











### 3 Opening Plenary Meeting

See section 1 for attendance and affiliation information.

**Call to order** Mar 11, 2024 at 10:33 MT by the Chair who presided. The Recording Secretary wrote the minutes.

The Chair presented “Opening Plenary March 2024” finalized as <http://www.ieee802.org/1/files/public/minutes/2024-03-opening-plenary-slides.pdf>.

During this presentation, the Chair:

- Introduced the agendas on slide 2 that were tacitly approved.
- Reminded all participants that access to this session requires a registration fee (slide 3).
- Provided mixed mode session information (slide 4) and mixed mode guidelines (slides 5-7).
- Reviewed meeting decorum, including the policies on public reporting, and on photography or recording (slide 8), 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 9).
- Introduced meeting policies to be reviewed at this meeting (slide 10)
- Showed slides 11 through 15 (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 prior to the end of the session.

- Presented slide 16 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 17 and 18.
- Presented slides 19 through 21 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;
  - Participants in the IEEE-SA “individual process” shall act independently of others, including employers; and
  - IEEE-SA standards activities shall allow the fair & equitable consideration of all viewpoints.
- Made subgroup announcements (slide 22) 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 23), noting fee waivers may be granted in advance, exceptionally. Such waiver applies to SAE participants in Nashville, TN, USA for this session.
- Shared information about food and social logistics (slide 24).
- Provided general information regarding meeting contributions, minutes, schedule for all Working Groups, website (slide 25).
- Showed slide 55 and gave the floor to the 802 Chair who thanked not only 802.1 participants for the work, dedication, and time put into 802 activities at large, but also their families for supporting the participants. He was thanked by the 802.1 Chair who recognized his leadership and thanked him for isolating 802.1 from higher-level overhead. The 802.1 Chair noted the 802 Chair is IEEE SA treasurer and will be working with the IEEE Board of Governors. A round of applause ensued.
- Introduced 802.1 officers and leadership (slide 26) noting the vacancy created by Marina Gutiérrez no longer being able to serve as IEEE P802.1DP/SAE AS6675 joint project Secretary.
  - János Farkas, IEEE P802.1DP/SAE AS6675 joint project co-Chair, thanked Gutiérrez for her service.
- Reviewed the list of editors for current projects (slide 27) thanking them for all their efforts in progressing the work, and calling for a volunteer to succeed in the role of P802.1Qdw editor, currently vacant.
- Discussed 802.1 WG Process (slide 28) including the “New work” process as previously introduced and leveraging Nendica towards vetting all new 802.1 work.

- Provided an update on current joint development procedures (slide 29) noting that a proposed revision of the IEC/IEEE 60802 on TSN – rev 10 is under discussion.
- Reminded 802.1 voting members of their obligations regarding declaring affiliation(s) and employer(s) (slide 30), electronic ballots (ePolls) conducted between sessions (slide 31), requesting and retaining voting membership (slide 32), and responding to WG ballot series (including ePolls) as well as regarding the consequences of not responding to WG ballot series (including ePolls) (slide 33).
- Reviewed the list of 802.1 voters (slide 34), including information about individuals who may gain (slides 35 and 36) or lose (slides 37 and 38) 802.1 voting membership.
- Addressed questions on slide 33, the details of which were discussed.
- Reminded individual participants of 802.11 reciprocal credit, which was continued at this session (slide 39).
- Had the Executive Secretary introduce information about:
  - The May 12-17, 2024 interim session (slide 40).
  - The Sep 16-20, 2024 interim session (slide 41).
    - The Executive Secretary and Hubert Lambers co-presented “Proposal to Host IEEE 802.1 Sept 2024 Interim Session”  
<https://www.ieee802.org/1/files/public/docs2024/admin-lambers-Sept24-interim-update-0324-v04.pdf>.  
**Discussion:** None.  
**Disposition:** For information.
  - The Jan 2025 interim session (slide 42).
  - The May 19-23, 2025 interim session (slide 43).
    - Christophe Mangin presented “Proposal to host the IEEE 802.1 May 2025 interim meeting in Rennes, France”  
<https://www.ieee802.org/1/files/public/docs2024/admin-mangin-May2025-interim-proposal-0324-v01.pdf>.  
**Discussion:** High-speed rail vs flight access was discussed.  
**Disposition:** For information.
- Had the Executive Secretary provide an overview of the schedule for future interim sessions (slide 44):
  - May 12-17, 2024
    - Hosted by and co-located with the 802 wireless group as in-person session with provisions to support mixed mode
      - Location: Warsaw, Poland
  - September 2024
    - Hosted by Airbus as in-person session with provisions to support mixed mode
      - Date: September 16-20, 2024
      - Location: Hamburg, Germany
  - January 2025
    - Currently no host
    - Possibilities for collocation with 802.3 and 802.11 were discussed.
  - May 2025
    - Hosted by Mitsubishi Electric R&D Centre Europe as in-person session with provisions to support mixed mode
      - Date: May 19-23, 2025
      - Location: Rennes, France
  - September 2025
    - Currently no host
    - Possibilities for collocation with 802.3 and 802.11 were discussed.



