-YANG-1117-v01.pdf>

**Disposition:** Related to new project; more discussion needed

### **Wednesday 8 November 2017 5:35 PM-5:45 PM**

An **802.1 TSN TG - 802.24.1 Smart Grid TG joint meeting** was called to order at 5:35 PM. The TSN TG Chair, János Farkas, presided. Craig Gunther wrote the minutes.

Tim Godfrey presented *Update on 802.24 TSN Utility Applications White Paper*

<https://mentor.ieee.org/802.24/dcn/17/24-17-0006-10-sgtg-tsn-utility-applications-white-paper.docx>

**Disposition:** White paper update for information

There was no other business to discuss and the joint meeting was adjourned at 5:45 PM.

### **Thursday 9 November 2017 8:00 AM-6:00 PM**

Call to order: 9 November 2017, 8:00 AM

János Farkas projected *Joint IEC - 802.1 work on TSN Profile for Industry Automation*

<http://www.ieee802.org/1/files/public/docs2017/admin-haasz-iec-joint-development-1117-v1.pdf>.

Glenn Parsons then discussed the *IEC/IEEE JWG proposal* <https://mentor.ieee.org/802-ec/dcn/17/ec-17-0169-00-INTL-iec-ieee-jwg-proposal.pdf>.

**Straw poll:** Glenn Parsons conducted a straw poll on "Who is interested in the development of a profile *TSN for Industrial Networks?*". 33 individuals (among 46 in the room) voted YES.

János Farkas continued by presenting an initial draft PAR in

<http://ieee802.org/1/files/public/docs2017/P60802-farkas-draft-PAR-1117-v01.pdf>, and CSD in <http://ieee802.org/1/files/public/docs2017/P60802-farkas-draft-CSD-1117-v01.pdf>.

- It was noted that November 20-22, 2017 in Arlington there will be an IEC meeting and Ludwig Winkel, the IEC chair, invited interested 802.1 participants to attend.

**Disposition:** Proposes new project; more discussion needed

John Messenger, P802.1Q-Rev editor, continued the P802.1Q-Rev/D2.0 ballot comment resolution from Tuesday.

Jessy Rouyer presented the liaison responses in:

- <http://www.ieee802.org/1/files/public/docs2017/liaison-response-BBF-84-1117-v01.pdf>
- <http://www.ieee802.org/1/files/public/docs2017/liaison-response-ITU-T-SG15-LS68-1117-v01.pdf>

**Disposition:** See slides 50 and 51 in

<http://www.ieee802.org/1/files/public/minutes/2017-11-closing-plenary-slides.pdf>

Geoff Garner, P802.1AS-Rev editor, presented *P802.1AS-Rev with 802.11 members: Status of 802.1AS-Rev/D5.1 and Questions on Several Items Needing Resolution*

<http://www.ieee802.org/1/files/public/docs2017/as-garner-802-1as-d5-1-status-and-several-items-needing-resolution-1117-v01.pdf>

**Disposition:** Editor's presentation of open items related to ongoing project

Geoff Garner presented the following liaison response

<http://www.ieee802.org/1/files/public/docs2017/liaison-WFA-1117-v01.pdf>

**Disposition:** See slide 54 in

<http://www.ieee802.org/1/files/public/minutes/2017-11-closing-plenary-slides.pdf>

Stephen Haddock, P802.1AX-Rev editor, presented *802.1AX- Link Aggregation: Editor's Report: November 2017*

<http://www.ieee802.org/1/files/public/docs2017/ax-rev-haddock-editors-report-1117-v1.pdf>

**Disposition:** Editor's update on ongoing project

János Farkas led the review of TSN TG motions (as finalized starting on slide 40 in

<http://www.ieee802.org/1/files/public/minutes/2017-11-closing-plenary-slides.pdf>) and outgoing TSN TG liaisons:

- <http://www.ieee802.org/1/files/public/docs2017/liaison-response-NGMN-RAN-functional-split-1117-v01.pdf>
- <http://www.ieee802.org/1/files/public/docs2017/liaison-response-ETG-1117-v01.pdf>
- <http://www.ieee802.org/1/files/public/docs2017/liaison-response-PI-1117-v01.pdf>

