











## 2 802.1 Officers and Leadership

- Chair: Glenn Parsons
- Vice-Chair and Recording Secretary: Jessy Rouyer
- Executive Secretary: Stephan Kehrer
- Liaison Secretary: Karen Randall
- Maintenance TG Chair: Paul Congdon
- Security TG Chair: Mick Seaman
  - Security TG Vice-Chair: Karen Randall
- TSN TG Chair: János Farkas
  - TSN TG Vice-Chair: Craig Gunther
  - TSN TG Secretary: Christian Boiger
  - IEC/IEEE 60802 Joint Project Chair: Ludwig Winkel
  - IEC/IEEE 60802 Joint Project Secretary: Josef Dorr
  - IEEE P802.1DP/SAE AS6675 joint project co-Chairs: Abdul Jabbar & János Farkas
  - IEEE P802.1DP/SAE AS6675 joint project Secretary: Marina Gutiérrez
- Nendica Chair: Roger Marks
- YANGsters Chair: Scott Mansfield
  - YANGsters Vice-Chair and Secretary: Stephan Kehrer
- Maintenance of Email exploder: Mark Hantel and Hal Keen
- Maintenance of website: Roger Marks

## 3 Opening Plenary Meeting

The table in section 1 reflects the attendance and affiliation of all participants in all 802.1 WG and subgroup meetings held in this session.

**Call to order** Nov 8, 2021 at 9:00 ET by the Chair who presided. The Recording Secretary wrote the minutes.

The Chair presented “Opening Plenary November 2021” finalized as <http://www.ieee802.org/1/files/public/minutes/2021-11-opening-plenary-slides.pdf>.

During this presentation, the Chair:

- Introduced the agendas on slide 2 that were tacitly approved.
- Presented slide 3 thereby providing the following information:
  - IEEE SA’s copyright policy is described in Clause 7 of the IEEE SA Standards Board Bylaws and Clause 6.1 of the IEEE SA Standards Board Operations Manual;
  - Any material submitted during standards development, whether verbal, recorded, or in written form, is a Contribution and shall comply with the IEEE SA Copyright Policy.
- Showed IEEE SA Copyright Policy slides 4 and 5.
- Showed slides 6 through 10 (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 including:
  - Instructions for the WG Chair;
  - Participants have a duty to inform the IEEE;
  - Ways to inform IEEE;
  - Other guidelines for IEEE Working Group meetings; and

- Patent-related information.
- Advised WG attendees that:
  - 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 IEEE is not aware. Additionally, neither 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", i.e. provided 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.
- Presented slides 11 through 13 reproducing the IEEE SA slides 1 through 3 approved by SASB in June 2019 regarding IEEE Codes of Ethics and Conduct, participation in the "individual process", and dominance, thereby conveying that:
  - Participant behavior in IEEE-SA activities is guided by the IEEE Codes of Ethics & Conduct (slide 11);
  - Participants in the IEEE-SA "individual process" shall act independently of others, including employers (slide 12); and
  - IEEE-SA standards activities shall allow the fair & equitable consideration of all viewpoints (slide 13).
- Reviewed meeting decorum, including the policies on public reporting, and on photography or recording (slide 14);
  - The Chair called for any members of the press (i.e., anyone reporting publicly on this meeting) to announce their presence.
    - Marina Gutiérrez answered the call due to a blogging activity.
- Asked participants to record attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker (slide 15).
- Provided electronic meeting guidelines (slide 16).
- Made subgroup announcements (slide 17) thereby reminding subgroup Chairs of their obligation to:
  - Remind participant at the start of the first subgroup meeting that the meeting is subject to the policies in "MEETING INTRODUCTION" presentations made available beforehand (as announced in the opening plenary meeting) and, in the case of a Task Group (TG), to make the "Call for Potentially Essential Patents" and minute any responses to it;
  - After any recess, announce that the meeting remains subject to the policies as read and displayed in the opening plenary meeting; and
  - At meeting start and after any recess, ask participants to record attendance in IMAT and, if unable to do so, to promptly provide their affiliation to the minute taker.
- Reminded participants of the various plenary session registration fees applying and attendant registration details (slide 18).
- Provided general information regarding meeting contributions, minutes, schedule for all Working Groups, website (slide 19).
- Introduced 802.1 officers and leadership (slide 20).
- Discussed 802.1 WG Process (slide 21) including the "New work" process as previously introduced and leveraging Nendica to vet all new 802.1 work.

- Provided an update on current joint development procedures (slide 22).
  - Ludwig Winkel provided an overview of the changes in the joint development procedure for the IEEE/IEC 60802 joint project.
- Reminded 802.1 voting members of their obligations regarding declaring affiliation(s) and employer(s) (slide 23), requesting and retaining voting membership (slide 24), and responding to WG ballots and ePolls as well as regarding the consequences of not responding to WG ballots and ePolls (slide 25).
- Reviewed the list of 802.1 voters (slide 26), including information about individuals who may gain (slides 27 and 28), will lose (slide 29), may lose (slide 30) 802.1 voting membership.
- Reminded individual participants of 802.11 reciprocal credit, which was continued at this session (slide 31).
- Reviewed the schedule for future interim sessions and those changed to electronic due to COVID-19 (slide 32):
  - May 18-22, 2020
    - Pasadena, CA, USA hosted by Ethernet Alliance
    - Changed to electronic due to COVID-19
  - September 21-25, 2020
    - Stuttgart, DE hosted by Hirschmann
    - Changed to electronic due to COVID-19
  - January 2021
    - Changed to electronic due to COVID-19
  - May 3-7, 2021
    - Santa Fe, NM, USA hosted by Analog Devices
    - Changed to electronic due to COVID-19
  - September 20-24, 2021
    - Stuttgart, DE hosted by Hirschmann
    - Changed to electronic due to COVID-19
  - January 17-21, 2022
    - Changed to electronic due to COVID-19
  - May 23-27, 2022
    - Santa Fe, NM, USA hosted by Analog Devices
    - Jordon Woods provided a verbal update on the proposal in “IEEE 802.1 Interim Meeting Proposal Santa Fe, New Mexico May 2022”  
<https://www.ieee802.org/1/files/public/docs2021/admin-woods-May2022-interim-proposal-0720-v02.pdf>
  - September 2022 (proposal in Geneva, CH)
    - 12-16 Sept 2022: co-located 802.1/802.3 meetings
    - 17 Sept 2022 (Saturday): Joint ITU-IEEE workshop
    - 19-30 Sept. 2022: ITU-T SG15
    - The Chair noted this is tentative on ITU-T restarting in-person meetings.
- Reviewed the schedule for future plenary sessions and those cancelled or changed to electronic due to COVID-19 (slide 33):
  - March 15-20, 2020 – Atlanta, GA, USA
    - Hilton Atlanta (cancelled due to COVID-19)
  - July 12-17, 2020 – Montreal, QC, Canada
    - Sheraton Montreal (changed to electronic due to COVID-19)
  - November 8-13, 2020 – Bangkok, Thailand
    - Bangkok Marriott Marquis Queen’s Park (changed to electronic due to COVID-19)
  - March 14-19, 2021 – Denver, CO, USA
    - Hyatt Regency Denver (changed to electronic due to COVID-19)



- July 11-16, 2021 – Madrid, Spain
  - Marriott Madrid Auditorium (changed to electronic due to COVID-19)
- November 14-19, 2021 – Vancouver, BC, Canada
  - Hyatt Regency Vancouver
- March 13-18, 2022 – Orlando, FL, USA
  - Hilton Orlando Lake Buena Vista
- July 10-15, 2022 – Montreal, QC, Canada
  - Sheraton Le Centre Montreal
- November 13-18, 2022 – Bangkok, Thailand
  - Marriott Marquis Queen's Park
- Summarized LMSC items to consider for in-person sessions (slide 34).
- Reviewed the list of dates by which the decision to hold a future session would have to be made (slide 35).
  - Plenary sessions
    - March 13-18, 2022 – Orlando, FL, USA
      - **Latest possible decision date:** November 2, 2021
    - July 10-15, 2022 – Montreal, QC, Canada
      - **Latest possible decision date:** March/April 2022
  - Interim sessions
    - May 2022, Sante Fe, NM, USA
      - Straw poll
      - Defer hosting confirmation to January 2022
    - September 2022, Geneva, Switzerland
      - Defer hosting approval to March 2022 plenary session
- Conducted the following straw poll (slide 36):
  - Will you be able to attend the May 2022 interim session if it is held only in-person?
    - Yes: 34
    - No: 11
    - Don't Know: 26
- Reviewed the LMSC schedule of EC/WG/TAG meetings to be held during this plenary session (slide 37).
- Reported the following items out of the 802 Executive Committee (EC) plenary session #128 (electronic plenary session #5) (slide 38):
  - Hybrid meetings ad hocs (requesting input)
    - EC mixed mode draft ([EC-21-203](#))
    - Future meeting vision
    - Experiment for closing EC with 802 chair, staff and others at IEEE HQ
  - Coordination with Smart Manufacturing (C/SM)
    - Coordinating LMSC and SMSC to differentiate scopes of IEEE/IEC P60802 and P2971/P2972
    - Study Group recommended to be setup to allow joint discussion
  - 802 Task Force ([EC-21-241](#))
    - Update on tools project (document management and attendance - replacement of Mentor/IMAT)
    - SA funding of FrameMaker licenses
  - 802 Milestone ([EC-21-275](#))
  - Future Venues ([EC-21-265](#))
    - Orlando – Mar 2022 – Decision on Dec 7, 2021

- Treasurer ([EC-21-271](#))
  - 2021 surplus projected at \$30k, reserves now \$900k (\$600k cash, \$300k committed)
  - Penalties for cancelled meetings so far = \$0 -- Mar 2022 penalty greater than reserves
- Introduced material on the LMSC restructuring ad hoc (slide 39) and summarized the outcome of the Nov 3, 2021 802 Next Gen Workshop (slide 40).
- Indicated that 802 LMSC elections take place in March 2022 (slide 41).
  - Individuals wishing to run for elected positions were invited to talk to currently elected individuals for further details.
  - The current 802 Chair, 802.1 Chair and 802.1 Vice Chair are planning to stand for re-election.
- Showed the straw polls planned to be conducted at the closing plenary meeting (slide 42):
  - 1. When do you expect the next in-person 802.1 session will be?
    - March 2022
    - July 2022
    - Nov 2022
    - May 2022
    - Sept 2022
    - 2023 or later
  - 2. If the 2022 March Plenary Session is held in Orlando, Florida as an in-person only session, will you attend?
    - Yes/No
  - 3. If the 2022 March Plenary Session is held in Orlando, Florida as a mixed-mode session, will you attend:
    - Attend In-person
    - Attend Virtually (remotely)
    - Will not attend plenary
- Provided information about public review (slide 43).
- Pointed out the 802.1ASDs PAR and CSD (slide 44) and other 802 PARs, PAR modification, related CSDs (slide 45) that are up for vote or finalization during this IEEE 802 plenary session.
- Discussed the 802.1 technical plenary that is scheduled 14:00-16:00 ET Dec 2, 2021 to address specific technical problems across all 802 and to initially provide wider awareness for the revision of IEEE Std 802 (slide 46).
- Requested that Karen Randall, Liaison Secretary, introduce liaison resources (slide 47), which she did, including pointing to the liaison tracking web page at <https://1.ieee802.org/liasons/liaisontable/>.
- Reviewed, with the Liaison Secretary's support, the set of new and previously-received incoming liaisons to be handled by specific subgroups as listed (slide 48).
- Summarized progress made in the RAC EtherType ad hoc (slide 49) regarding P802f and the consistency of the hexadecimal representation of EtherTypes.
- Listed upcoming meetings for IETF coordination and noted individual presentations on 802.1 at IETF 112 (slide 50).
- Discussed promotion of the work of the WG (slide 51).
- Briefly introduced 802.1 public visibility messaging (slide 52).
- Summarized the various types of IEEE Awards and encouraged nominations (slide 53)
- Provided the anticipation of next actions with respect to projects in the WG's current workload (slide 54).
- Presented the timeline for 802.1Q revisions and amendments (slide 55).