- Provided an overview of the schedule for future plenary sessions (slide 45):
  - March 10-15, 2024 – Denver, CO, USA
    - Hyatt Regency Denver at Colorado Convention Center
  - July 14-19, 2024 – Montreal, QC, Canada
    - Sheraton Le Centre Montreal
  - November 10-15, 2024 – Vancouver, BC, Canada
    - Hyatt Regency Vancouver
  - March 9-14, 2025 – Atlanta, GA, USA
    - Hilton Atlanta
  - July 13-18, 2025 – Madrid, Spain
    - Melia Castilla
  - November 9-14, 2025 – Bangkok, Thailand
    - Marriot Marquis Queen’s Park
  - March 8-13, 2026 – Chicago, IL, USA
    - Hyatt Regency Vancouver
  - July 13-18, 2026 – Montreal, QC, Canada
    - Le Centre Sheraton Montreal
  - Nov 8-13, 2026 – Bangkok, Thailand
    - Marriot Marquis Queen’s Park
- Conducted the following straw poll (slide 46):
  - 1. If the 2025 May Interim Session is held at the Mama Shelter hotel, hosted by Mitsubishi Electric R&D Centre Europe, in Rennes, France, as a mixed-mode session, will you attend:
    - Attend In-person - 25
    - Attend Virtually (remotely) - 9
    - Will not attend interim - 5
    - No response - 5
- Previewed the straw polls regarding this plenary session to be conducted during the 802.1 closing plenary meeting (slide 47):
  - 1. Would you like to come back to this venue?
    - Yes - No - Did not respond -
  - 2. Did you go to the social?
    - Yes - No - Did not respond -
  - 3. Did you like the social?
    - Yes - No - Did not respond -
- Provided pointers to the LMSC schedule of EC/WG/TAG meetings to be held during this plenary session (slide 48).
- Reported the following items out of the 802 Executive Committee (EC) plenary session #135 (slide 49):
  - Fee Waivers granted
    - Norman Finn, Hubert Lambers, SAE AS-1 and others
  - IEEE 802 Milestone preview at social
    - Official unveiling at Computer History Museum on May 19th
  - 802 rules update ([EC-24-059](#))
    - Reiterate that attendance in-person required to gain voting rights
      - Pending LMSC approval.
    - Open source project proposal for 802.3 code for equations requires rules update to add SC/WG rules to allow this
  - Venues ([EC-24-31](#))
    - March 2024 – 975 attendees – with about half in-person
    - Finalizing contracts for venues into 2027

- Treasurer ([EC-24-50](#))
  - Reserves “back to normal” at \$1.7M
  - March meeting cost ~ \$700k --- just 2 years ago is was ~\$300k
- Introduced the July 13, 2024 IEEE 802 / ITU-T SG15 workshop (slides 50-51)
  - **Discussion:** mixed-mode provisions are undecided; workshop and session registrations will be separate but at no cost for the workshop; the event organizer is common to ITU-T SG15 and IEEE 802 and will arrange for a single hotel room from separate reservations made through each organization’s registration webpage.
- Introduced IEEE SA staff supporting IEEE 802 (slide 52):
  - Jodi Haasz
    - IEEE 802 lead, supports dot01, dot03 and dot18 groups title:
    - Operational Program Management Senior Manager
  - Christy Bahn
    - supports dot11, dot15, dot19 and, dot24 groups
    - Operational Program Management Senior Program Manager
  - Dalisa Gonzalez
    - Observe 802 plenary
    - Program Coordinator
  - Pat Roder (remote)
    - assisting Jodi and Christy
    - Operational Program Management Senior Program Manager
  - Michelle Turner
    - 802 editorial support
    - Senior Manager, Content Production and Management
  - Catherine Berger (email)
    - 802 editorial support
    - Senior Program & Special Project Manager
- Pointed to instructions to access IEEE 802 electronic media (slide 53) with indication made that the included IEEE Std 802.1Q should be searchable.
- Indicated that 802 LMSC elections would take place at this plenary session (slide 54).
  - Individuals wishing to run for elected positions were invited to talk to currently elected individuals for further details.
  - James Gilb has declared his candidacy to succeed Paul Nikolich as 802 Chair.
  - The 802 Chair also appoints several LMSC positions.
  - The 802.1 Chair and 802.1 Vice-Chair are standing for re-election.
- Provided information about the candidate 802 Chair’s plan for filling LMSC appointed Officer and non-voting positions (slide 55), noted that Dorothy Stanley has committed to serve in the two “TBD” positions until volunteers step up, and provided information about 802.1 WG elections (slide 56).
- Provided IEEE 802 program status pointers (slide 57), mentioning the following notable items (slide 58):
  - March / April 2024 publication
    - 802.1ASdr-2024 & 802.1CS/cor1-2024
      - The Chair noted that IEEE Std 802.1ASdr-2024 is published with access to be provided to WG participants.
  - Expiring PARs – Dec 2024
    - P802.1ASdm, P802.1ASdn, P802.1DC, P802.1DP, P802.1CQ
      - The Chair noted that the 48-hour rule could be used to extend these at this session at the WG and the Chair’s discretion.