**Disposition:** Motions and outgoing liaisons reviewed

Jordon Woods presented Switch latency in industrial applications

<http://www.ieee802.org/1/files/public/docs2017/new-woods-swth-latency-1117-v03.pdf>

**Disposition:** Proposes new project; more discussion needed

### **Friday 10 November 2017 8:00 AM-10:00 AM**

Call to order: 10 November 2017, 8:00 AM

Norman Finn presented PAR and CSD proposals for *Quality of Service Provision for Non-Bridges* in <http://www.ieee802.org/1/files/public/docs2017/new-finn-non-bridge-queuing-PAR-1117-v03.pdf>, and in <http://www.ieee802.org/1/files/public/docs2017/new-finn-non-bridge-queuing-CSD-1117-v02.pdf>

**Disposition:** Proposes new project; more discussion needed

Tongtong Wang presented *Flow Aggregation in TSN*

<http://ieee802.org/1/files/public/docs2017/new-wangtt-TSN-flow-aggregation-1117-v02.pdf>

**Disposition:** Related to new subject; more discussion needed

## 5 802.1-802.15 joint meeting

Call to order: 7 November 2017 6:30 PM

802.1 and 802.15 held a joint meeting to discuss P802.1ACct (Media Access Control (MAC) Service Definition: Amendment Support for IEEE Std 802.15.3). The 802.1 Chair, Glenn Parsons, presided. The 802.1 Recording Secretary, Jessy Rouyer, wrote the minutes.

The 802.1 Chair:

- Made the Call for Potentially Essential Patents based on presentation of Slide #3 of the IEEE-SA PatCom Patent Slides for Standards Development Meetings  
<https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.pdf>
  - There were no responses to the call prior to the end of the joint meeting.
- Introduced the agenda that comprised only discussion of P802.1ACct progress.
  - The agenda was approved.
- Noted that 802.1 proposes to have a motion to start TG or WG ballot on P802.1ACct after this meeting (depending on discussion of how much content is to be added to 802.1AC), that all 802.15 voting members would be ex-officio in this WG ballot (i.e., only the votes of 802.15 voting members who vote would count in this WG ballot so that 802.15 voting members who do not vote do not affect the ballot's quorum), and that anyone could vote in the TG ballot.

James Gilb presented *Contribution for 802.1ACct* <https://mentor.ieee.org/802.15/dcn/17/15-17-0633-00-0000-contribution-for-802-1acct.pdf>.

- Based on discussion, the 802.1 Chair suggested that a motion be prepared for a TG ballot, and noted that the corresponding comment resolution could be in January 2018, followed by WG ballot in March 2018, Sponsor ballot in July 2018, and approval to proceed to RevCom in November 2018.
  - A draft motion for 802.1 to “Authorize the editor of P802.1ACct, James Gilb, to generate a draft for Task Group balloting.” was shown.
- An announcement will be made in 802.15 regarding this TG ballot following final motion approval in the 802.1 WG closing plenary meeting.

There was no other business to discuss and the joint meeting adjourned at 6:55 PM.

## 6 Midweek Plenary Meeting

Call to order: 8 November 2017, 1:30 PM.

The 802.1 Chair, Glenn Parsons, presided.

The 802.1 Recording Secretary, Jessy Rouyer, wrote the minutes.

The Chair presented the *Midweek Agenda* slides available at <http://www.ieee802.org/1/files/public/minutes/2017-11-midweek-plenary-slides.pdf>.