- Showed the 802.1 plenary session electronic meeting schedule for this session, which was tacitly approved (slide 62). The Chair indicate the Vice-Chair would present the 802.1 orientation in a Webex breakout session.
- Listed 802.1 management meetings (slide 63).
- Reminded the Working Group of the logistics orientation to be held Nov 8, 2021 13:30 ET (slide 64).
- Requested that subgroup agendas be presented (slide 65):
  - Paul Congdon, Maintenance TG Chair, presented the agenda on slide 66.
  - Mick Seaman, Security TG Chair, presented the agenda on slide 67.
  - János Farkas, TSN TG Chair, Ludwig Winkel, IEC/IEEE 60802 Joint Project Chair, and Craig Gunther, TSN TG Vice-Chair, presented the agenda on slide 68.
  - Roger Marks, Nendica Chair, presented the agenda on slide 69.
    - The WG Chair requested Roger Marks, Nendica Chair, to provide, which he did, a Nendica status report (slides 56 to 61).
  - Scott Mansfield, YANGsters Chair, presented the agenda on slide 70.
- Called for Any Other Business (slide 71).
  - No further business was discussed in this meeting.

11:13 ET adjournment

## 4 Maintenance Task Group

Between this session and the preceding session, the IEEE 802.1 Maintenance Task Group (TG) held electronic meetings whose minutes are incorporated to these session minutes by reference as follows:

- Minutes of the Maintenance TG meeting held 2021-09-28 11:01 – 12:30 ET <https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;84a59a91.21>
- Minutes of the Maintenance TG meeting held 2021-10-12 11:00 – 11:53 ET <https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;ad5e44ea.21>
- Minutes of the Maintenance TG meeting held 2021-10-26 11:00 – 13:02 ET <https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;88ff4b15.21>
- Minutes of the Maintenance TG meeting held 2021-11-02 11:01 – 13:19 ET <https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;fde930d3.21>

The table in section 1 reflects the attendance and affiliation of all participants in all 802.1 WG and subgroup meetings held in this session.

**Call to order** Nov 09, 2021 at 14:00 ET by Paul Congdon, IEEE 802.1 Maintenance TG Chair who presided and wrote the minutes.

Agenda items and dispositions:

1. Meeting introduction. The IEEE SA slides on IEEE Patent Policy and IEEE SA Copyright and Participation Policies were provided beforehand as part of “MEETING INTRODUCTION” <http://www.ieee802.org/1/files/public/templates/admin-TG-intro-0721-v01.pdf>.

The Maintenance TG Chair showed this presentation advising that the following, provided beforehand, applies:

- 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 IEEE is not aware. Additionally, neither 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.
- IEEE SA's copyright policy is described in Clause 7 of the IEEE SA Standards Board Bylaws and Clause 6.1 of the IEEE SA Standards Board Operations Manual;
- Any material submitted during standards development, whether verbal, recorded, or in written form, is a Contribution and shall comply with the IEEE SA Copyright Policy.

The Maintenance TG Chair made the Calls for Potentially Essential Patents at the beginning of each TG meeting during this session 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 these Calls prior to the end of the session.

The Maintenance TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

2. Approval of agenda. The Maintenance TG chair presented the agenda in <https://1.ieee802.org/november-2021-plenary-session-electronic-maintenance-tg-agenda/>  
**Disposition:** The agenda was reviewed, discussed, and updated as recorded by these minutes.
3. 802.1D supersede proposed plan status. The Maintenance TG chair led the discussion of "802.1D supersede proposed plan status" in <https://www.ieee802.org/1/files/public/docs2021/maint-congdon-concall-1121-2-v01.pdf>.  
**Disposition:** The 802.1 chair noted that the private "802.1D" page on the IEEE 802.1 website has been updated and will be re-circulated amongst stakeholders.
4. 802.1BR Expiration. The Maintenance TG chair led the discussion of "802.1BR Expiration" in "Maintenance Task Group Electronic Meetings"  
<https://www.ieee802.org/1/files/public/docs2021/maint-congdon-concall-1121-2-v01.pdf>.  
**Disposition:** It was agreed to post to the main 802.1 email list an announcement of the WG's intention to let IEEE Std 802.1BR expire and that the WG would wait until March 2022 to hear from individuals interested in revising the document. If interest is expressed then a revision project could be considered at that time.
5. Review of motions. The Maintenance TG chair led the discussion of "Motion Summary" in "Maintenance Task Group Electronic Meetings"  
<https://www.ieee802.org/1/files/public/docs2021/maint-congdon-concall-1121-2-v01.pdf>.  
**Disposition:** For information. A motion to develop a PAR and potentially a CSD for a revision to IEEE Std 802 will be created by Nendica.
6. Response to 802 PARs under consideration. The Maintenance TG chair led the drafting of responses to IEEE 802 PARs under consideration during the Nov 5-19, 2021 electronic plenary session per <https://www.ieee802.org/PARs.shtml>.  
**Disposition:** The 802.1 response to the CSD for "802.15.3ma - Standard for High Data Rate Wireless Multi-Media Networks - Revision to IEEE Standard 802.15.3-2016" was generated in "Comments on P802.15 PARs & CSDs From 802.1"  
<https://www.ieee802.org/1/files/public/docs2021/admin-PAR-CSD-comments-802-15-1121-v02.pdf>.

7. SC6 Status. Karen Randall presented the “ISO/IEC JTC1 SC6 STATUS November 2021” slides in “Maintenance Task Group Electronic Meetings”

<https://www.ieee802.org/1/files/public/docs2021/maint-congdon-concall-1121-2-v01.pdf>.

**Disposition:** For information. It was noted that ISO is performing systematic review of 802.1BR. The 802.1 WG may want to make a recommendation to ISO regarding this review if the WG decides to let 802.1BR expire. ISO renewing 802.1BR keeps the standard active in ISO, while the standard could become inactive-reserved in IEEE 802.

8. P802.1ASdr Editor’s Update. Silvana Rodrigues, P802.1ASdr editor, presented and led a discussion on “802.1ASdr Editor’s Update”

<https://www.ieee802.org/1/files/public/docs2021/dr-Rodrigues-editors-update-1121-v00.pdf>.

**Disposition:** For information. It was noted that IEEE 1588g is conducting a straw poll to refine the choices of replacement terminology. Individuals interested in participating in this straw poll can do so after joining IEEE 1588g by following the instructions at <https://ieeesa.imeetcentral.com/1588public/>.

9. Liaisons. Karen Randall led the discussion of incoming and outgoing liaisons assigned for processing by the Maintenance TG:

- MEF’s “Bandwidth Profile Algorithm in MEF 10.3 Versus MEF 10.4”  
<https://www.ieee802.org/1/files/public/docs2021/liaison-MEF-LS318-SG15replyreMEF10reference-1121.pdf>
- ITU-T SG15’s “LS on OTNT Standardization Work Plan Issue 29”  
<https://www.ieee802.org/1/files/public/docs2021/liaison-sg15-LS312-OTNTStdznWorkPlan-0421.zip>
- MoCA specifications MAC/PHYv2.0 and MAC/PHYv2.5
- FDIS ballot comments on IEEE 802.1AS-2020 (SC6 N17611)
- FDIS ballot comments on IEEE 802.1CMde-2019 (SC6 N17604)
- FDIS ballot comments on IEEE 802.1Qcc-2018 (SC6 N17603)

**Disposition:** Liaison responses were drafted, subsequently finalized as:

- Response to ITU-T SG15’s “LS on OTNT Standardization Work Plan Issue 29” in “Liaison response to LS312 on OTNT Standardization Work Plan Issue 29”  
<https://www.ieee802.org/1/files/public/docs2021/liaison-response-itu-t-sg15-otnt-swp-1121-v01.pdf>
- Response to MoCA specifications MAC/PHYv2.0 and MAC/PHYv2.5 in “Liaison on MoCA 2.0 and MoCA 2.5 drafts”  
<https://www.ieee802.org/1/files/public/docs2021/liaison-response-MoCA-MoCADraftsforreview-1121-v01.pdf>
- Response to FDIS ballot comments on IEEE 802.1AS-2020 (SC6 N17611) in  
<https://www.ieee802.org/1/files/public/docs2021/liaison-SC6CommentResponse1ASFDIS-0921-v01.pdf>
- Response to FDIS ballot comments on IEEE 802.1CMde-2019 (SC6 N17604) in  
<https://www.ieee802.org/1/files/public/docs2021/liaison-SC6CommentResponse1CMdeFDIS-1121-v02.pdf>
- Response to FDIS ballot comments on IEEE 802.1Qcc-2018 (SC6 N17603) in  
<https://www.ieee802.org/1/files/public/docs2021/liaison-SC6CommentResponse1QccFDIS-0921-v01.pdf>

10. P802.1Q-Rev/d1.0 comment resolution. Mick Seaman, P802.1Q-Rev editor, led a discussion of the comment resolution plan for the rest of the session.

**Disposition:** For information.

16:05 ET recess

**Call to order** Nov 12, 2021 at 14:00 ET by Paul Congdon, IEEE 802.1 Maintenance TG Chair who presided and wrote the minutes.

The Maintenance TG Chair announced that this ad hoc meeting remains subject to the Policies mentioned in agenda item 1 and asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

11. P802.1Q-Rev/d1.0 comment resolution. Mick Seaman, editor P802.1Q-Rev, led the resolution of comments received on <https://www.ieee802.org/1/files/private/q-rev-drafts/d1/802-1Q-rev-d1-0.pdf>.

**Disposition:** Partial disposition. Max Turner's comments were discussed.

16:01 ET recess

**Call to order** Nov 15, 2021 at 14:00 ET by Paul Congdon, IEEE 802.1 Maintenance TG Chair who presided and wrote the minutes.

The Maintenance TG Chair announced that this ad hoc meeting remains subject to the Policies mentioned in agenda item 1 and asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

12. P802.1Q-Rev/d1.0 comment resolution. Mick Seaman, editor P802.1Q-Rev, continued the resolution of comments received on <https://www.ieee802.org/1/files/private/q-rev-drafts/d1/802-1Q-rev-d1-0.pdf>.

**Disposition:** Partial disposition: <https://www.ieee802.org/1/files/private/q-rev-drafts/d1/802-1Q-rev-d1-0-sa-pdis2.pdf>.

13. Document vehicle status. The Maintenance TG chair presented the "Brief Vehicle Status Update" slide in <https://www.ieee802.org/1/files/public/docs2021/maint-congdon-concall-1121-2-v01.pdf>

**Disposition:** For information.

14. New Maintenance Items: The Maintenance TG chair led the discussion of the following new maintenance item:

- 0336: OperIPV initialization not defined

**Disposition:** Details for discussion on all items are logged in the IEEE 802.1 maintenance database at <https://www.802-1.org/home> where items progressed at the meeting can be reviewed by selecting 'Meetings'.

15. Any Other Business. No other business was discussed by the Maintenance TG in this session.

16. Future meetings. Agreed (informally, none dissenting) to hold an electronic meeting of the Maintenance TG to continue P802.1Q-Rev/D1.0 comment resolution on Nov 23, 2021 at 11:00 ET: <https://1.ieee802.org/maintenance-tg-electronic-meeting-agenda-november-23-2021-11-am-et/>

16:07 ET adjournment

## 5 Security Task Group

Between this session and the preceding session, the IEEE 802.1 Security Task Group (Security TG) held electronic meetings whose minutes are incorporated to these session minutes by reference as follows:

- Minutes of the Security TG meeting held 2021-10-19 13:02 - 14:25 ET

The table in section 1 reflects the attendance and affiliation of all participants in all 802.1 WG and subgroup meetings held in this session.

**Call to order** November 9, 2021 at 11:00 ET by Mick Seaman, IEEE 802.1 Security TG Chair, who presided and wrote the minutes assisted by Karen Randall, Security TG Vice-Chair.

Agenda items and dispositions:

1. Meeting introduction. The IEEE SA slides on IEEE Patent Policy and IEEE SA Copyright and Participation Policies were provided beforehand as part of "MEETING INTRODUCTION" <http://www.ieee802.org/1/files/public/templates/admin-TG-intro-0721-v01.pdf>.

The Security TG Chair announced that the meeting is subject to these Policies as read and displayed at the opening plenary meeting.