- Expiring standards
  - 2024 – 802
  - 2026 – 802.1AB, 802.1AC
  - 2027 – 802.1CB
- myProject and DVL updates
- Provided information about public review (slide 59).
- Pointed out 802.1 PAR and CSD (slide 60) as well as 802.3 and 802.11 PARs, PAR modification, and CSDs (slide 61) that are up for vote or finalization during this IEEE 802 plenary session.
- Noted the tutorials scheduled at this plenary session (slide 62).
- Had the Liaison Secretary co-present liaison resources (slide 63), 802.1 liaison relationships (slide 64), 802.1 liaison statements (slide 65), and present the set of incoming liaisons to be handled by specific subgroups as listed on slide 66 as well as the status of outgoing liaisons, either sent since the previous plenary session or to be completed (slide 67).
- Addressed comments regarding IEEE 802 electronic media per slide 53. It was observed that IEEE Std 802.1Q-2022 still is not searchable and that IEEE Std 802.1AS-2020/Cor 1-2021 is missing. The Chair is to follow up on this with the IEEE SA Program Manager for 802.1.
- Summarized IETF coordination items (slide 68).
- Provided information about JTC1/SC6 coordination (slide 69), ITU coordination (slide 70), and noting the tentatively proposed adoption of 802.3 by ITU-T SG15 (to alleviate the need for “A.5” qualification as part of the ITU-T process), the possibility for 802.1Q to be similarly proposed, and meetings to be held with 802.15 during this plenary session (slide 71).
- Discussed promotion of the work of the WG (slide 72).
  - Scott Mansfield, YANGsters Chair, provided an update on the status of the YANG blog post. The Chair noted he would convene a discussion to discuss the details with IEEE SA staff after the next IETF meeting, and that this post may need to be approved at the Jul 2024 802.1 session.
  - It was noted that the 2024 Ethernet & IP @ Automotive Technology Day <https://standards.ieee.org/events/automotive/> would take place Oct 16-17, 2024 in Detroit, MI, USA.
- Discussed 802.1 public visibility messaging (slide 73), calling for a volunteer to succeed Roger Marks on public visibility.
- Reminded nominations are welcome for the various types of IEEE awards (slide 74) highlighting the various deadlines and encouraging nominations.
- Recognized Günter Steindl for being a recipient of the 2023 IEEE SA Standards Medallion (slide 75) and encouraged further nominations.
- Noted upcoming WG Chair Awards to follow the publication of IEEE Std 802.1Qcw-2023, IEEE Std 802.1Qcj-2023, and IEEE Std 802f-2023, and recognized editors and recipients (slide 76).
- Provided the anticipation of next actions with respect to the projects in the WG’s current workload (slide 77).
- Reviewed the timeline for 802.1Q (slide 78) and 802.1AS (slide 79) revisions and amendments.
  - The anticipated schedule for P802.1Q-2022-Rev was discussed for information.
- Showed the 802.1 schedule for this plenary session, which was tacitly approved (slide 80).
- Listed 802.1 leadership and editors’ meetings (slide 81).

- Reminded the Working Group of the logistics orientation information available <https://1.ieee802.org/orientation/> and of the possibility to practice the web-based voting tool to be used at the 802.1 closing plenary meeting (slide 82).
- Requested that subgroup agendas be presented (slide 83):
  - The Maintenance TG Chair presented the Maintenance TG agenda on slide 84.
  - The Security TG Chair presented the agenda on slide 85.
  - The TSN TG Chair and the IEC/IEEE 60802 Joint Project Chair presented the agenda on slide 86.
  - The Nendica Chair presented the Nendica report on slides 87-89.
  - The YANGsters Chair presented the agenda (slide 90), a list of ongoing YANG projects (slide 91), and a list of nearly published and published YANG work (slide 92).
- Called for Any Other Business (slide 93).
  - No other business was discussed in this meeting.

12:51 MT recess

## 4 802.1/802.15 Joint Meeting

Between this session and the preceding session, no 802.1/802.15 joint meetings were held.

See section 1 for 802.1 attendance and affiliation information and 802.15 session minutes for 802.15 attendance and affiliation information.

The minutes of the 802.1/802.15 joint meeting held Mar 12, 2024 are on page 7 of “802.15 WG & CAC Minutes March 2024 Plenary” <https://mentor.ieee.org/802.15/dcn/24/15-24-0148-00-0000-802-15-wg-cac-min-mar-2024-plenary.docx>.

## 5 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 2024-02-14 10:00 - 12:00 ET <https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;500ece50.24&S=>
- Minutes of the Maintenance TG meeting held 2024-02-27 10:00 - 12:02 ET <https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;c55cb7aa.24&S=>
- Minutes of the Maintenance TG meeting held 2024-03-04 11:00 - 12:54 ET <https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;c11d9ab7.24&S=>

See section 1 for attendance and affiliation information.

**Call to order** Mar 12, 2024 at 8:00 MT by Mark Hantel, IEEE 802.1 Maintenance TG Chair (Chair), who presided and wrote the minutes, assisted by Karen Randall, IEEE 802.1 Liaison Secretary.

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-0324-v01.pdf>.

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

- Participant behavior shall comply with the outlined requirements;
- 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 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 meeting.

The 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 Chair presented the agenda in <https://1.ieee802.org/march-2024-plenary-session-maintenance-tg-agenda/>.

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

3. 802 PARs under consideration. The chair presented and led the discussion on “Comments on IEEE P802.3dm PAR & CSD From IEEE 802.1”

<https://www.ieee802.org/1/files/public/docs2024/admin-PAR-CSD-comments-3dm-0324-v01.pdf> and “Comments on IEEE P802.11bp PAR & CSD From IEEE 802.1”

<https://www.ieee802.org/1/files/public/docs2024/admin-PAR-CSD-comments-11bp-0324-v02.pdf>.