During this presentation, the Chair:

- Showed the agenda on slide 2. The agenda was approved.
- Showed slides 3 through 7 (reproducing slides 0 through 4 of the IEEE-SA PatCom Patent Slides for Standards Development Meetings, separately available at <http://standards.ieee.org/about/sasb/patcom/materials.html>):
  - The Chair made the “Call for Potentially Essential Patents”. There were no responses to the call.
- Reminded participants in IEEE 802 meetings that they are participating on an individual basis (slide 8).
- Showed the list of 802.1 voters (slide 9).
- Reviewed the schedule for future interim meetings (slide 10), which remained unchanged from the opening plenary except for:
  - January 14-18, 2019 in Japan
    - Hajime Koto presented <http://www.ieee802.org/1/files/public/docs2017/admin-koto-proposal-of-IEEE802.1-Interim-meeting-1117.pdf>.
  - May 20-24, 2019 in North America (exact location to be defined)
  - September 2019
    - Potential ADVA Optical Networking proposal.
    - The Chair conducted a straw poll on “Who would attend a meeting in Edinburgh, UK in September 2019?”. The result was 46 participants.
- Indicated a new incoming liaison was received, to be handled by the DCB TG (slide 11)
- Provided his anticipation of next actions with respect to projects in the current WG’s workload asking editors to review for correctness (slide 12).
- Showed an updated 802.1 plenary schedule/agenda for this meeting (slide 13).
- Introduced material then led a discussion on the use of random MAC addresses (slide 14).
  - Stephen McCann presented *P802.11aq Pre-Association Service Discovery Summary* <https://mentor.ieee.org/802.11/dcn/17/11-17-1565-02-00aq-pre-association-summary.ppt>. It was agreed to continue the discussion in the 802.11 TG aq meeting.
- Introduced material then led a discussion on YANG for EtherTypes (slide 15)
  - Marc Holness presented *IEEE YANG Modeling of EtherTypes* <http://www.ieee802.org/1/files/public/docs2017/yang-mholness-YANG-ethertype-1117-v01.pdf>. It was agreed 802.1’s involvement would be limited to providing the RAC/RA with the script as presented to produce an alternative EtherType list that is a YANG module and can be made available on the RA website. Any other aspect, such as raising the issue of unregistered EtherTypes, would be addressed by the RAC or RA, the Chair committing to discuss such aspects with the RAC or RA and report to 802.1. It was noted a joint IEEE 802/IETF coordination meeting on YANG the Tuesday immediately following this plenary meeting (at 8:00 AM Singapore time) would focus on YANG. It was also noted that “EtherTypes with friendly names” should not be discussed.

- Provided background for the motions for consent agenda ([EC-16-183](#)) requiring EC action ([EC-16-170](#)) (slide 16).
- Conducted votes on the following motions (slides 17-40).
  - PARs to NesCom
    - Motion
      - Approve forwarding P802.1CBcv PAR documentation in <http://www.ieee802.org/1/files/public/docs2017/cv-draft-PAR-1017-v03.pdf> to NesCom
      - Approve CSD documentation in <http://www.ieee802.org/1/files/public/docs2017/cv-draft-CSD-0917-v01.pdf>
      - In the WG (y/n/a): 24, 0,3
      - Proposed: Stephan Kehrer      Second: Norm Finn
        - The Chair noted that no comments had been received from other WGs and that several EC members have indicated they would vote against this motion for process reasons.
    - Drafts to Sponsor ballot
      - Motion
        - Approve sending P802.1Qcc D2.0 to Sponsor Ballot
        - Confirm the CSD for P802.1Qcc in <http://www.ieee802.org/1/files/public/docs2013/new-p802-1qcc-draft-5c-0513-v2.pdf>
        - P802.1Qcc D1.6 had 100% approval at the end of the last WG recirculation ballot
        - In the WG (y/n/a): 31, 0 ,1
        - Proposed: János Farkas    Second: John Messenger
      - Motion
        - Approve sending P802.1Qcp D2.0 to Sponsor Ballot
        - Confirm the CSD for P802.1Qcp in <https://mentor.ieee.org/802-ec/dcn/17/ec-17-0157-00-ACSD-802-1qcp.docx>
        - P802.1Qcp D1.4 had 100% approval at the end of the last WG recirculation ballot
        - In the WG (y/n/a): 33, 0, 0
        - Proposed: János Farkas    Second: John Messenger
    - Liaisons
      - Motion
        - Approve sending the liaison response on LLC Encapsulation EtherType to IETF IS-IS WG
        - <http://www.ieee802.org/1/files/public/docs2017/liaison-IETF-llc-encap-0717-v03.pdf>
        - Proposed: John Messenger    Second: Jessy Rouyer
        - For            32    Against\_0            Abstain            0
    - JTC1 SC6 PSDO items
      - Motion
        - Approve liaison of the following comment responses to ISO/IEC JTC1/SC6 under the PSDO agreement:
          - IEEE 802.1AEcg: <http://www.ieee802.org/1/files/public/docs2017/aecg-seaman-iso-pre-ballot-responses-1117v01.txt>
        - Proposed: Mick Seaman    Second: John Messenger
        - For            32    Against\_0            Abstain            1