The Security TG Chair made the Calls 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 these Calls prior to the end of the session.

The Security TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

2. Approval of agenda. The Security TG Chair presented the agenda in <https://1.ieee802.org/november-2021-plenary-session-electronic-security-tg-agenda/>  
**Disposition:** the agenda was reviewed, discussed and updated as recorded by these minutes.

3. P802.1AEdk MAC Privacy protection. Don Fedyk, P802.1AEdk Editor, reviewed the updated MAC Privacy protection YANG.

Discussion:

- Noted that the convention of not dating the latest YANG file can lead to some confusion as to the revision of the YANG file being discussed when the latest is not pulled from GitHub. Desirable that it be easy for those who are not YANG experts and who are not using GitHub to be able to access the relevant files. Similarly desirable to maintain the historic record. YANG file discussed reposted in the directory <https://www.ieee802.org/1/files/private/dk-drafts/d1/ieee802-dot1ae-pry@2021-10-26.yang/>.
- Burst size parameter for MPPDU generation was changed in the MIB, so that the configured burst size is the excess over the MPPDU size (the necessary minimum) to make avoiding configuration mistakes easier.
- The MIB also has separate enable/disable controls for Privacy MDDU transmission and reception, so the latter can be enabled first to facilitate deployment without data loss.
- General question for YANG: how should vendor-specific extensions be named/identified (for example, alternate reassembly algorithms) to avoid the need

to create a registry? The use of an OUI derived identifier would seem unwarranted here since there is no need to communicate a short identifier in protocol.

- Use of Pause (or PFC) is a potential privacy exposure.
- The use of UML figures for various purposes (this goes beyond YANG) in the P802.1AEdk draft (and in 802.1AE as a whole) would benefit from some further documentation.

Disposition:

- YANG files uploaded to the drafts directory to be kept in subdirectories with names ending @yyyy-mm-dd.yang. These directories to include related files (test files, test results, supporting modules).
- Update YANG with similar changes to those made in the MIB, including description references.
- Bring the extension naming issue to the attention of YANGsters.
- Add an informative Annex to describe the use of UML throughout 802.1AE.
- The P802.1AEdk draft needs text documenting the Pause/PFC Privacy exposure.

13:01 ET recess

**Call to order** November 10, 2021 at 11:04 ET by Mick Seaman, IEEE 802.1 Security TG Chair who presided and wrote the minutes assisted by Karen Randall, Security TG Vice-Chair.

4. A.O.B. MADINAS. Glenn Parsons, IEEE 802.1 Working Group Chair, reported that he had presented on MAC privacy and randomization to IETF MADINAS (MAC Address Device Identification for Network and Application Services), and led a discussion of issues arising.
- Discussion:

- Interest in a chain of trust for MAC Addresses.
- Can 802.1X and 802.1AR be used as part of the chain of trust?

**Disposition:** Need to determine if there is a constituency in 802.1 that is interested in this problem.

5. P802.1AEdk MAC Privacy protection (continued).

- Don Fedyk, P802.1AEdk Editor, continued the review of the updated MAC Privacy protection YANG.

Discussion:

- Provider Edge Bridge modelling as a basis for an EDE-CC needs an additional port type, for the Customer Network Port (CNP)
- Simplification of red-side/black-side mapping proposed, get Provider Edge Bridge model with CNP type set first, then examine need/opportunity for additional control to coordinate/simplify management changes.

**Disposition:** YANG model to be updated and reloaded.

- Mick Seaman, 802.1AE editor, led a brief discussion of 802.1AE maintenance items noted as a result of P802.1AEdk discussion, including removing inaccurate references to PCP encoding that should have simply referenced discard eligibility plus priority.

**Disposition:** Maintenance items to be raised so as to provide the desired paper trail for items included in P802.1AEdk drafts.

12:27 ET recess



**Call to order** November 15, 2021 at 11:00 ET by Mick Seaman, IEEE 802.1 Security TG Chair who presided and wrote the minutes assisted by Karen Randall, Security TG Vice-Chair.

6. P802.1AEdk MAC Privacy protection (continued)

Disposition:

- An updated draft, P802.1AEdk/D1.3, had been uploaded as <https://www.ieee802.org/1/files/private/dk-drafts/d1/802-1AEdk-d1-3.pdf>.
- Updated YANG models still need to be attached.
- Some MIB updates still required.
- A further TG ballot will be required, once D0.7 ballot comment processing and a presentation for the TSN TG have been completed.

7. A.O.B. PFC headroom, project proposal. Mick Seaman, TG Chair, led a brief discussion of the proposed PFC project.

Discussion:

- PAR & CSD will be developed in the TSN TG.
- May begin project work in Security TG to address MACsec support of PFC before TSN TG in-depth analysis of time delay support.
- The layering proposed might allow MACsec protection of other MAC control frames. Should be aware of potential complications of a desire to protect all exchanges traversing public lands.

**Disposition:** Wait on PAR and CSD approval.

8. A.O.B. ORAN: Nader Zein provided a brief update on ORAN Security.

**Disposition:** Substantive discussion delayed pending ORAN release of presentation for discussion including copyright removal/release.

9. Future meetings. Agreed (informally, none dissenting) to hold Security TG electronic meetings Nov 30, 2021 and Dec 14, 2021 13:00 ET to progress P802.1AEdk.

Further agreed (informally, none dissenting) to hold an electronic meeting Dec 7, 2021 9:00 ET to discuss the PFC headroom proposed PAR. Discussion was assigned to the TSN TG in the 802.1 closing plenary meeting, so this Security TG electronic meeting was cancelled.

12:21 ET adjournment

## 6 Time-Sensitive Networking Task Group

Between this session and the preceding session, the IEEE 802.1 Time-Sensitive Networking (TSN) Task Group (TG) held electronic meetings on generic TSN topics whose minutes are incorporated to these session minutes by reference as follows:

- Minutes of the IEEE 802.1 TSN TG meeting held 2021-09-27 11:00 - 13:08 ET <https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=408557>
- Minutes of the IEEE 802.1 TSN TG meeting held 2021-10-04 11:00 - 12:56 <https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=429329>
- Minutes of the IEEE 802.1 TSN TG meeting held 2021-10-11 11:00 - 13:03 <https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=439391>
- Minutes of the IEEE 802.1 TSN TG meeting held 2021-10-18 11:00 - 13:00 (revised) <https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=470046>
- Minutes of the IEEE 802.1 TSN TG meeting held 2021-10-25 11:00 - 13:02 <https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=462509>

Between this session and the preceding session, the IEEE 802.1 TSN TG held electronic meetings on P802.1DG whose minutes are incorporated to these session minutes by reference as follows:

- Minutes of the IEEE P802.1DG meeting held 2021-10-05 9:00 - 10:20 ET  
<https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=424394>
- Minutes of the IEEE P802.1DG meeting held 2021-10-12 9:00 - 11:01 ET  
<https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=433447>

The table in section 1 reflects the attendance and affiliation of all participants in all 802.1 WG and subgroup meetings held in this session.

Minutes of the IEC/IEEE 60802 Joint Project electronic meetings are in section 6.1.

Minutes of the IEEE P802.1DP/SAE AS 6675 joint project electronic meeting are in section 6.2.

**Call to order** Nov 08, 2021 at 14:33 ET by János Farkas, IEEE 802.1 TSN TG Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

Agenda items and dispositions:

1. Meeting introduction. The IEEE SA slides on IEEE Patent Policy and IEEE SA Copyright and Participation Policies were provided beforehand as part of "MEETING INTRODUCTION" <http://www.ieee802.org/1/files/public/templates/admin-TG-intro-0721-v01.pdf>.

The TSN TG Chair announced that the meeting is subject to these Policies as read and displayed at opening plenary meeting.

The TSN TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

2. Approval of agenda. The TSN TG Chair presented the agenda in <https://www.ieee802.org/1/files/public/docs2021/admin-TSN-agenda-1121-v01.pdf>.  
**Disposition:** The agenda was reviewed, discussed and updated as recorded by these minutes.
3. The TSN TG Chair presented "LS on Correction Field update for Transparent Clock" <https://www.ieee802.org/1/files/public/docs2021/liaison-3GPP-WGSA2-CorrectionFieldupdtforTransparentClock-1121.pdf>.  
**Disposition:** Liaison discussed.
4. Jessy Rouyer presented SG15-LS330 "LS on revision of G.8012 and G.8021" <https://www.ieee802.org/1/files/public/docs2021/liaison-SG15-LS330-G8021Rev-1121.pdf>.  
**Disposition:** Liaison discussed.
5. Jessy Rouyer presented SG15-LS271 "LS on revision of G.8012 and G.8021" <https://www.ieee802.org/1/files/public/docs2020/liaison-SG15-LS271-G8012-G8021-0920.pdf>.  
**Disposition:** Liaison discussed.
6. Daniel Hopf and Georg Janker presented the liaison from Open Alliance in <https://www.ieee802.org/1/files/public/docs2021/liaison-OPENAlliance-LiaisonRequest-1121.pdf>.  
**Disposition:** Liaison discussed.

7. Josef Dorr presented “Liaison with LNI 4.0: draft sharing IEEE 802.1 WG and LNI 4.0” <https://www.ieee802.org/1/files/public/docs2021/liaison-LNI40-Qddand60802draftsharing-1121.pdf>.  
**Disposition:** Liaison discussed. 802.1 closing plenary meeting motion for draft sharing to be prepared.
8. The TSN TG Chair presented “LS on Work items related to deterministic communication in ITU-T SG13” <https://www.ieee802.org/1/files/private/liaisons/liaison-itu-t-SG13-LS217-determcommunica-0921.zip>.  
**Disposition:** Liaison discussed. More discussion needed.
9. The TSN TG Chair presented and led the discussion on “PWI proposal on Deterministic Wireless Industrial Network” [https://www.ieee802.org/1/files/private/SC6/ISO-IECJTC1-SC6\\_N17531\\_PWI\\_proposal\\_on\\_Deterministic\\_Wireless\\_Industrial\\_Network.pdf](https://www.ieee802.org/1/files/private/SC6/ISO-IECJTC1-SC6_N17531_PWI_proposal_on_Deterministic_Wireless_Industrial_Network.pdf).  
**Disposition:** Liaison discussed. More discussion needed.
10. Christophe Mangin, P802.1CBdb editor, presented “802.1CBdb/D2.1 Editor’s report for the first SA recirculation ballot” <https://www.ieee802.org/1/files/public/docs2021/db-mangin-d2-1-editors-report-1121-v01.pdf>.  
**Disposition:** For information. 802.1 closing plenary meeting motion to be prepared.
11. The TSN TG Chair presented draft motions for the 802.1 closing plenary approval.  
**Disposition:** Draft motions reviewed for 802.1 closing plenary approval.
12. Geoffrey Garner, P802.1ASdm editor, presented “P802.1ASdm-Rev/D0.3 Editor’s Report Proposed Comment Resolution for TG Ballot Revision 3” <https://www.ieee802.org/1/files/public/docs2021/dm-garner-d0-3-tg-ballot-editors-report-0921-v03.pdf> and led the resolution of comments received on <https://www.ieee802.org/1/files/private/asdm-drafts/d0/802-1ASdm-d0-3.pdf>.  
**Disposition:** Partial disposition. Comments 40, 105, 106 discussed and resolved as documented in <https://www.ieee802.org/1/files/private/asdm-drafts/d0/802-1ASdm-d0-3-pdis-v05.pdf>.

16:39 ET recess

**Call to order** Nov 09, 2021 at 09:00 ET by Craig Gunther, IEEE 802.1 TSN TG Vice-Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

13. The TSN TG Vice-Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.  
The TSN TG Vice-Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
14. Max Turner, P802.1DG editor, presented “IEEE P802.1DG - Outline for Draft 1.4 to be ready for TG Ballot before January 2022 Plenary” <https://www.ieee802.org/1/files/public/docs2021/dg-turner-OutlineD1v5-1121-v01.pdf>.  
**Disposition:** Presentation discussed. Updated presentation: <https://www.ieee802.org/1/files/public/docs2021/dg-turner-OutlineD1v4-1121-v02.pdf>.