**Disposition:** More discussion needed. and “Comments on IEEE P802.3dm PAR & CSD From IEEE 802.1” updated as <https://www.ieee802.org/1/files/public/docs2024/admin-PAR-CSD-comments-3dm-0324-v02.pdf> based on discussion.

4. Liaison Review. Karen Randall, IEEE 802.1 liaison secretary, presented and led the discussion on proposed responses to liaisons from ITU-T JCA, ITU-T SG15, and proposed responses to SC6 comments on IEEE P802.1Qcj and IEEE P802.1Qcw.

**Disposition:** For information.

5. Project Status Review.

- The Chair gave a verbal update to P802-REVC.
- Mick Seaman, P802.1Q Editor, presented “802.1Q-2022-Rev – Plan”  
<https://www.ieee802.org/1/files/private/q-2022-rev-drafts/q-2022-rev-seaman-plans-0324-v00.pdf>.
- The Chair gave a verbal update on P802.1ASdm and P802.1ASdn.
- Marco Hernandez, P802.1ACea Editor, gave a verbal update on P802.1ACea.
- The Chair gave a verbal update on P802.1CB-2017/Cor1.

**Disposition:** For information.

6. The following maintenance items were reviewed:

- 0312 - Stream ID as a Key for YANG lists
- 0314 - network media and PHY
- 0363 - IEEE 802.1Q-2022 maximum SDU size

**Disposition:** For information.

7. Any Other Business. No other business was discussed by the Maintenance TG in this meeting.

10:05 MT recess

**Call to order** Mar 13, 2024 at 08:02 MT by Mark Hantel, IEEE 802.1 Maintenance TG Chair (Chair), who presided and wrote the minutes, assisted by Karen Randall, IEEE 802.1 Liaison Secretary.

8. Meeting introduction and other administrative items. The Chair announced that the 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.

9. Approval of agenda. The Chair presented the agenda in <https://1.ieee802.org/march-2024-plenary-session-p802revc-comment-resolution/>.

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

10. P802-REVC D1.2 comment resolution. James Gilb, P802-REVC Editor, led the resolution of comments received on <https://www.ieee802.org/1/files/private/802-REVC-drafts/d1/P802-REVC-d1.2.pdf>.

**Disposition:** Ballot comments 4, 5, 6, 10, 14 resolved. Final disposition: <https://mentor.ieee.org/802.1/dcn/24/1-24-0018-00-Mntg-p802-revc-comments-dis.pdf>.

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

9:18 MT adjournment

## 6 Security Task Group

Between this session and the preceding session, the IEEE 802.1 Security Task Group (Security TG) did not hold electronic meetings.

See section 1 for attendance and affiliation information.

**Call to order** Mar 13, 2024 at 10:30 MT by Mick Seaman, IEEE 802.1 Security TG Chair, who presided and wrote the minutes assisted by Karen Randall, IEEE 802.1 Security TG Vice-Chair.

Agenda items and dispositions:

1. Meeting introduction. The IEEE SA slides on IEEE Patent Policy, IEEE SA Copyright Policy, and Participation Behavior were provided beforehand as part of "MEETING INTRODUCTION" <https://www.ieee802.org/1/files/public/templates/admin-TG-intro-0324-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/march-2024-plenary-session-security-tg-agenda/>.

**Disposition:** The agenda was reviewed, discussed and updated as recorded by these minutes.

3. P802.1Qdt Priority-based Flow Control Enhancements. Lily Lyu, P802.1Qdt Editor, presented “Annex N Updates” <https://www.ieee802.org/1/files/public/docs2024/dt-lyu-annex-n-update-slide-0324-v01.pdf>. This presentation summarized the proposed updates to the existing 802.1Q Annex N “Buffer requirements for PFC” <https://www.ieee802.org/1/files/public/docs2024/dt-lyu-annex-n-draft-update-0324-v01.pdf>.

**Discussion:**

- N.1 Overview needs to be clear that the headroom is the minimum buffering that needs to be available at the time a PFC is transmitted - it can be consumed before reception stops.
- N.2 Delay model of PFC headroom. Use the reception of the last bit of the PFC frame from the physical link as a timing reference point.
- N.5 Worst case delay. Specify standard adjustment (for interfering frame of maximum size) as a starting point for the calculation rather than make implementations add a communicated value which some will not observe.
- N.6 Buffer allocation example. This is just an example. Annex should remain focused on 802.3 MAC Control PFC without MACsec data protection or MAC Privacy protection rather than get involved in describing or making assumptions about implementation choices that can affect calculations for MACsec/MAC Privacy protection.
- Headroom is not the final answer to buffer allocation. It merely sets a lower limit on the buffering required to avoid frame loss. System specific considerations and constraints for buffer sizing and organization will be significant.

**Disposition:** For information.

Mick Seaman, Security TG Chair and P802.1Q-2022-Rev Editor, led a brief discussion of the P802.1Q-2022-Rev timeline as it related to P802.1Qdt.

**Discussion:**

- Follow up from the Mar 12, 2024 Maintenance TG meeting. Amendment projects to be included were currently in WG Ballot: P802.1Qdj, P802.1Qdx, P802.1Qdy.
- This should not slow work on P802.1Qdt, which is likely to be the next amendment after the Revision completes, though it would not be able to go to RevCom for final approval as a standard until Revision approval as a standard.