- Motion
  - Approve submission of the following project(s) to ISO/IEC JTC1/SC6 for adoption under the PSDO agreement
    - 802c-2017
  - Proposed: John Messenger Second: Jessy Rouyer
  - For 32 Against 0\_Abstain 1
- Motion
  - Approve liaison of the following draft(s) to ISO/IEC JTC1/SC6 for information under the PSDO agreement
    - P802.1CM D2.0
  - Proposed: John Messenger Second: Jessy Rouyer
  - For 34 Against 0\_Abstain 0
- Midweek motions
  - For WG internal business
  - Motion: Plenary
    - IEEE 802.1 WG approves to hold three plenary sessions at the March 2018 IEEE 802 plenary as follows:
      - Opening plenary – Monday AM2
      - Midweek plenary – Wednesday PM1
      - Closing plenary – Friday AM2
    - Proposed: Eric Gray Seconded: Janos Farkas
    - Approved by acclamation
  - Motion: interim
    - 802.1 WG approves changing the dates of the interim meeting in September 2018 as follows:
      - September 10-14, 2018
    - The meeting fee range will be increased by US\$100.
    - Proposed: Mickaël Fontaine Second: John Messenger
    - Approved: 35 – 0 – 3
  - Motion: interim
    - 802.1 WG approves an interim meeting hosted by Ethernet Alliance from May 20-24, 2019 as described in:
      - [http://www.ieee802.org/1/files/public/docs2017/admin-dambrosia-EA\\_OfferToHost\\_May2019\\_1017-v2.pdf](http://www.ieee802.org/1/files/public/docs2017/admin-dambrosia-EA_OfferToHost_May2019_1017-v2.pdf)
    - Proposed: Eric Gray Second: Jessy Rouyer
    - Approved by acclamation
  - Motion: Conference Calls
    - Approve virtual conferences Monthly on the last Wednesday of every month from 9AM (US-Eastern) to 10AM (US- Eastern) to facilitate IEEE 802 YANG editor coordination.
    - Access information is <http://join.me/ieee802.1> and will also be posted on the <http://www.ieee802.org/1> page and will be updated as necessary.
    - Proposed: Marc Holness
    - Second: John Messenger
    - Approved by acclamation

- Motion: Conference Calls
  - Authorize Maintenance TG to hold teleconferences on 16th January and 27th February 2018 at 11am EST if necessary. Access information will be posted to the 802.1 reflector in advance.
  - Proposed: John Messenger Second: Jessy Rouyer
  - Approved by acclamation
- Motion: Conference Calls
  - The TSN TG will continue to have virtual conferences weekly on Mondays from 8AM (US-Pacific) to 10AM (US- Pacific).
  - Access information is posted on the <http://www.ieee802.org/1/pages/tsn.html> page and will be updated as necessary.
  - Agenda will be announced on the 802.1 email reflector by the Friday before.
  - Proposed: János Farkas
  - Second: Don Pannell
  - Approved by acclamation
- Motion: plenary pre-meeting
  - 802.1 resolves to hold pre-meeting(s) on the Monday morning of the March 2018 Plenary session for TSN.
  - Proposed: János Farkas
  - Second: Craig Gunther
  - Approved by acclamation
- Motion: Maintenance TG ballot
  - Authorize the editor of P802.1ACct “Media Access Control (MAC) Service Definition Amendment Support for IEEE Std 802.15.3”, James Gilb, to generate drafts and conduct Task Group balloting.
  - Proposed: John Messenger Second: Jessy Rouyer
  - For            29\_\_Against\_0            Abstain            0

There was no other business to discuss (slide 41) and the midweek plenary meeting was adjourned at 3:35 PM.