10:57 ET recess

**Call to order** Nov 10, 2021 at 14:00 ET by János Farkas, IEEE 802.1 TSN TG Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

15. The TSN TG Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.

The TSN TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

16. Johannes Specht presented “Missing Station Capabilities for Resource Engineering” <https://www.ieee802.org/1/files/public/docs2021/new-specht-dev-caps-and-limits-1121-v01.pdf>.

**Disposition:** Presentation discussed. More discussion needed.

17. Johannes Specht presented “Cut-Through Forwarding (CTF): Towards an IEEE 802.1 Standard” <https://www.ieee802.org/1/files/public/docs2021/new-specht-ctf-802-1-1121-v01.pdf>.

**Disposition:** Presentation discussed. 802.1 closing plenary meeting motion to be prepared.

16:08 ET recess

**Call to order** Nov 11, 2021 at 09:01 ET by János Farkas, IEEE 802.1 TSN TG Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

18. The TSN TG Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.

The TSN TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

19. Jessy Rouyer presented SG15-LS330 “LS on revision of G.8012 and G.8021” <https://www.ieee802.org/1/files/public/docs2021/liaison-SG15-LS330-G8021Rev-1121.pdf>.

**Disposition:** No response at this time.

20. Jessy Rouyer presented SG15-LS271 “LS on revision of G.8012 and G.8021” <https://www.ieee802.org/1/files/public/docs2020/liaison-SG15-LS271-G8012-G8021-0920.pdf>.

**Disposition:** No response at this time.

21. The TSN TG Chair led the review of a draft “Liaison response to Nov 4, 2021 liaison statement from OPEN Alliance”.

**Disposition:** Draft liaison reviewed and updated. 802.1 closing plenary meeting motion to be prepared.

22. The TSN TG Chair led the review of a draft “Liaison response to draft sharing between IEEE 802.1 WG and EtherCAT”.

**Disposition:** Draft liaison reviewed and updated. 802.1 closing plenary meeting motion to be prepared.

23. The TSN TG Chair led the review of a draft “Liaison response to work items related to deterministic communication in ITU-T SG13”.

**Disposition:** Draft liaison reviewed and updated. 802.1 closing plenary meeting motion to be prepared.

24. The TSN TG Chair continued leading the discussion on “PWI proposal on Deterministic Wireless Industrial Network” [https://www.ieee802.org/1/files/private/SC6/ISO-IECJTC1-SC6\\_N17531\\_PWI\\_proposal\\_on\\_Deterministic\\_Wireless\\_Industrial\\_Network.pdf](https://www.ieee802.org/1/files/private/SC6/ISO-IECJTC1-SC6_N17531_PWI_proposal_on_Deterministic_Wireless_Industrial_Network.pdf).

**Disposition:** No response at this time.

25. Geoffrey Garner, P802.1ASdm editor, continued leading the resolution of comments received on <https://www.ieee802.org/1/files/private/asdm-drafts/d0/802-1ASdm-d0-3.pdf>.

**Disposition:** More discussion needed.

11:18 ET recess

**Call to order** Nov 11, 2021 at 11:30 ET by János Farkas, IEEE 802.1 TSN TG Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

26. The TSN TG Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.

The TSN TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

27. Glenn Parsons, IEEE 802.1 Chair, presented “IEEE RAC EtherType ad hoc status update” <https://www.ieee802.org/1/files/public/docs2021/admin-parsons-RAC-EtherType-adhoc-status-1121.pdf>.

**Disposition:** For information.

28. Marc Holness, P802f editor, led the resolution of comments received on <https://www.ieee802.org/1/files/private/802-f-drafts/d1/802f-d1-0.pdf>.

**Disposition:** Final disposition. Comments 43, 45, 46, 47 discussed and resolved as documented in <https://www.ieee802.org/1/files/private/802-f-drafts/d1/802f-d1-0-dis-v02.pdf>.

29. Norman Finn, P802.1DC editor, shared his anticipation of the project’s next step.

**Disposition:** For information.

30. Norman Finn presented “Towards a PAR (or PARs) for Pulsed Queues” <https://www.ieee802.org/1/files/public/docs2021/new-finn-pulsed-queueing-0121-v01.pdf>,

“Multiple Cyclic Queuing and Forwarding” <https://www.ieee802.org/1/files/public/docs2021/new-finn-multiple-CQF-0921-v02.pdf> and

“Towards a PAR (or PARs) for Pulsed Queues” <https://www.ieee802.org/1/files/public/docs2021/new-finn-pulsed-queueing-0821-v03.pdf>.

**Disposition:** Presentations discussed. 802.1 closing plenary meeting motion to be prepared.

13:30 ET recess

**Call to order** Nov 11, 2021 at 14:00 ET by János Farkas, IEEE 802.1 TSN TG Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

31. The TSN TG Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.

The TSN TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

32. Roger Marks, P802.1CQ editor, led the review of a draft “Liaison on P802.1CQ Multicast and Local Address Assignment”.

**Disposition:** Draft liaison reviewed and updated. 802.1 closing plenary meeting motion to be prepared.

33. Max Turner presented “IEEE802.1ASDM – REDUNDANCY”

<https://www.ieee802.org/1/files/public/docs2021/dm-turner-ASredundancy-0721-v02.pdf>.

**Disposition:** Presentation discussed. More discussion needed.

16:06 ET recess

**Call to order** Nov 12, 2021 at 09:00 ET by János Farkas, IEEE 802.1 TSN TG Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

34. The TSN TG Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.

The TSN TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

35. Toru Osuga presented “Text Contribution for P802.1Qdq”

<https://www.ieee802.org/1/files/public/docs2021/dq-osuga-text-contribution-1121-v00.pdf>.

**Disposition:** For information.

36. Hiroki Nakano presented <https://www.ieee802.org/1/files/private/dq-drafts/d0/802-1Qdq-d0-0.pdf>.

**Disposition:** For information. Anticipated next: TG balloting.

37. Rodrigo F. Coelho presented “UNI Requirements: CNC Dynamics & End Station Capabilities” <https://www.ieee802.org/1/files/public/docs2021/dj-Coelho-Uni-requirements-CNC-dynamics-ES-capabilities1121-v02.pdf>.

**Disposition:** Presentation discussed. More discussion needed.

38. Andreas Meisinger presented “Strict Priority RA Class”

<https://www.ieee802.org/1/files/public/docs2021/dd-Meisinger-LNI40-Qdd-SP-RAclass-1121-v02.pdf>.

**Disposition:** Presentation discussed.

17:15 ET recess

**Call to order** Nov 12, 2021 at 11:31 ET by János Farkas, IEEE 802.1 TSN TG Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

39. The TSN TG Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.

The TSN TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

40. Don Pannell led the discussion of comments

<https://www.ieee802.org/1/files/public/docs2021/ds-PAR-CSD-comments-1121-v01.pdf>

received on <https://www.ieee802.org/1/files/public/docs2021/ds-draft-PAR-0921-v01.pdf>

and <https://www.ieee802.org/1/files/public/docs2021/ds-draft-CSD-0921-v01.pdf>.

**Disposition:** Comments resolved in <https://www.ieee802.org/1/files/public/docs2021/ds-PAR-CSD-comments-1121-v01.pdf>.

Updated PAR: <https://www.ieee802.org/1/files/public/docs2021/ds-PAR-1121-v01.pdf>.

Updated CSD: <https://www.ieee802.org/1/files/public/docs2021/ds-CSD-1121-v01.pdf>.

41. Geoffrey Garner, P802.1ASdm editor, continued leading the resolution of comments

received on <https://www.ieee802.org/1/files/private/asdm-drafts/d0/802-1ASdm-d0-3.pdf>.

**Disposition:** Partial disposition. Comments 95, 52, 18, 65, 88, 121, 64, 27, 28, 41, 44, 45, 46, 47, 48 discussed and resolved as documented in

<https://www.ieee802.org/1/files/private/asdm-drafts/d0/802-1ASdm-d0-3-pdis-v05.pdf>.

13:30 ET recess

**Call to order** Nov 15, 2021 at 09:01 ET by János Farkas, IEEE 802.1 TSN TG Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

42. The TSN TG Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.

The TSN TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

43. Greg Schlechter and the TSN TG Chair presented “Common TSN for Converged Networks – next steps” <https://www.ieee802.org/1/files/public/docs2021/new-Schlechter-Common-TSN-1121-v01.pdf>.

**Disposition:** Presentation discussed. 802.1 closing plenary meeting motion to be prepared.

44. Lily Lv presented “Recap of PFC Headroom and Enhancements Project Proposal” <https://www.ieee802.org/1/files/public/docs2021/new-lv-recap-of-PFC-headroom-and-enhancements-1121-v01.pdf>.

**Disposition:** Presentation discussed. 802.1 closing plenary meeting motion to be prepared.

45. Max Turner presented “IEEE802.1ASDM – REDUNDANCY” <https://www.ieee802.org/1/files/public/docs2021/dm-turner-ASredundancy-1121-v01.pdf>.

**Disposition:** Presentation discussed.

11:13 ET recess

## 6.1 IEC/IEEE 60802 Joint Project

Between this session and the preceding session, the IEC/IEEE 60802 Joint Project held electronic meetings whose minutes are incorporated to these session minutes by reference as follows:

- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2021-09-27 9:00 - 11:00 ET <https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=409510>
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2021-10-04 9:00 - 11:00 ET <https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=426315>
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2021-10-08 9:00 - 11:00 ET <https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=470968>
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2021-10-11 9:00 - 11:00 ET <https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=440304>
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2021-10-15 9:00 - 11:00 ET <https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=448545>
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2021-10-18 9:00 - 11:00 ET <https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=449514>
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2021-10-22 9:00 - 11:00 ET <https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=460627>

- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2021-10-25 9:00 - 11:00 ET <https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=471938>
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2021-10-29 9:00 - 11:00 ET <https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=466821>
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2021-11-05 9:00 - 11:00 ET <https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=474780>

Between this session and the preceding session, the IEC/IEEE 60802 Joint Project System Specification ad hoc (System ad hoc) held the following electronic meetings:

- Minutes of the IEC/IEEE 60802 Joint Project System Specification ad hoc meeting held 2021-10-01 9:00 - 11:00 ET <https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=416685>

The table in section 1 reflects the attendance and affiliation of all participants in all 802.1 WG and subgroup meetings held in this session.

**Call to order** Nov 08, 2021 at 11:30 ET by Ludwig Winkel, IEC 65C/WG18 Convenor and IEC/IEEE 60802 Joint Project Chair (60802 Chair), who presided with János Farkas, IEEE 802.1 TSN TG Chair (TSN TG Chair). Josef Dorr, IEC/IEEE 60802 Joint Project Secretary (60802 Secretary), wrote the minutes.

Agenda items and dispositions:

1. Meeting introduction and other administrative items. The IEEE SA slides on IEEE Patent Policy and IEEE SA Copyright and Participation Policies were provided beforehand as part of "MEETING INTRODUCTION" <http://www.ieee802.org/1/files/public/templates/admin-TG-intro-0721-v01.pdf>.

The TSN TG Chair showed this presentation advising that the following, provided beforehand, applies:

- 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 IEEE is not aware. Additionally, neither 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.

The TSN TG Chair 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 this Call prior to the end of the session.

The TSN TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

The TSN TG Chair explained that the IEC/IEEE 60802 Joint Project also follows the usual IEC patent [https://www.iec.ch/members\\_experts/tools/patents/patent\\_policy.htm](https://www.iec.ch/members_experts/tools/patents/patent_policy.htm) and copyright [https://www.iec.ch/standardsdev/resources/draftingpublications/overview/rules\\_requirements/copyright.htm](https://www.iec.ch/standardsdev/resources/draftingpublications/overview/rules_requirements/copyright.htm) policies.