**Disposition:** For information.

Mick Seaman reported on progress on the Clause 36 update proposal discussed in the January meeting.

**Discussion:**

- Current work on state machine ongoing. Being explicit about the ability to limit headroom measurement frames buffering to two at any time (for given PFC and user data transmission method). Excess receive messages would be an error and can be simply discard, limiting the amount of work that can be forced on a protocol participant.
- Noted that existing figures showing hop-by-hop nature of PFC include interaction/coupling with congestion signaling methods (congestion point directly to or towards source. Use of the two methods in combination only requires loose coupling of their respective specifications.

**Disposition:** For further discussion. Working towards draft to initiate first TG ballot at or just prior to the July 2024 IEEE 802.1 plenary session.

4. Any Other Business

4.1 MACsec and post-quantum security. Mick Seaman, Security TG Chair, reported on further informal contact with regard to updating MACsec with post-quantum security.

**Discussion:**

- As discussed at prior meetings, it needs to be appreciated that MACsec used symmetric key cryptography (as opposed to asymmetric cryptography, where quantum issues are of concern), and that work to support the NIST request for 256 bit keys for the post-quantum era has already been completed (in IEEE Std 802.1AEbn-2013, now included in the IEEE Std 802.1AE-2018 revision). No further work is necessary on MACsec (IEEE Std 802.1AE) or MACsec Key Agreement (MKA in IEEE Std 802.1X).

**Disposition:** This area appears to continue to be attractive to those wishing to start new projects, and development of a canned response is probably advisable.

4.2 Automotive use of MACsec. James McIntosh led a brief discussion of work on the automotive use of MACsec.

**Discussion:**

- As previously noted, data integrity, data origin authenticity, and anti-replay are paramount.
- The challenge is use on very cost constrained devices, with minimal delay after power up to full operation.

**Disposition:** It is hoped that work ongoing elsewhere could be shared with the Security TG and liaison would be welcomed.

5. Review potential Security TG Motions/Liaisons for Closing Plenary.

**Disposition:** None required, apart from addition to the general list of permissions to hold electronic meetings prior to the July 2024 IEEE 802.1 plenary session (with 10 days notice to the 802.1 minutes email list, as usual). [Updated in the IEEE 802.1 closing plenary meeting to add an electronic interim session with attendance credit (subject to discussion ongoing in the 802 LMSC) with the notice time required for such a session.]

6. Future meetings/teleconferences. The Security TG will not meet during the May 2024 IEEE 802.1 interim session in Warsaw, Poland. An electronic meeting shortly after the Warsaw session, and additional electronic meetings are anticipated.

12:41 MT adjournment



## 7 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 TSN TG meeting held 2024-02-05, 11:00 – 13:00 ET  
<https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;4feb8471.24&S=>
- Minutes of the TSN TG meeting held 2024-02-06, 10:00 – 12:00 ET  
<https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;77850ac9.24&S=>
- Minutes of the TSN TG meeting held 2024-02-26, 11:00 – 13:00 ET  
<https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;649aedeb.24&S=>
- Minutes of the TSN TG meeting held 2024-03-04, 11:00 – 13:00 ET  
<https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;c58ec163.24&S=>

Between this session and the preceding session, the IEEE 802.1 Time-Sensitive Networking (TSN) Task Group (TG) did not hold electronic meetings on P802.1DG.

See section 1 for attendance and affiliation information.

Minutes of the IEC/IEEE 60802 Joint Project meetings are in section 7.1.

Minutes of the IEEE P802.1DP/SAE AS 6675 joint project meeting are in section 7.2.

**Call to order** Mar 11, 2024 at 8:00 MT by János Farkas, IEEE 802.1 TSN TG Chair (Chair), who presided. Johannes Specht, IEEE 802.1 TSN TG Secretary (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” <https://www.ieee802.org/1/files/public/templates/admin-TG-intro-0324-v01.pdf>.

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

2. Approval of agenda. The Chair presented the agenda in <https://1.ieee802.org/2024-03-plenary-tsn-agenda/>.

**Disposition:** The agenda was reviewed, and updated as recorded by these minutes.

3. Johannes Specht, P802.1ASdn editor, led the resolution of comments received on <https://www.ieee802.org/1/files/private/asdn-drafts/d2/802-1ASdn-d2-0.pdf>.

**Disposition:** Partial disposition: <https://www.ieee802.org/1/files/private/asdn-drafts/d2/802-1ASdn-d2-0-dis-v01.pdf>.

4. Geoffrey Garner, P802.1ASdm editor, led the resolution of comments received on <https://www.ieee802.org/1/files/private/asdm-drafts/d2/802-1ASdm-d2-0.pdf>.

**Disposition:** Disposition per agenda item 36.

10:00 MT recess

**Call to order** Mar 11, 2024 at 13:30 MT by János Farkas, IEEE 802.1 TSN TG Chair (Chair), who presided. Johannes Specht, IEEE 802.1 TSN TG Secretary (Secretary), wrote the minutes.