## 7 New 802.1 website

The new 802.1 Wordpress-based website at <http://1.ieee802.org> was introduced to the 802.1 WG during the morning break on 10 November 2017.

## 8 Closing Plenary Meeting

Call to order: 10 November 2017, 10:30 AM.

The 802.1 Chair, Glenn Parsons, presided.

The 802.1 Recording Secretary, Jessy Rouyer, wrote the minutes.

The Chair presented the *802.1 Closing Plenary* slides available at <http://www.ieee802.org/1/files/public/minutes/2017-11-closing-plenary-slides.pdf>.

During this presentation, the Chair:

- Introduced the agenda on slide 2, which was approved.
- Showed slides 3 through 7 (reproducing slides 0 through 4 of the IEEE-SA PatCom Patent Slides for Standards Development Meetings, separately available at <http://standards.ieee.org/about/sasb/patcom/materials.html>):
  - The Chair made the “Call for Potentially Essential Patents”. There were no responses to the call.
- Reminded participants in IEEE 802 meetings that they are participating on an individual basis (slide 8).
- Showed the list of 802.1 Officers (slide 9) and provided 802.1 website information (slide 10).
- Reviewed the list of 802.1 voters (slide 11), including information about individuals who have gained (slide 12), could gain (slide 13), will lose (slides 14-15) 802.1 voting membership.
- Reviewed the schedule for future 802.1 interim meetings, which remained unchanged from the midweek plenary (except for additional information regarding the September 10-14, 2018 interim: <http://www.ieee802.org/1/files/public/docs2017/admin-fontaine-oslo-interim-1117-v01.pdf>) (slide 16), and that for future 802.1 plenary meetings, which remained unchanged from the opening plenary (slide 17).
  - The Chair noted there is going to be a proposal for a plenary meeting in November 2020 in Bangkok, Thailand, following up a July 2020 plenary meeting in Vancouver, BC, Canada, the latter venue offered a venue discount if it is chosen again in July 2022.
- Reviewed the current WG’s work load (slide 18).
- Showed the 802.1 plenary schedule/agenda for this meeting (slide 19).
- Introduced information about the reports on 802 Standing Committees and on the 802 TF (slide 20):
  - Patricia Thaler reported on the IETF SC:
    - Joint coordination meeting on YANG the Tuesday immediately following this plenary meeting at 8 AM Singapore time. Patricia Thaler posted the details November 10 on the YANGsters mailing list. <https://www.iab.org/activities/joint-activities/iab-ieee-coordination/>
  - John Messenger reported on the JTC1 SC:
    - Recommendations were made to withdraw outdated TR8802-1:2001, ISO/IEC 15802-1 (MAC Service Definition) and 15802-3 (MAC Bridges).
    - The SC6 Security adhoc must complete its work by about August 2018. It can identify issues but not how to fix them. Participants are national bodies and liaison organizations (including IEEE 802). The next SC6 meeting will be in Tokyo, Japan in August 2018.
    - <https://mentor.ieee.org/802.11/dcn/17/11-17-1550-05-0jtc-jtc1-sc-agenda-for-orlando-nov-2017.pptx>
  - The Chair reported on the ITU SC:
    - Major standards bodies met at GSC-21 (<https://gsc.ieee.org/>) to discuss working methods and hot topics (artificial intelligence and smart cities)
    - <https://mentor.ieee.org/802-ec/dcn/17/ec-17-0205-00-INTL-itu-standing-committee-agenda-november-2017.pdf>
  - The Chair reported on 802 TF:
    - Two topics of interest: open source, and myProject
    - <https://mentor.ieee.org/802-ec/dcn/17/ec-17-0212-00-00EC-ieee-802-november-2017-task-force-notes.pdf>
- Reported in detail on the following 802 TF topics: IEEE Open Source offering (slide 21) and myProject status (slide 22).