2. Approval of agenda. The 60802 Chair presented the agenda in [https://1.ieee802.org/2021-11-plenary-tsn-agenda/#TSN 8211 IECIEEE 60802](https://1.ieee802.org/2021-11-plenary-tsn-agenda/#TSN_8211_IECIEEE_60802).  
**Disposition:** The agenda was reviewed, discussed, and agreed (informally, none dissenting) as presented.
3. Updated IEC - IEEE cooperation process. Ludwig Winkel provided an overview of the updated revision of the IEC - IEEE cooperation process description in “IEC and IEEE processes for drafting a dual logo IEC/IEEE International Standard”  
<https://www.ieee802.org/1/files/public/docs2021/admin-IEC-IEEE-cooperation-process-1121.pdf>.  
**Disposition:** For information.
4. Update on the IEC 61802 conformity assessment project. The 60802 Chair gave a verbal update on the IEC 61802 conformity assessment project. The negotiations to sponsor IEC 61802 development between five involved consortia are still ongoing.  
**Disposition:** For information.
5. 802.1AR Adoption and background. Oliver Pfaff presented “IEEE 802.1AR Adoption by IEC/IEEE 60802” <https://www.ieee802.org/1/files/public/docs2021/60802-Pfaff-et-al-802-1AR-Adoption-1121-v01.pdf> which is intended as an update of bullet item a) in 5.5.4 “Common Requirements for Security” of <https://www.ieee802.org/1/files/private/60802-drafts/d1/60802-d1-3.pdf>.
  - Oliver Pfaff briefly browsed “The Background for IEEE 802.1AR Adoption by IEC/IEEE 60802” <https://www.ieee802.org/1/files/public/docs2021/60802-Pfaff-et-al-Background-for-802-1AR-Adoption-1121-v01.pdf> that provides digest information on important IEEE 802.1AR concepts.**Disposition:** More discussion is needed.
6. CNC UNI service model NETCONF over TLS. Nemanja Stamenic presented “CNC-UNI Service Model” <https://www.ieee802.org/1/files/public/docs2021/60802-Stamenic-et-al-CNC-UNI-service-model-NETCONF-over-TLS-1121-v01.pdf> including some issues and proposals related to IEEE P802.1Qdj.  
**Disposition:** More discussion is needed.
7. Editor’s update and D1.3 TG ballot comment resolution. Jordon Woods, IEC/IEEE 60802 Joint Project Editor (60802 Editor):
  - Presented “Editor’s Report 60802 Draft 1.3” <https://www.ieee802.org/1/files/public/docs2021/60802-woods-D1-3-update-1121-v01.pdf>, providing updated status based on the inclusion of IEC comments received on <https://www.ieee802.org/1/files/private/60802-drafts/d1/60802-d1-3.pdf>.
  - Continued the resolution of comments received on <https://www.ieee802.org/1/files/private/60802-drafts/d1/60802-d1-3.pdf>.**Disposition:** Partial disposition. Ballot comments 924, 925, 927, 926 were resolved. The comment dispositions are documented in <https://www.ieee802.org/1/files/private/60802-drafts/d1/60802-d1-3-pdis-v14.pdf>.
8. Review of minutes. This agenda item was skipped by lack of time.

13:30 ET recess

**Call to order** Nov 09, 2021 at 11:30, by Ludwig Winkel, 60802 Chair, who presided with János Farkas, TSN TG Chair. Josef Dorr, 60802 Secretary, wrote the minutes.

9. Meeting introduction and other administrative items. The TSN TG Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1, asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
10. Approval of agenda. The 60802 Chair presented the agenda in [https://1.ieee802.org/2021-11-plenary-tsn-agenda/#TSN 8211 IECIEEE 60802-2](https://1.ieee802.org/2021-11-plenary-tsn-agenda/#TSN_8211_IECIEEE_60802-2).  
**Disposition:** The agenda was reviewed, discussed, and agreed (informally, none dissenting) as presented.
11. IEC/IEEE 60802 IA-station model. Josef Dorr presented “IA-station model” <https://www.ieee802.org/1/files/public/docs2021/60802-Dorr-IA-station-1121-v02.pdf>. The presentation was discussed.  
**Disposition:** The presentation can serve as a reference for comments on <https://www.ieee802.org/1/files/private/60802-drafts/d1/60802-d1-3.pdf> asking for clarification of the IA-station model.
12. D1.3 TG ballot comment resolution. The IEC/IEEE 60802 Editor continued the resolution of comments received on <https://www.ieee802.org/1/files/private/60802-drafts/d1/60802-d1-3.pdf>.  
**Disposition:** Partial disposition.
  - Ballot comments 951, 419, 952, 953, 954, 956, 211 were resolved.
  - Ballot comment 957 was discussed but not resolved.The comment dispositions are documented in <https://www.ieee802.org/1/files/private/60802-drafts/d1/60802-d1-3-pdis-v14.pdf>.
13. Review of minutes. The minutes were reviewed under the lead of the 60802 Secretary.

13:30 ET recess

**Call to order** Nov 10, 2021 at 11:30 ET, by Ludwig Winkel, 60802 Chair, who presided with János Farkas, TSN TG Chair. Josef Dorr, 60802 Secretary, wrote the minutes.

14. Meeting introduction and other administrative items. The TSN TG Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1, asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
15. Approval of agenda. The 60802 Chair presented the agenda in [https://1.ieee802.org/2021-11-plenary-tsn-agenda/#TSN 8211 IECIEEE 60802-3](https://1.ieee802.org/2021-11-plenary-tsn-agenda/#TSN_8211_IECIEEE_60802-3).  
**Disposition:** The agenda was reviewed, discussed, and agreed (informally, none dissenting) as presented.
16. Time Sync Error Analysis & Modelling. David McCall presented and led the discussion on “60802 Dynamic Time Sync Error – Error Model & Monte Carlo Method Analysis” <https://www.ieee802.org/1/files/public/docs2021/60802-McCall-Stanton-Time-Sync-Error-Model-and-Analysis-2021-11-v01.pdf>. The presentation included an online demo run of an RStudio script.  
The presentation could not be finished by lack of time.  
**Disposition:** The continuation of the presentation is scheduled for the IEC/IEEE 60802 meeting on Nov 15, 2021.

17. Review of minutes. This agenda item was skipped by lack of time.

13:30 ET recess

**Call to order** Nov 11, 2021 at 11:30 ET by Ludwig Winkel, 60802 Chair, who presided with János Farkas, TSN TG Chair. Josef Dorr, 60802 Secretary, wrote the minutes.

18. Meeting introduction and other administrative items. The 60802 Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1, asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

19. Approval of agenda. The 60802 Chair presented the agenda in [https://1.ieee802.org/2021-11-plenary-tsn-agenda/#TSN 8211 IECIEEE 60802-4](https://1.ieee802.org/2021-11-plenary-tsn-agenda/#TSN_8211_IECIEEE_60802-4).

**Disposition:** The agenda was reviewed, discussed, and agreed (informally, none dissenting) as presented.

20. ClockTarget and ClockSource. Günter Steindl presented “ClockTarget / ClockSource / ClockSlave / ClockMaster / LocalClock / PTP clock / ApplicationClock Requirements and assigned features” <https://www.ieee802.org/1/files/public/docs2021/60802-Steindl-ClockTarget-and-ClockSource-1121-v04.pdf>.

- During discussion, the question was raised whether a bound for the error contributed by the transfer of synchronized time from the clock source to the clock target should be included in IEC/IEEE 60802.
- Based on discussion, the presentation was subsequently in <https://www.ieee802.org/1/files/public/docs2021/60802-Steindl-ClockTarget-and-ClockSource-1121-v05.pdf>.

**Disposition:** More discussion is needed.

21. D1.3 TG ballot comment resolution. This agenda item was skipped by lack of time.

22. Review of minutes. The minutes were reviewed under the lead of the 60802 Secretary.

13:30 ET recess

**Call to order** Nov 12, 2021 at 11:30 ET by János Farkas, TSN TG Chair, who presided with Ludwig Winkel, 60802 Chair. Josef Dorr, 60802 Secretary, wrote the minutes.

23. Meeting introduction and other administrative items. The TSN TG Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1, asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

24. Approval of agenda. The 60802 Chair presented the agenda in [https://1.ieee802.org/2021-11-plenary-tsn-agenda/#TSN 8211 IECIEEE 60802-5](https://1.ieee802.org/2021-11-plenary-tsn-agenda/#TSN_8211_IECIEEE_60802-5).

**Disposition:** The agenda was reviewed, discussed, and agreed (informally, none dissenting) as presented.

25. NETCONF Subscriptions and YANG Push. Martin Mittelberger presented “Subscribed Notifications / YANG Push” <https://www.ieee802.org/1/files/public/docs2021/60802-Mittelberger-et-al-NETCONF-Subscriptions-and-YANG-Push-1121-v01.pdf> to provide an overview of available mechanisms and a usage proposal for IEC/IEEE 60802.

**Disposition:** More discussion is needed. A text contribution to IEC/IEEE 60802 is expected as a next step. The YANGsters chair invited the contributor to discuss the topic in YANGsters as well.

26. D1.3 TG ballot comment resolution. The IEC/IEEE 60802 Editor continued the resolution of comments received on <https://www.ieee802.org/1/files/private/60802-drafts/d1/60802-d1-3.pdf>.

**Disposition:** Partial disposition. Ballot comments 478, 901, 387, 898 were resolved. The comment dispositions are documented in <https://www.ieee802.org/1/files/private/60802-drafts/d1/60802-d1-3-pdis-v14.pdf>.

27. Review of minutes. The minutes were reviewed under the lead of the 60802 Secretary.

13:30 ET recess

**Call to order** Nov 15, 2021 at 11:30 ET by János Farkas, TSN TG Chair, who presided with Ludwig Winkel, 60802 Chair. Josef Dorr, 60802 Secretary, wrote the minutes.

28. Meeting introduction and other administrative items. The TSN TG Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1, asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

The 60802 Chair proposed to cancel the IEC/IEEE 60802 weekly electronic meetings that had been scheduled for

- Nov 26, 2021;
- Dec 06, 2021; and
- Dec 20, 2021 to Jan 03, 2022.

This proposal was agreed (informally, none dissenting).

29. Approval of agenda. The 60802 Chair presented the agenda in [https://1.ieee802.org/2021-11-plenary-tsn-agenda/#TSN 8211 IECIEEE 60802-6](https://1.ieee802.org/2021-11-plenary-tsn-agenda/#TSN_8211_IECIEEE_60802-6).

**Disposition:** The agenda was reviewed, discussed, and agreed (informally, none dissenting) as presented.

30. Boundary Port Isolation. Günter Steindl presented “Boundary Port Isolation - Requirements and assigned features”

<https://www.ieee802.org/1/files/public/docs2021/60802-Steindl-Boundary-Port-Isolation-1121-v01.pdf>.

**Disposition:** The applicability of IEEE 802.1X for boundary port isolation needs further analysis. A further presentation is expected.

31. Time Sync Error Analysis and Modelling. David McCall continued his Nov 10, 2021 presentation of “60802 Dynamic Time Sync Error – Error Model & Monte Carlo Method Analysis” <https://www.ieee802.org/1/files/public/docs2021/60802-McCall-Stanton-Time-Sync-Error-Model-and-Analysis-2021-11-v02.pdf>.

**Disposition:** More discussion is needed.

- Some Time Series simulations should be carried out to validate the most promising Monte Carlo analysis results (e.g., pDelayInterval Sensitivity Analysis with Lower Timestamp Error).
- Another contribution on techniques for compensating for Clock Drift is expected.

32. D1.3 TG ballot comment resolution. This agenda item was skipped by lack of time.

33. Review of minutes. The minutes were reviewed under the lead of the 60802 Secretary.

13:30 ET adjournment

## 6.2 IEEE P802.1DP/SAE AS6675 joint project

Between this session and the preceding session, the IEEE 802.1 Time-Sensitive Networking (TSN) Task Group (TG) held electronic meetings on P802.1DP/SAE AS6675 whose minutes are incorporated to these session minutes by reference as follows:

- Minutes of the IEEE P802.1DP / SAE AS6675 meeting held 2021-10-13 10:00 - 12:04 ET <https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES:dbc25dd9.21>

The table in section 1 reflects the attendance and affiliation of all participants in all 802.1 WG and subgroup meetings held in this session.

**Call to order** Nov 10, 2021 at 9:00 ET by János Farkas, IEEE 802.1 TSN TG Chair. Abdul Jabbar and János Farkas, IEEE P802.1DP/SAE AS6675 joint project co-Chairs, presided. Marina Gutiérrez, IEEE P802.1DP/SAE AS6675 Secretary, wrote the minutes.