5. The Chair announced that this 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 Secretary.

6. The Chair showed the incoming liaisons and communication:

- “LS on Consented Recommendations” (ITU-T SG15 LS 94)  
<https://www.ieee802.org/1/files/public/docs2023/liaison-itu-t-SG15-LS94-ConsentedRecs-dec23.pdf>
- “LS on Inclusive Terminology and YANG” (ITU-T SG15 LS 95)  
<https://www.ieee802.org/1/files/public/docs2023/liaison-itu-t-sg15-LS95-InclusiveTerminologyandYANG-dec23.pdf>
- “LS on Initiation of approval process for G.8021 amendment and G.8013/Y.1731 corrigendum” (ITU-T SG15 LS 92)  
<https://www.ieee802.org/1/files/public/docs2023/liaison-itu-t-SG15-LS92-ApprovalprocessG8021andG8013-dec23.pdf>
- “LS on work items related to deterministic networking in ITU-T SG13” (ITU-T SG13 LS 139) <https://www.ieee802.org/1/files/public/docs2023/liaison-itu-t-SG13-LS139-DetermNetworking-dec23.zip>
- “Liaison on P802.1ASeb draft PAR” (IEEE 1588)  
<https://www.ieee802.org/1/files/public/docs2024/liaison-ieee1588-P8021ASebPARcomments-feb24.pdf>

**Disposition:** Incoming liaisons discussed.

7. Dave Cavalcanti presented “TSN Components and Devices Testing”  
<https://www.ieee802.org/1/files/public/docs2024/liaison-Avnu-TSN-testing-updates-0324-v01.pdf>.

**Disposition:** Presentation discussed.

8. The Chair presented draft TSN TG motions.  
**Disposition:** Draft TSN TG motions reviewed.
9. Feng Chen presented “IEEE P802.1Qdd Resource Allocation Protocol (RAP) Editor’s Update for Draft 0.9” <https://www.ieee802.org/1/files/public/docs2024/dd-chen-D0-9-editors-update-0324-v01.pdf>  
**Disposition:** Presentation discussed.
10. Stephan Kehrer, P802.1Qdj editor, led the resolution of comments received on <https://www.ieee802.org/1/files/private/dj-drafts/d2/802-1Qdj-d2-2.pdf>.  
**Disposition:** Final disposition: <https://www.ieee802.org/1/files/private/dj-drafts/d2/802-1Qdj-d2-2-dis-v01.pdf>.

15:18 – 15:45 MT recess

11. Mick Seaman led the resolution of comments received on <https://www.ieee802.org/1/files/private/dx-drafts/d2/802-1Qdx-d2-0.pdf>.  
**Disposition:** Partial disposition: <https://www.ieee802.org/1/files/private/dx-drafts/d2/802-1Qdx-d2-0-pdis-v02.pdf>.
12. Geoffrey Garner, P802.1ASdm editor, continued the resolution of comments received on <https://www.ieee802.org/1/files/private/asdm-drafts/d2/802-1ASdm-d2-0.pdf>.  
**Disposition:** Comment 103 resolved. Disposition per agenda item 36.
13. Johannes Specht, P802.1DU editor, led the resolution of comments received on <https://www.ieee802.org/1/files/private/du-drafts/d0/802-1-DU-d0-2.pdf>.  
**Disposition:** Disposition per agenda item 32.

18:00 MT recess

**Call to order** Mar 13, 2024 at 8:00 MT by János Farkas, IEEE 802.1 TSN TG Chair (Chair), who presided. Johannes Specht, IEEE 802.1 TSN TG Secretary (Secretary), wrote the minutes.

14. The Chair announced that this 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 Secretary.
15. The Chair led further discussion on whether the fault-tolerant timing module discussed as part of the IEEE P802.1DP/SAE AS6675 joint project is in scope of the P802.1DP PAR.  
**Disposition:** Resolution documented in comment 153 of <https://www.ieee802.org/1/files/private/dp-drafts/d1/802-1DP-d1-1-pdis-v06.pdf>.
16. Geoffrey Garner, P802.1ASdm editor, continued the resolution of comments received on <https://www.ieee802.org/1/files/private/asdm-drafts/d2/802-1ASdm-d2-0.pdf>.  
**Disposition:** Comment 33 resolved. Disposition per agenda item 36.

10:00 – 10:30 MT recess.

17. The Chair and Don Pannell presented comments and their resolution (<https://www.ieee802.org/1/files/public/docs2024/eb-PAR-CSD-comments-responses-0324-v01.pdf>) on the P802.1ASeb PAR (<https://www.ieee802.org/1/files/public/docs2024/eb-draft-PAR-0124-v01.pdf>) and CSD (<https://www.ieee802.org/1/files/public/docs2024/eb-draft-CSD-0124-v01.pdf>).  
**Disposition:** Presentation discussed.

18. The Chair led the development of a draft liaison response to the IEEE 1588 Working Group's "Liaison on P802.1ASeb draft PAR".

**Disposition:** Created draft for outgoing liaison response finalized as "Liaison response to the IEEE 1588 Working Group's "Liaison on P802.1ASeb draft PAR""

<https://www.ieee802.org/1/files/public/docs2024/liaison-response-ieee1588-P8021ASebPARcomments-0324-v01.pdf>.

19. Silvana Rodrigues, P802.1ASds editor, led the resolution of comments received on <https://www.ieee802.org/1/files/private/asds-drafts/d0/802-1ASds-d0-2.pdf>.