- Requested the 802.1 TG Chairs to provide reports on the activities of their TGs (slide 23; see individual TG minutes above for details):
  - Mick Seaman gave an oral update of Security TG progress (slide 24).
  - Patricia Thaler presented DCB TG progress (slide 25).
  - János Farkas presented TSN TG progress (slide 26).
  - Maximilian Riegel presented OmniRAN TG progress (slides 27-28).
  - John Messenger presented Maintenance TG progress (slides 29-33)
- Provided a summary of progress in the “IEEE 802 network enhancements for the next decade” Industry Connections activity (slide 34):
  - Current topics: factory wired & wireless networking, data center lossless networks
  - <https://mentor.ieee.org/omniran/dcn/16/omniran-16-0084-06-5gaa-draft-icaid-for-5g-sc-action-a.docx>
  - <https://mentor.ieee.org/802.1/dcn/17/1-17-0005-02-ICne-november-2017-agenda.pdf>
- Asked for draft outgoing liaisons (slide 37), most of which were in response to incoming liaisons (slides 35-36), to be reviewed.
  - The TSN TG Chair introduced outgoing liaisons prepared in the TSN TG.
- Introduced EC regular motions (slide 38) then conducted votes on the following motions (slides 39-79).
  - Drafts to Sponsor ballot
    - Motion
      - Conditionally approve sending P802.1CM D2.0 to Sponsor Ballot
      - Confirm the CSD for P802.1CM in <https://mentor.ieee.org/802-ec/dcn/15/ec-15-0073-00-ACSD-802-1cm.pdf>
      - P802.1CM D1.0 had 84 % approval at the end of the last WG ballot
      - In the WG (y/n/a): 27, 0, 2
      - Proposed: János Farkas Second: David Chen
    - Motion
      - Conditionally approve sending P802.1Qcn\* to Sponsor Ballot
      - Confirm the CSD for P802.1Qcn in <https://mentor.ieee.org/802-ec/dcn/15/ec-15-0072-00-ACSD-802-1qcn.pdf>
      - P802.1Qcn D1.0 had 100% approval at the end of the last WG ballot
      - In the WG (y/n/a): 32, 0, 0
      - Proposed: Pat Thaler Second:
      - \* Note that a change of designation to P802.1Qcy has been requested because of confusion of Qcn with the acronym for Quantized Congestion Notification (QCN).
  - Liaisons
    - Motion
      - Approve liaison of the following response to Next Generation Mobile Networks
      - <http://www.ieee802.org/1/files/public/docs2017/liaison-response-NGMN-RAN-functional-split-1117-v01.pdf>
      - In the WG (y/n/a): 30, 0, 0
      - Proposed: János Farkas Second: Karl Weber
    - Motion
      - Approve liaison of the following response to Broadband Forum
      - <http://www.ieee802.org/1/files/public/docs2017/liaison-response-BBF-84-1117-v01.pdf>
      - In the WG (y/n/a): 30, 0, 0
      - Proposed: Jessy Rouyer Second: János Farkas

- Motion
  - Approve liaison of the following response (to LS 68) to ITU-T SG15
  - <http://www.ieee802.org/1/files/public/docs2017/liaison-response-ITU-T-SG15-LS68-1117-v01.pdf>
  - In the WG (y/n/a): 30, 0, 0
  - Proposed: Jessy Rouyer Second: János Farkas
- It was agreed that the 802.1 Chair is to prepare “liaison organization cover letters” to accompany 802.1 drafts being shared with other organizations marking all for “Technical coordination”.
- Motion.
  - Approve liaison of the following response to EtherCAT Technology Group
  - <http://www.ieee802.org/1/files/public/docs2017/liaison-response-ETG-1117-v01.pdf>
  - In the WG (y/n/a): 32, 0, 0
  - Proposed: Karl Weber Second: János Farkas
- Motion
  - Approve liaison of the following response to PROFIBUS and PROFINET International
  - <http://www.ieee802.org/1/files/public/docs2017/liaison-response-PI-1117-v01.pdf>
  - In the WG (y/n/a): 32, 0, 0
  - Proposed: John Messenger Second: János Farkas
- Motion
  - Approve liaison of the following letter to Wi-Fi Alliance
  - <http://www.ieee802.org/1/files/public/docs2017/liaison-WFA-1117-v01.pdf>
  - In the WG (y/n/a): 30, 0, 1
  - Proposed: John Messenger Second: János Farkas
- Liaisons (ME)
  - Motion – liaison from IEEE 802. The DCB TG Chair introduced the outgoing liaison to WBA corresponding to this motion.
    - Approve <https://mentor.ieee.org/802-ec/dcn/17/ec-17-0208-04-00EC-draft-response-to-wba-liaison.docx> as communication to Wireless Broadband Alliance granting the IEEE LMSC chair (or his delegate) editorial license.
    - This approval is under LMSC OM “Procedure for coordination with other standards bodies”
    - In the WG (y/n/a): 28, 0, 3
    - Proposed: Pat Thaler Second: Max Riegel
- Administrative
  - Motion
    - 802.1 approves the July 2017 (Plenary) and September 2017 (Interim) minutes: <http://ieee802.org/1/files/public/minutes/2017-07-minutes-v2.pdf>  
<http://ieee802.org/1/files/public/minutes/2017-09-minutes-v1.pdf>
    - Proposed: Jessy Rouyer Seconded: John Messenger
    - Approved by acclamation