Agenda items and dispositions:

1. Meeting introduction. The IEEE SA slides on IEEE Patent Policy and IEEE SA Copyright and Participation Policies were provided beforehand as part of "MEETING INTRODUCTION" <http://www.ieee802.org/1/files/public/templates/admin-TG-intro-0721-v01.pdf>.  
János Farkas, IEEE 802.1DP/SAE AS6675 co-Chair, announced that the meeting is subject to these Policies as read and displayed at opening plenary meeting.  
János Farkas, IEEE 802.1DP/SAE AS6675 co-Chair, asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.  
János Farkas, IEEE 802.1DP/SAE AS6675 co-Chair, explained that the IEEE P802.1DP/SAE AS6675 Joint Project also follows the usual SAE IP and copyright <https://www.sae.org/about/legal-policies/intellectual-property> policies.
2. Approval of agenda. János Farkas, IEEE 802.1DP/SAE AS6675 co-Chair, presented the agenda in [https://1.ieee802.org/2021-11-plenary-tsn-agenda/#TSN\\_8211\\_P8021DPAS6675](https://1.ieee802.org/2021-11-plenary-tsn-agenda/#TSN_8211_P8021DPAS6675).  
**Disposition:** The agenda was reviewed, discussed and agreed (informally, none dissenting) as presented.
3. The IEEE P802.1DP/SAE AS6675 joint project co-Chairs presented "IEEE/SAE cooperation on TSN" <https://www.ieee802.org/1/files/public/docs2021/admin-IEEE-SAE-cooperation-process-1121.pdf>.  
**Disposition:** For information.
4. Brent Nelson presented "Aerospace bridge policing and stream isolation requirements derived from ARINC 664 part 7 networks" <https://www.ieee802.org/1/files/public/docs2021/dp-Nelson-Policing-Filtering-from-A664p7-1109-v02.pdf>.  
**Disposition:** Presentation discussed. More discussion needed.
5. Abdul Jabbar presented "End System Traffic Shaping for P802.1DP" <https://www.ieee802.org/1/files/public/docs2021/dp-jabbar-endsystem-shaping-0921-v00.pdf>.  
**Disposition:** Presentation was discussed. More discussion is needed.

10:57 ET recess

## 7 Nendica

Between this session and the preceding session, the IEEE 802 “Network Enhancements for the Next Decade” Industry Connections Activity (Nendica) held electronic meetings whose minutes are incorporated to these session minutes by reference as follows:

- Minutes of the Nendica meeting held 2021-09-30 09:00-11:00 ET  
<https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;c6accf9d.21>
- Minutes of the Nendica meeting held 2021-10-07 09:00-11:00 ET  
<https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;75caf42b.21>
- Minutes of the Nendica meeting held 2021-10-14 09:00-11:00 ET  
<https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;15653148.21>
- Minutes of the Nendica meeting held 2021-10-21 09:00-11:00 ET  
<https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;b35694e.21>
- Minutes of the Nendica meeting held 2021-10-28 09:00-11:00 ET  
<https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;715452a6.21>
- Minutes of the Nendica meeting held 2021-11-04 09:00-11:00 ET  
<https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;bd7b4927.21>

The table in section 1 reflects the attendance and affiliation of all participants in all 802.1 WG and subgroup meetings held in this session.

**Call to order** Nov 11, 2021 at 09:00 ET by Roger Marks, Nendica Chair, who presided and wrote the minutes.

Agenda items and dispositions:

1. Meeting introduction and other administrative items.

The IEEE SA slides on IEEE Patent Policy and IEEE SA Copyright and Participation Policies were provided beforehand as part of “MEETING INTRODUCTION”

“<http://www.ieee802.org/1/files/public/templates/admin-prePAR-intro-0721-v01.pdf>”. The Nendica Chair showed this presentation advising that the following, provided beforehand, applies:

- IEEE SA’s copyright policy is described in Clause 7 of the IEEE SA Standards Board Bylaws and Clause 6.1 of the IEEE SA Standards Board Operations Manual;
- Any material submitted during standards development, whether verbal, recorded, or in written form, is a Contribution and shall comply with the IEEE SA Copyright Policy.

The Nendica Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

2. Approval of agenda. Additions to the Mentor server document list were noted. The Nendica Chair presented the draft agenda and deleted an erroneous item.

**Disposition:** The agenda was reviewed and agreed (informally, none dissenting) as <https://1.ieee802.org/802-nendica-agenda-2021-11-11/>.

3. Minutes. The Nendica Chair reviewed the draft “Minutes of the Nendica meeting held 2021-11-04 09:00-11:00 ET” <https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;bd7b4927.21>.

**Disposition:** It was agreed (informally, none dissenting) to approve the minutes as presented.

4. Update. The Nendica web site was reported as unchanged. The Nendica Chair presented “Nendica Session Issues, 2021-11” <https://mentor.ieee.org/802.1/dcn/21/1-21-0069-00->

[ICne.pdf](#), including an update on the 802.1 Working Group Chair's announced plans for the 802.1 Technical Plenary beginning Dec 2, 2021.

5. Nendica organization. The following motion was made:
  - Motion: To request meeting authorization on the same terms agreed 2021-07-20  
Motion by: Specht  
Seconded: Steindl

The Nendica Chair announced that this motion had been approved without objection.

**Disposition:** The Nendica Chair plans to bring the consequential motion to the Nov 16, 2021 IEEE 802.1 closing plenary meeting.

6. CTF Study Item. Johannes Specht discussed aspects of "Cut-Through Forwarding (CTF): Towards an IEEE 802.1 Standard" <https://www.ieee802.org/1/files/public/docs2021/new-specht-ctf-802-1-1121-v01.pdf>, presented Nov 10, 2021 to the 802.1 TSN TG. It was expected that the 802.1 WG would, on Nov 16, 2021, consider a proposal to authorize the TSN TG to develop a PAR and CSD on this topic. Discussion suggested that progress toward a PAR would formalize any remaining concerns and allow them to be addressed. It was noted that Specht had re-recorded his video for the Jul 2021 IEEE 802 tutorial, that Dieter Proell had edited a video of the entire tutorial as re-recorded by all the speakers, and that Specht had been coordinating to make the video available on an IEEE 802 YouTube channel. Appreciations were expressed for the progress and to Proell for his editing.

**Disposition:** Updates are anticipated at future Nendica meetings.

7. ELLA Study Item. Roger Marks presented "Planning for IEEE Std 802 Revision" <https://mentor.ieee.org/802.1/dcn/21/1-21-0070-00-ICne.pdf>. Discussion followed, primarily on the details of potential PAR development. The following motion was made:

- Motion: To request the following motion of the 802.1 WG: "802.1 authorizes Nendica to generate a PAR and, if appropriate, CSD for pre-circulation to the March IEEE 802 Plenary Session for a revision to IEEE Std 802, taking into account information from the 802.1 Technical Plenary."  
Motion by: Kiessling  
Seconded: Proell

The Nendica Chair announced that this motion had been approved without objection.

**Disposition:** The Nendica Chair plans to bring the consequential motion to the Nov 16, 2021 IEEE 802.1 closing plenary meeting.

8. New 802.1 topics.
  - Pulsed Queuing and Multi-CQF: This agenda item was skipped in the absence of the expected presenter.
  - Source (Remote) PFC: Paul Congdon presented "Leveraging Qcz for sPFC-SFC" <https://mentor.ieee.org/802.1/dcn/21/1-21-0068-01-ICne.pdf>. Discussion followed.

**Disposition:** Further discussion at future Nendica meetings is anticipated. It was noted that the topic should be entitled "Source PFC" for now but the title may be further refined in the future.

9. Future Meetings.

The next Nendica meeting is scheduled for Nov 18, 2021, 09:00-11:00 ET, on the presumption that continuation of the Nendica meeting series will be authorized by the 802.1 WG. The tentative agenda for that meeting at <https://1.ieee802.org/802-nendica-agenda-2021-11-18/> would be announced by the Nendica Chair one day following the conclusion of today's meeting. Requests for agenda time should be directed to the Chair before then.

10. Any Other Business. No other business was discussed by Nendica in this meeting.

11:00 ET adjournment

## 8 YANGsters

Between this session and the preceding session, YANGsters held electronic meetings whose minutes are incorporated to these session minutes by reference as follows:

- Minutes of the YANGsters meeting held 2021-09-28 10:00 –10:39 ET  
<https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=437497>
- Minutes of the YANGsters meeting held 2021-10-05 10:00 –10:51 ET  
<https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=438444>
- Minutes of the YANGsters meeting held 2021-10-12 10:00 –10:58 ET  
<https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=459680>
- Minutes of the YANGsters meeting held 2021-10-26 10:00 –11:00 ET  
<https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=506808>
- Minutes of the YANGsters meeting held 2021-11-02 10:02 –11:00 ET  
<https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=507755>

The table in section 1 reflects the attendance and affiliation of all participants in all 802.1 WG and subgroup meetings held in this session.

**Call to order** Nov 11, 2021 at 14:01 ET by Scott Mansfield, YANGsters Chair, who presided. Stephan Kehrer, YANGsters Secretary, wrote the minutes.

Agenda items and dispositions:

1. Meeting introduction. The IEEE SA slides on IEEE Patent Policy and IEEE SA Copyright and Participation Policies were provided beforehand as part of “MEETING INTRODUCTION” <http://www.ieee802.org/1/files/public/templates/admin-prePAR-intro-0721-v01.pdf>.

The YANGsters Chair announced that the meeting is subject to these Policies as read and displayed at the opening plenary meeting.

The YANGsters Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

2. Approval of agenda. The YANGsters Chair presented the agenda in <https://1.ieee802.org/november-2021-plenary-session-electronic-yangsters-agenda/>.

**Disposition:** The agenda was reviewed, discussed and agreed (informally, none dissenting) as presented.

3. Introduction to YANGsters. The YANGsters Chair introduced YANGsters by presenting
  - <https://1.ieee802.org/yangsters/>, and
  - <https://1.ieee802.org/yangsters/yangsters-guidelines/yangsters-faq/>.

**Disposition:** For information.

4. Status. The YANGsters Chair provided an overview of YANGsters by showing <https://www.ieee802.org/1/files/public/docs2021/yangsters-smansfield-plenary-status-1121-v02.pdf>.

**Disposition:** For information.



5. Liaisons: The YANGsters Chair presented and led the discussion on related liaisons from BBF in <https://www.ieee802.org/1/files/public/docs2021/liaison-BBF-LS475-strategytobindQcxCFMYANGtoETFalarmmgmtmodel-0921.pdf>, <https://www.ieee802.org/1/files/public/docs2021/liaison-response-BBF-strategytobindQcxtoETFalarmmgmtmodel-0721-v01.pdf>, <https://www.ieee802.org/1/files/public/docs2021/liaison-BBF-strategytobindQcxtoETFalarmmgmtmodel-0721.pdf>:

- An overview of these liaisons was provided.
- BBF's decision to "continue to proceed with the understanding that the BBF model results in a non-compliant IEEE 802.1Q Device, extending the ieee802-dot1q-cfm YANG module with a BBF YANG module that defines alarms per defect" was noted.

**Disposition:** Agreed (informally, none dissenting), that no further actions are required on the latest of these liaisons at this time.

6. Review of discussions since last plenary: UML-Like Diagram guidelines update. The YANGsters Chair presented and led the discussion of the topic by showing <https://1.ieee802.org/uml-like-diagrams/>.