**Disposition:** Comments 18, 23, 29, 34-36, 50, 51, 53, 57, 63, 65 resolved. Disposition per agenda item 26.

12:30 – 13:30 MT recess

20. The Chair announced that this 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 Secretary.

21. Hiroki Nakano presented <https://www.ieee802.org/1/files/private/dq-drafts/d0/802-1Qdq-d0-5.pdf>.

**Disposition:** Draft discussed.

22. Norman Finn presented "Multiple Cyclic Queuing and Forwarding"

<https://www.ieee802.org/1/files/public/docs2024/dv-finn-overlapped-CQF-0224-v01.pdf>.

**Disposition:** Presentation discussed.

15:30 – 16:00 MT recess

23. The Chair announced that this 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 Secretary.

24. Roger Marks presented "Data Center Collective Multicast using BARC-assigned Address Blocks" <https://www.ieee802.org/1/files/public/docs2024/cq-Marks-collective-multicast-0324-v00.pdf>.

**Disposition:** Presentation discussed.

17:22 MT recess

**Call to order** Mar 14, 2024 at 8:00 MT by János Farkas, IEEE 802.1 TSN TG Chair (Chair), who presided. Johannes Specht, IEEE 802.1 TSN TG Secretary (Secretary), wrote the minutes.

25. The Chair announced that this 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 Secretary.

26. Silvana Rodrigues, P802.1ASds editor, continued the resolution of comments received on <https://www.ieee802.org/1/files/private/asds-drafts/d0/802-1ASds-d0-2.pdf>.

**Disposition:** Comments 5, 37, 42 resolved. Partial disposition:

<https://www.ieee802.org/1/files/private/asds-drafts/d0/802-1ASds-d0-2-pdis-V01.pdf>.

27. Geoffrey Garner, P802.1ASdm editor, continued the resolution of comments received on <https://www.ieee802.org/1/files/private/asdm-drafts/d2/802-1ASdm-d2-0.pdf>.

**Disposition:** Comments 6, 19, 26-30, 51, 58, 74 resolved. Disposition per agenda item 36.

10:00 MT recess

**Call to order** Mar 14, 2024 at 10:30 MT by János Farkas, IEEE 802.1 TSN TG Chair (Chair), who presided. Johannes Specht, IEEE 802.1 TSN TG Secretary (Secretary), wrote the minutes.

28. The Chair announced that this 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 Secretary.
29. Steve Haddock, P802.1AXdz editor, gave an update on P802.1AXdz and presented “Link Aggregation Modeling Questions” <https://www.ieee802.org/1/files/public/docs2024/dz-haddock-link-agg-overview-and-modeling-questions-0312-v01.pdf>.  
**Disposition:** For information.
30. Geoffrey Garner, P802.1ASdm editor, continued the resolution of comments received on <https://www.ieee802.org/1/files/private/asdm-drafts/d2/802-1ASdm-d2-0.pdf>.  
**Disposition:** Comments 1, 4, 14, 15, 34, 36-39, 52, 53, 59-63, 66, 71, 81-85, 90 resolved. Disposition per agenda item 36.

12:30 MT recess

**Call to order** Mar 15, 2024 at 8:00 MT by János Farkas, IEEE 802.1 TSN TG Chair (Chair), who presided. Johannes Specht, IEEE 802.1 TSN TG Secretary (Secretary), wrote the minutes.

31. The Chair announced that this 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 Secretary.
32. Johannes Specht, P802.1DU editor, continued the resolution of comments received on <https://www.ieee802.org/1/files/private/du-drafts/d0/802-1-DU-d0-2.pdf>.  
**Disposition:** Partial disposition: <https://www.ieee802.org/1/files/private/du-drafts/d0/802-1DU-d0-2-pdis-v03.pdf>.
33. Christophe Mangin presented “CTF Bridges”  
<https://www.ieee802.org/1/files/public/docs2024/du-mangin-CTF-E-ISS-0324-v01.pdf>.  
**Disposition:** Presentation discussed.

10:00 MT recess

**Call to order** Mar 15, 2024 at 13:00 MT by János Farkas, IEEE 802.1 TSN TG Chair (Chair), who presided. Johannes Specht, IEEE 802.1 TSN TG Secretary (Secretary), wrote the minutes.

34. The Chair announced that this 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 Secretary.
35. Geoffrey Garner, P802.1ASdm editor, continued the resolution of comments received on <https://www.ieee802.org/1/files/private/asdm-drafts/d2/802-1ASdm-d2-0.pdf>.  
**Disposition:** Comments 2, 5, 21, 31, 32, 64, 65, 67-70, 72, 75, 77-79, 92 resolved. Disposition per agenda item 36.

15:30 – 16:00 MT recess

36. Geoffrey Garner, P802.1ASdm editor, continued the resolution of comments received on <https://www.ieee802.org/1/files/private/asdm-drafts/d2/802-1ASdm-d2-0.pdf>.  
**Disposition:** Comments 3, 9-13, 20, 41-45, 50, 73 resolved. Partial disposition: <https://www.ieee802.org/1/files/private/asdm-drafts/d2/802-1ASdm-d2-0-pdis-v01.pdf>.

17:00 MT adjournment

## 7.1 IEC/IEEE 60802 Joint Project

Between this session and the preceding session, the IEC/IEEE 60802 Joint Project held no electronic meeting.

See section 1 for attendance and affiliation information.