- Maintenance
  - Motion
    - Authorize the editor of 802.1AC-2016/Cor-1 “Media Access Control (MAC) Service Definition – Corrigendum 1: Logical Link Control (LLC) Encapsulation EtherType”, John Messenger, to generate drafts for and conduct Working Group balloting.
    - Proposed: Janos Farkas Second: Jessy Rouyer
    - For 29\_\_Against 0\_Abstain 0
- Security
  - Motion
    - 802.1 authorizes the Security Task Group to hold teleconferences to progress P802.1AR- Rev, P802.1AE-Rev, P802.1Xck, P802E and task group matters arising:
    - Dates/times to be announced subject to notice of at least 10 days to the 802.1 email exploder
    - Proposed: James McIntosh Second: John Messenger
    - For: 30 Against: 0 Abstain: 0
- OmniRAN
  - Motion: P802.1CF Working Group Ballot
    - 802.1 authorizes Walter Pienciak, the editor of P802.1CF, to prepare drafts for and conduct Working Group balloting.
    - Moved: Max Riegel
    - Second: Hajime Koto
    - For: 26 Against: 0 Abstain: 0
  - Motion: Conference calls
    - Approve OmniRAN TG conference calls:
      - Nov 28th , 09:30 AM ET, 90mins
      - Dec 5th, 09:30 AM ET, 90mins
      - Dec 12th, 09:30 AM ET, 90mins
      - Between the January 2018 interim and the March 2018 plenary with at least 10 days prior notice to the 802.1 mailing list.
        - Agenda and call-in details will be announced at least 10 days prior on the 802.1 mailing list and be made available on <http://1.ieee802.org/omniran/>
    - Moved: Max Riegel,
    - Second: Walter Pienciak
    - Approved by acclamation
- DCB
  - Motion: PAR and CSD development
    - 802.1 authorizes two conference calls (for preparation) and the January 2018 Interim to develop PAR and CSD for pre-circulation to the EC for an amendment to IEEE 802.1Q to meet the objectives of Congestion Isolation as described in the DCB TG in contributions [new-dcb-congdon-congestion-isolation-1117-v01.pdf](#), [new-dcb-congdon-congestion-project-1117-v01.pdf](#)
    - Proposed: Pat Thaler
    - Second: Yolanda Yu
    - Approved (y/n/a): 30, 0, 0