- There are several UML-like diagrams in P802.1Q-Rev. Comments regarding these diagrams have been received during the SA ballot on P802.1Q-Rev/D1.0.
  - It was pointed out that the use of UML-like diagrams that is described in <https://1.ieee802.org/uml-like-diagrams/> deviates from the description provided in OMG UML version 2.5 that is referenced in P802.1Q-Rev. This might prompt ballot comments since the UML-like diagrams follow the guidelines provided by YANGsters.
    - It was suggested to update the reference in P802.1Q-Rev to point to <https://1.ieee802.org/uml-like-diagrams/> instead of the OMG UML version 2.5 as a way to address this concern.
  - Another topic that needs discussion is the question of how to provide indices in the UML-like diagrams. The current guidance is to provide indices in parentheses after the class name. In the past the indices have been placed on the arrows showing relations between classes.
- It was pointed out that the current suggestion for color coding provided by YANGsters (e.g. having a white background for everything out of scope of the specific IEEE 802 standard being developed and a grey background for everything originating in IEEE 802 standard being developed) might not always be the best approach.
  - It was agreed (informally, none dissenting) that color coding as it is currently described in <https://1.ieee802.org/uml-like-diagrams/> makes sense, since amendments should always be written as if they are part of the base standard. For this reason, highlighting parts added by an amendment in a different shade is not appropriate. This would result in the figures needing to be redrawn with an updated shading when rolling up an amendment into the base standard and would impose an unnecessary burden on the editor doing the rollup.

**Disposition:** Agreed (informally, none dissenting), that more discussion on the topic is needed.

7. Review of discussions since last plenary: Revision statement in YANG discussion. The YANGsters Chair presented “YANG Revision Guidelines”  
<https://www.ieee802.org/1/files/public/docs2020/yangsters-smansfield-yang-revision-guidelines-0820-v01.pdf>.
  - The current way that YANG files are provided at <https://1.ieee802.org/yang-modules/> is the following:
    - The current version of a YANG file is named without a revision date.
    - Previous versions of a YANG file have the revision date of the file added to the name when a new version is published and uploaded.
  - Discussed was whether there should be a convention on how files, especially YANG files, should be named during standards development and provided to the editor of a draft standard. Without such guidance the editor has additional work to do, e.g., renaming YANG modules by adding a date in order not to overwrite already present versions of the file. Guidance on this could be provided as part of <https://1.ieee802.org/filenaming-conventions/>.  
**Disposition:** Agreed (informally, none dissenting), that more discussion on the topic is needed. The topic of file naming conventions needs to be discussed in IEEE 802.1 leadership.
8. Review of discussions since last plenary: Updates to YANG Catalog GitHub repository. The YANGsters Chair presented the topic.
  - Guidelines regarding the YANG Catalog GitHub repository can be found at [https://1.ieee802.org/yangsters/yangsters-guidelines/yangsters-faq/#YANG\\_Catalog\\_GitHub\\_Repository](https://1.ieee802.org/yangsters/yangsters-guidelines/yangsters-faq/#YANG_Catalog_GitHub_Repository).
  - An issue can arise when trying to commit new YANG modules to the YANG Catalog GitHub repository. This can result in a git message stating “X commits ahead”.
    - Guidance on how to handle that issue is provided at <https://1.ieee802.org/yangsters/tools-for-yang/git-issue-x-commits-ahead/>.**Disposition:** For information.
9. Instance examples for Provider Edge Bridge. The YANGsters Chair presented “Provider Edge Bridge Instance Examples”  
<https://www.ieee802.org/1/files/public/docs2021/yangsters-smansfield-peb-instances-1121-v02.pdf>.  
**Disposition:** Agreed (informally, none dissenting), that more discussion on the topic is needed.
10. Review of YANG issues from recent ballots. Discussion was deferred by lack of time.
11. Future meetings. A motion is planned for the 802.1 closing plenary meeting to request the continuation of the weekly YANGsters electronic meetings. YANGsters’ next electronic meeting is Nov 23, 2021.
  - Information on YANGsters electronic meetings can be found at <https://1.ieee802.org/yangsters/yangsters-call-information/>.
12. Any Other Business. No other business was discussed by YANGsters in this session.

16:08 ET adjournment

## 9 Closing Plenary Meeting

**Call to order** Nov 16, 2021 at 9:00 ET by the Chair who presided. The Recording Secretary wrote the minutes.

The table in section 1 reflects the attendance and affiliation of all participants in all 802.1 WG and subgroup meetings held in this session.

The Chair presented “Closing Plenary July 2021” finalized as <https://www.ieee802.org/1/files/public/minutes/2021-11-closing-plenary-slides.pdf>.

During this presentation, the Chair:

- Introduced the agenda on slide 2 that was tacitly approved.
- Announced that this closing plenary meeting remains subject to the IEEE SA Copyright Policies (slides 3 to 5), IEEE Patent Policy (slides 6 to 10) and IEEE SA Participation policies (slides 11 to 13) made available beforehand (as announced in the opening plenary meeting – see section 3) and made the “Call for Potentially Essential Patents”, i.e. provided 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.
- Reviewed meeting decorum, including the policies on public reporting, and on photography or recording (slide 14), and called for any members of the press (i.e., anyone reporting publicly on this meeting) who have not already announced themselves to announce their presence.
  - There were no responses to the call.
- Asked participants to record attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker (slide 15).
- Provided electronic meeting guidelines (slide 16).
- Reminded participants of the various plenary session registration fees applying and attendant registration details (slide 17).
- Provided general information regarding meeting contributions, minutes, schedule for all Working Groups, website (slide 18).
- Recognized 802.1 officers and leadership (slide 19) and the editors of current projects (slide 20).
- Reminded 802.1 voting members of their obligations regarding declaring affiliation(s) and employer(s) (slide 21), requesting and retaining voting membership (slide 22), and responding to WG ballots and E-Polls as well as regarding the consequences of not responding to WG ballots and E-Polls (slide 23).
- Reviewed the list of 802.1 voters (slide 24), including information about individuals who gained (slide 25), may gain (slide 26), may lose (slide 27), or will lose (slide 28) 802.1 voting membership.
- Reminded individual participants of 802.11 reciprocal credit, which was continued at this session (slide 29).
- Reviewed the schedule for future interim (slide 30) and plenary (slide 31) sessions. This schedule remained unchanged from the opening plenary meeting except for the following updated presentation being linked for the May 2022 interim session:
  - “IEEE 802.1 Interim Meeting Proposal Santa Fe, New Mexico May 2022”  
<https://www.ieee802.org/1/files/public/docs2021/admin-woods-May2022-interim-proposal-0721-v01.pdf>.
- Summarized future session decision dates (slide 32). This remained unchanged from the opening plenary meeting.

- Summarized LMSC items to consider for in-person sessions (slide 33).
- Conducted the following straw polls (slides 34-36) and addressed comments on these straw polls.
  - When do you expect the next in-person 802.1 session will be?
    - A – March 2022 16
    - B – May 2022 24
    - C – July 2022 16
    - D – Sept 2022 5
    - E – Nov 2022 4
    - F – 2023 or later 7
    - No Answer 12
    - (86 in the room)
  - If the 2022 March Plenary Session is held in Orlando, Florida as an in-person only session, will you attend?
    - Yes 28
    - No 42
    - No answer 13
    - (83 in the room)
  - If the 2022 March Plenary Session is held in Orlando, Florida as a mixed-mode session, will you attend?
    - Yes, Attend In-person 22
    - Yes, Attend Virtually (remotely) 43
    - No, Will not attend plenary 5
    - No answer 16
    - (86 in the room)
- Discussed the [802.1 technical plenary](#) that is scheduled 16:00-18:00 ET Dec 2, 2021 to address specific technical problems across all 802 and to initially provide wider awareness for the revision of IEEE Std 802 (slide 37).
- Provided the anticipation of next actions with respect to projects in the WG's current workload (slide 38).
- Pointed out the 802.1ASDs PAR and CSD (slide 39) and other 802 PARs, PAR modification, related CSDs (slide 40) that are up for vote or finalization during this IEEE 802 plenary session.
- Summarized liaison resources (slide 41) and the set of new and previously-received (slide 42) incoming liaisons.
- Requested that Karen Randall, Liaison Secretary, lead the final review, which she did, of draft liaison responses prepared and reviewed in 802.1 subgroups during this plenary session (slide 43).
- Discussed promotion of the work of the WG (slide 44) encouraging in particular the editors of projects nearing standard publication time to think of possible promotion.
- Requested that the subgroup Chairs provide reports on the activities of their subgroups (slide 45) during this plenary session (slide 46) (see individual subgroup minutes above for details) after showing the list of upcoming 802.1 leadership meetings (slide 47).
  - Paul Congdon, Maintenance TG Chair, presented the report on slides 48-50.
  - Mick Seaman, Security TG Chair, presented the report on slide 51.
  - János Farkas, TSN TG Chair, and Ludwig Winkel, IEC/IEEE 60802 Joint Project Chair, presented the report on slide 52.
  - Roger Marks, Nendica Chair, presented the report on slides 53-54.
  - Scott Mansfield, YANGsters Chair, presented the YANGsters report on slide 55.
- Provided guidance on using DirectVoteLive to vote on motions (slide 56).
- Showed the 802.1 consent agenda items for the LMSC closing plenary meeting (slides 57-60).

- Conducted votes on the following motions (slides 61-109) that all passed unless otherwise indicated. (Supporting information is available in “Closing Plenary November 2021” finalized as <https://www.ieee802.org/1/files/public/minutes/2021-11-closing-plenary-slides.pdf>.)

**Motions for 802 EC  
Consent Agenda  
PARs to NesCom**

- Motion
  - Approve forwarding P802.1ASds PAR documentation in <https://www.ieee802.org/1/files/public/docs2021/ds-PAR-1121-v01.pdf> to NesCom
  - Approve CSD documentation in <https://www.ieee802.org/1/files/public/docs2021/ds-CSD-1121-v01.pdf>
  - In the WG, Proposed: Don Pannell, Second: Silvana Rodrigues
  - PAR (y/n/a): 59, 0, 2
  - CSD (y/n/a): 58, 0, 2

**Motions for 802 EC  
Consent Agenda  
Drafts to RevCom**

- Motion
  - Approve sending P802.1AS-2020/Cor1 D4.0 to RevCom
    - No CSD; Maintenance PAR not intended to provide any new functionality.
    - P802.1AS-2020/Cor1 D4.0 had 100% approval, 83% return rate at the end of the first SA recirculation ballot.
  - In the WG, Proposed: Paul Congdon, Second: János Farkas
    - Sending draft (y/n/a): 60, 0, 1
- Motion
  - Approve sending P802.1ACct D2.0 to RevCom
  - Approve CSD documentation in <https://mentor.ieee.org/802-ec/dcn/17/ec-17-0155-00-ACSD-802-1acct.pdf>
  - P802.1ACct D2.0 had 100% approval, 82% return rate at the end of the initial SA ballot
  - In the WG, Proposed: Paul Congdon, Second: Jessy Rouyer
    - Sending draft (y/n/a): 57, 0, 5
    - CSD (y/n/a): 56, 0, 6
- Motion
  - Approve sending P802.1ABdh to RevCom
  - Approve CSD documentation in <https://mentor.ieee.org/802-ec/dcn/19/ec-19-0138-00-ACSD-p802-1abdh.pdf>
  - P802.1ABdh D2.1 had 100% approval at the end of the last SA ballot
  - In the WG, Proposed: János Farkas Second: Steve Haddock
    - Sending draft (y/n/a): 61, 0, 4
    - CSD (y/n/a): 57, 0, 6

- Motion
  - Approve sending P802.1CBcv to RevCom
  - Approve CSD documentation in <https://mentor.ieee.org/802-ec/dcn/18/ec-18-0089-00-ACSD-802-1cbcv.pdf>
  - P802.1CBcv D2.1 had 98% approval at the end of the last SA ballot
  - In the WG, Proposed: János Farkas      Second: Stephan Kehrer
    - Sending draft (y/n/a): 61, 0, 2
    - CSD (y/n/a): 57, 0, 5
- Motion
  - Approve sending P802.1CBdb to RevCom
  - Approve CSD documentation in <https://mentor.ieee.org/802-ec/dcn/18/ec-18-0090-00-ACSD-802-1cbdb.pdf>
  - P802.1CBdb D2.1 had 100% approval at the end of the last SA ballot
  - In the WG, Proposed: János Farkas      Second: Christophe Mangin
    - Sending draft (y/n/a): 63, 0, 2
    - CSD (y/n/a): 60, 0, 4