- Motion: Conference Calls
  - Approve two virtual conferences for one hour to develop PAR and CSD for Congestion Isolation:
    - Tuesday, Dec 12th, 5PM Pacific
    - Tuesday Jan 9th 5PM Pacific
  - Access information will be announced on the 802.1 email reflector by the Friday before.
  - Proposed: Pat Thaler
  - Second: Yolanda Yu
  - Approved (y/n/a): 29, 0, 0
- Motion: Conference Call
  - Approve virtual conference for two hours to process Working Group recirculation ballot comments on 802.1Qcn:
    - Tuesday Jan 2th 5PM Pacific
  - Access information will be announced on the 802.1 email reflector by the Friday before.
  - Proposed: Pat Thaler
  - Second: Paul Bottorff
  - Approved (y/n/a): 29, 0, 0
- TSN
  - Motion - PAR
    - 802.1 authorizes the January 2018 Interim to generate PAR and CSD for pre-circulation to the EC for an amendment to IEEE 802.1CB to specify YANG and MIB.
    - Proposed: Stephan Kehrer
    - Second: Norman Finn
    - In the WG (y/n/a): 29, 0, 0
  - Motion - PAR
    - 802.1 authorizes the January 2018 Interim to generate PAR and CSD for pre-circulation to the EC for an amendment to IEEE 802.1CB to specify additional stream identification methods.
    - Proposed: Christophe Mangin
    - Second: Jordon Woods
    - In the WG (y/n/a): 24, 0, 3
  - Motion - PAR
    - 802.1 authorizes the January 2018 Interim to generate PAR and CSD for a standard specifying TSN profiles for Industrial Automation for pre-circulation to the EC. The standard will be developed by an IEC/IEEE JWG.
    - Proposed: János Farkas
    - Second: John Messenger
    - In the WG (y/n/a): 28, 0, 2
  - Motion - WG ballot
    - 802.1 authorizes Stephen Haddock and Jessy Rouyer, the Editors of P802.1AX-Rev, Link Aggregation – Revision, to prepare drafts for and conduct Working Group balloting after successful completion of Task Group balloting.
    - Proposed: Stephen Haddock
    - Second: János Farkas
    - In the WG (y/n/a): 30, 0, 0

- Motion - TG ballot
  - 802.1 authorizes Scott Mansfield, the Editor of P802.1ABcu Station and Media Access Control Connectivity Discovery Amendment: YANG Data Model to prepare drafts for and conduct Task Group balloting.
  - Proposed: János Farkas
  - Second: Jessy Rouyer
  - In the WG (y/n/a): 27, 0, 0
- Motion - TG ballot
  - 802.1 authorizes Marina Gutierrez, the Editor of P802.1Qcw Bridges and Bridged Networks Amendment: YANG Data Models for Scheduled Traffic, Frame Preemption, and Per-Stream Filtering and Policing to prepare drafts for and conduct Task Group balloting.
  - Proposed: János Farkas
  - Second: Stephan Kehrer
  - In the WG (y/n/a): 26, 0, 0
- Motion - TG ballot
  - 802.1 authorizes Marc Holness, the Editor of P802.1Qcx Bridges and Bridged Networks Amendment: YANG Data Model for Connectivity Fault Management to prepare drafts for and conduct Task Group balloting.
  - Proposed: János Farkas
  - Second: Jessy Rouyer
  - In the WG (y/n/a): 29, 0, 0
- Motion - TG ballot
  - 802.1 authorizes the TSN Task Group to hold a teleconference on a proposed TSN Profile for Industrial Automation with participation from IEC SC65C/MT9 on February 20, 2018 from 7AM (US-Pacific) to 9AM (US- Pacific).
  - Access information is posted on the <http://www.ieee802.org/1/pages/tsn.html> page and will be updated as necessary.
  - Agenda will be announced on the 802.1 email reflector at least 10 days before the call.
  - Proposed: János Farkas
  - Second: Norm Finn
  - In the WG (y/n/a): 28, 0, 0
- Motion
  - 802.1 authorizes the January 2018 Interim to generate PAR and CSD for a standard specifying Quality of Service Provision for Non-Bridges for pre-circulation to the EC.
  - Proposed: Norman Finn
  - Second: Paul Bottorff
  - In the WG (y/n/a): 21, 0, 10
- John Messenger provided an oral update regarding the September 2019 interim meeting to be tentatively held in Edinburgh, UK, noting that an attempt will be made to additionally host in collocation the IEEE 802.3 WG interim meeting.
- The Chair invited reflections from 802.1 participants on whether the 5-day plenary format is a good format. A decision to continue or not will be made at the next plenary.

There was no other business to discuss and the closing plenary meeting was adjourned at 12:00 PM.

## **9 Next meeting**

22-26 January 2018, Geneva, Switzerland