**Motions for 802 EC  
Consent Agenda  
Liaisons and external communications (ME)**

- Motion
  - Approve <https://www.ieee802.org/1/files/public/docs2021/liaison-response-itu-t-sg15-otnt-swp-1121-v01.pdf> as communication to ITU-T SG15 on OTNT Standardization Work Plan Issue 29, granting the IEEE 802.1 WG chair (or his delegate) editorial license.
    - This approval is under LMSC OM “Procedure for public statements to government bodies”
  - In the WG, Proposed: Paul Congdon      Second: Karen Randall
    - (y/n/a): 55, 0, 5
- Motion
  - Approve liaison of the following comment responses to ISO/IEC JTC1/SC6 under the PSDO agreement:
    - IEEE 802.1AS-2020
      - <https://www.ieee802.org/1/files/public/docs2021/liaison-SC6CommentResponse1ASFDIS-0921-v01.pdf>
    - IEEE 802.1CMde-2019
      - <https://www.ieee802.org/1/files/public/docs2021/liaison-SC6CommentResponse1CMdeFDIS-1121-v02.pdf>
    - IEEE 802.1Qcc-2018
      - <https://www.ieee802.org/1/files/public/docs2021/liaison-SC6CommentResponse1QccFDIS-0921-v01.pdf>
  - In the WG, Proposed: Paul Congdon, Second: Karen Randall
    - (y/n/a): 59, 0, 4

- Motion
  - Approve submission of the following draft(s) to ISO/IEC JTC1/SC6 for adoption under the PSDO agreement, once approved and published.
    - IEEE P802.1ABcu
    - IEEE P802.1BA-Rev
    - IEEE P802.1ACct
    - IEEE P802.1AS/Cor1
    - IEEE P802.1ABdh
    - IEEE P802.1CBcv
    - IEEE P802.1CBdb
    - IEEE P802.1Q-Rev
  - In the WG, Proposed: Paul Congdon, Second: Karen Randall
    - (y/n/a): 57, 0, 4
- Motion
  - Approve <https://www.ieee802.org/1/files/public/docs2021/liaison-response-itu-t-SG13-LS217-determcommunications-1121.pdf> as communication to ITU-T SG13 granting the IEEE 802.1 WG chair (or his delegate) editorial license.
    - This approval is under LMSC OM “Procedure for public statements to government bodies”
  - In the WG, Proposed: János Farkas, Second: Jessy Rouyer
    - (y/n/a): 59, 0, 3

#### **Motions for 802 EC**

#### **Consent Agenda**

#### **Liaisons and external communications (II)**

- Motion
  - Approve <https://www.ieee802.org/1/files/public/docs2021/liaison-response-OPENAlliance-LiaisonRequest-1121-v01.pdf> as communication to OPEN Alliance, granting the IEEE 802.1 WG chair (or his delegate) editorial license.
  - In the WG, Proposed: János Farkas, Second: Karen Randall
    - (y/n/a): 60, 0, 3
- Motion
  - Approve <https://www.ieee802.org/1/files/public/docs2021/liaison-response-MoCA-MoCADraftsforreview-1121-v01.pdf> as communication to MoCA regarding specifications: MAC/PHYv2.0 and MAC/PHYv2.5, granting the IEEE 802.1 WG chair (or his delegate) editorial license.
  - In the WG, Proposed: Paul Congdon, Second: Karen Randall
    - (y/n/a): 54, 0, 7
- Motion
  - Approve <https://www.ieee802.org/1/files/public/docs2021/liaison-response-EtherCAT-draftsharing-1121-v01.pdf> as communication to the EtherCat Technology Group, granting the IEEE 802.1 WG chair (or his delegate) editorial license.
  - In the WG, Proposed: János Farkas, Second: Ludwig Winkel
    - (y/n/a): 54, 1, 6

- Motion
  - Approve <https://www.ieee802.org/1/files/public/docs2021/liaison-ietf-802-1CQ-1121-v01.pdf> as communication to IETF Internet Area Working Group, granting the IEEE 802.1 WG chair (or his delegate) editorial license.
  - In the WG, Proposed: János Farkas, Second: Johannes Specht
    - (y/n/a): 55, 1, 3
- Motion
  - Approve sharing the latest revision of the IEC/IEEE 60802 draft with OPC Foundation.
  - In the WG, Proposed: János Farkas, Second: Ludwig Winkel
    - (y/n/a): 56, 0, 5
- Motion
  - Approve sharing the latest revision of the IEC/IEEE 60802 draft with LNI 4.0.
  - In the WG, Proposed: János Farkas, Second: Ludwig Winkel
    - (y/n/a): 54, 0, 6
- Motion
  - Approve sharing the latest revision of the P802.1Qdd draft with LNI 4.0.
  - In the WG, Proposed: János Farkas, Second: Ludwig Winkel
    - (y/n/a): 51, 1, 9

#### **Administrative WG Motions**

- Motion
  - 802.1 approves the July 2021 (plenary) and September 2021 (interim) session minutes:
    - <https://www.ieee802.org/1/files/public/minutes/2021-07-minutes-v3.pdf>
    - <https://www.ieee802.org/1/files/public/minutes/2021-09-minutes-v2.pdf>
  - Proposed: Jessy Rouyer
  - Seconded: János Farkas
  - Approved by Acclamation

#### **Maintenance TG WG Motions**

- Motion
  - 802.1 authorizes the Maintenance TG to hold electronic meetings to address task group matters and progress resolution of maintenance items documented in the maintenance database (<https://1.ieee802.org/maintenance/database/>).
    - November 23, 2021 at 11:00AM ET  
<https://1.ieee802.org/maintenance-tg-electronic-meeting-agenda-november-23-2021-11-am-et/>
    - Additional dates/times to be announced subject to notice of at least 10 days to the [802.1 Minutes email list](#).
  - Proposed: Paul Congdon
  - Second: Jessy Rouyer
  - Approved by Acclamation



### Security TG WG Motions

- Motion
  - Authorize the Security Task Group to hold electronic meetings to progress P802.1AEdk and task group matters arising:
    - Dates/times to be announced subject to notice of at least 10 days to the [802.1 Minutes email list](#)
  - Proposed: Mick Seaman
  - Second: Karen Randall
  - Approved by Acclamation

### TSN TG WG Motions

- Motion
  - 802.1 authorizes the TSN TG to generate PAR and CSD at the January 2022 interim session for pre-circulation to the EC for an IEEE 802.1 standard on Cut-Through Forwarding.
  - Proposed: Johannes Specht
  - Second: Jordon Woods
  - In the WG (y/n/a): 43, 7, 10
- Motion
  - 802.1 authorizes the TSN TG to generate PAR and CSD at the January 2022 interim session for pre-circulation to the EC for an amendment to IEEE Std 802.1Q to specify pulsed queues.
  - Proposed: Norman Finn
  - Second: Karl Weber
  - In the WG (y/n/a): 36, 4, 19
- Motion
  - 802.1 authorizes the TSN TG to generate PAR and CSD at the January 2022 interim session for pre-circulation to the EC for an amendment to IEEE Std 802.1Q to specify mechanisms for automatic PFC headroom configuration and PFC MACsec interworking.
  - Proposed: Lily Lv
  - Second: Paul Congdon
  - In the WG (y/n/a): 38, 2, 16
- Motion
  - 802.1 authorizes the TSN Task Group to hold weekly electronic meetings on Mondays 11:00-13:00 ET starting November 22, 2021.
    - Agenda will be announced on the [802.1 Minutes email list](#) at least 5 calendar days before the electronic meeting.
    - Access information is posted on the <http://www.ieee802.org/1/tsn> page and will be updated as necessary.
  - Proposed: János Farkas
  - Second: Jessy Rouyer
  - Approved by Acclamation

- Motion
  - 802.1 authorizes the TSN Task Group to hold additional electronic meetings as needed to progress the projects of the Task Group.
    - Dates, times, and agenda to be announced subject to notice of at least 10 calendar days on the [802.1 Minutes email reflector](#).
    - Access information is posted on the <http://www.ieee802.org/1/tsn> page and will be updated as necessary.
  - Proposed: János Farkas
  - Second: Jessy Rouyer
  - Approved by Acclamation
- Motion
  - 802.1 authorizes the TSN Task Group to hold an additional electronic meeting to discuss common TSN for converged networks 9:00-11:00 ET on February 9, 2022.
    - Agenda will be announced on the [802.1 Minutes email reflector](#) at least 10 calendar days before the electronic meeting.
    - Access information is posted on the <http://www.ieee802.org/1/tsn> page and will be updated as necessary.
  - Proposed: János Farkas
  - Second: Stephan Kehrer
  - Approved by Acclamation
- Motion
  - 802.1 authorizes the TSN Task Group to hold weekly electronic meetings together with IEC 65C/WG18 to progress the work of the IEC/IEEE 60802 Joint Project on Mondays and Fridays 9:00-11:00 ET starting November 19, 2021.
    - Agenda will be announced on the [802.1 Minutes email list](#) at least 5 calendar days before the electronic meeting.
    - Access information is posted on the <http://www.ieee802.org/1/tsn> page and will be updated as necessary.
  - Proposed: János Farkas
  - Second: Ludwig Winkel
  - Approved by Acclamation
- Motion
  - 802.1 authorizes the TSN Task Group to hold weekly electronic meetings to progress the P802.1DG project on Tuesdays 9:00-11:00 ET starting December 7, 2021.
    - Agenda will be announced on the [802.1 Minutes email list](#) at least 5 calendar days before the electronic meeting.
    - Access information is posted on the <http://www.ieee802.org/1/tsn> page and will be updated as necessary.
  - Proposed: János Farkas
  - Second: Stephan Kehrer
  - Approved by Acclamation

- Motion
  - 802.1 authorizes the TSN Task Group to hold bi-weekly electronic meetings together with SAE AS6675 to progress the work of the P802.1DP / SAE AS6675 joint project on Wednesdays 10:00-12:00 ET starting December 8, 2021.
    - Agenda will be announced on the [802.1 Minutes email list](#) at least 5 calendar days before the electronic meeting.
    - Access information is posted on the <http://www.ieee802.org/1/tsn> page and will be updated as necessary.
  - Proposed: János Farkas
  - Second: Stephan Kehrer
  - Approved by Acclamation

#### **Nendica WG Motions**

- Motion
  - 802.1 authorizes Nendica to generate a PAR and, if appropriate, CSD for pre-circulation to the March IEEE 802 Plenary Session for a revision to IEEE Std 802, taking into account information from the 802.1 Technical Plenary.
  - Proposed: Ludwig Winkel
  - Second: Dieter Pröll
  - In the WG (y/n/a): 48, 1, 8
- Motion
  - 802.1 authorizes Nendica to hold weekly electronic meetings each Thursday 09:00-11:00 ET starting November 18, 2021.
    - Agenda to be announced subject to notice of at least 5 calendar days at the [802.1 Minutes email list](#).
    - Access and agenda information are provided on the calendar at <https://1.ieee802.org/802-nendica/>.
  - Proposed: Paul Congdon
  - Second: Johannes Specht
  - Approved by Acclamation
- Motion
  - 802.1 authorizes Nendica to hold additional meetings as announced at least 10 days in advance.
    - Dates, times and agenda to be announced subject to notice of at least 10 days to the [802.1 Minutes email list](#).
    - Access and agenda information are provided on the calendar at <https://1.ieee802.org/802-nendica/>.
  - Proposed: Nader Zein
  - Second: Lily Lv
  - Approved by Acclamation

#### **YANGsters WG Motions**

- Motion
  - 802.1 authorizes weekly electronic meetings for the YANGsters subgroup on Tuesdays 10:00-11:00 ET starting with November 30, 2021.
    - Agenda will be announced on the [802.1 Minutes email reflector](#) at least 5 calendar days before the electronic meeting.
    - Access information is posted on the <https://1.ieee802.org/yangsters/yangsters-call-information/> page and will be updated as necessary.
  - Proposed: Scott Mansfield
  - Second: Jessy Rouyer
  - Approved by Acclamation
- Called for Any Other Business (slide 110)
  - It was noted the agendas for the Nov 18, 2021 Nendica electronic meeting and Nov 19, 2021 IEC/IEEE 60802 Joint Project electronic meeting had been posted.
  - The Chair thanked the participants for all their efforts during this session and wished everyone happy holidays.
  - No further business was discussed in this meeting.

12:15 ET adjournment

## 10 Next Session

Jan 17-22, 2022 electronic interim session.