**Call to order** Mar 12, 2024 at 13:30 MT by Ludwig Winkel, IEC 65C/WG18 Convenor and IEC/IEEE 60802 Joint Project Chair (60802 Chair), who presided together with János Farkas, IEEE 802.1 TSN TG Chair (TSN TG Chair). Dieter Proell, 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, IEEE SA Copyright Policy, and Participant Behavior (“Policies”) were provided beforehand as part of “MEETING INTRODUCTION”  
<https://www.ieee802.org/1/files/public/templates/admin-TG-intro-0324-v01.pdf>.

The 60802 Chair announced that the meeting is subject to these Policies as read and displayed at the opening Time-Sensitive Networking Task Group meeting.

The 60802 Chair made the Calls for Potentially Essential Patents at the beginning of the 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 this Call prior to the end of the session.

The 60802 Chair explained that the IEC/IEEE 60802 Joint Project also follows the IEC patent and copyright policies, <https://www.iec.ch/news-resources/reference-material#policy>.

The 60802 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 60802 Chair presented the agenda in <https://1.ieee802.org/2024-03-plenary-tsn-agenda/>.

**Disposition:** The agenda was reviewed, discussed, and updated as recorded by these minutes.

3. Editor’s update. Jordon Woods, IEC/IEEE 60802 Joint Project Editor (60802 Editor), presented “Editor’s Report 60802 Draft 2.2”  
<https://www.ieee802.org/1/files/public/docs2024/60802-woods-D2-2-update-0324-v03.pdf>.

**Disposition:** For information.

4. 60802/D2.2 WG recirculation ballot comment resolution. The 60802 Editor led the resolution of comments received on <https://www.ieee802.org/1/files/private/60802-drafts/d2/60802-d2-2.pdf>.

**Disposition:** Partial disposition. Ballot comments 6, 74, 7, 75, 76, 77, 78, 3, 62, 70, 4, 63, 66, 69, 17, 71, 82, 83, 84, 85, 86, 80, 87, 88, 89, 90 were resolved.

15:30 MT recess

**Call to order** Mar 13, 2024 at 10:30 MT by Ludwig Winkel, IEC 65C/WG18 Convenor and IEC/IEEE 60802 Joint Project Chair (60802 Chair). Dieter Proell, IEC/IEEE 60802 Joint Project Secretary (60802 Secretary), wrote the minutes.

5. Meeting introduction and other administrative items. The 60802 Chair announced that the 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.
6. 60802/D2.2 WG recirculation ballot comment resolution. Jordon Woods, IEC/IEEE 60802 Joint Project Editor (60802 Editor) led the resolution of comments received on <https://www.ieee802.org/1/files/private/60802-drafts/d2/60802-d2-2.pdf>.  
**Disposition:** Partial disposition. Ballot comments 77, 25, 78, 79, 27, 10, 29, 36, 34, 11, 21, 23, 24, 49, 26, 28, 30, 106, 109, 52, 53, 54, 112, 113 were resolved.

11:45 – 13:30 MT recess

7. Changes in „60802 process doc“. The 60802 Chair presented “IEC and IEEE processes for drafting a dual logo IEC/IEEE International Standard”  
<https://www.ieee802.org/1/files/public/docs2024/admin-IEC-IEEE-cooperation-process-clean-0324-v10c.pdf> and <https://www.ieee802.org/1/files/public/docs2024/admin-IEC-IEEE-cooperation-process-track-changes-0324-v10c.pdf>.  
**Disposition:** The document is to be reviewed and any updates presented at a future meeting.
8. Timeline discussion. The 60802 Chair presented “IEC/IEEE 60802 timeline update rev 14”  
<https://www.ieee802.org/1/files/public/docs2024/60802-Winkel-timeline-0324-v14.pdf>.  
**Disposition:** For information.
  - Discussion continued on Friday Mar 15, 2024 from 10:30 to 12:30 MT.
9. 60802/D2.2 WG recirculation ballot comment resolution. The 60802 Editor led the resolution of comments received on <https://www.ieee802.org/1/files/private/60802-drafts/d2/60802-d2-2.pdf>.  
**Disposition:** Partial disposition. Ballot comments 14, 101, 103, 104, 110, 105, 60, 58, 107, 109, 111 were resolved.
10. Further 60802 Error Generation Time Series Simulation Results. Geoff Garner started presenting “Further 60802 Error Generation Time Series Simulation Results Version 2”  
<https://www.ieee802.org/1/files/public/docs2024/60802-garner-further-error-generation-time-series-simulation-results-0324-v02.pdf>.  
**Disposition:** More discussion is needed.

15:30 – 16:00 MT recess

11. Time Sync – Mean Link Delay&Timestamp Granularity. David McCall presented “60802 Time Sync – Mean Link Delay & Timestamp Granularity”  
<https://www.ieee802.org/1/files/public/docs2024/60802-McCall-Mean-Link-Delay-Timestamp-Granularity-0324-v01.pdf>.  
**Disposition:** Presentation discussed and updated as <https://www.ieee802.org/1/files/public/docs2024/60802-McCall-Mean-Link-Delay-Timestamp-Granularity-0324-v02.pdf> based on discussion.
12. Further 60802 Error Generation Time Series Simulation Results. Geoff Garner continued presenting “Further 60802 Error Generation Time Series Simulation Results Version 2”  
<https://www.ieee802.org/1/files/public/docs2024/60802-garner-further-error-generation-time-series-simulation-results-0324-v02.pdf>.  
**Disposition:** Presentation discussed.

13. 60802/D2.2 WG recirculation ballot comment resolution. The 60802 Editor led the resolution of comments received on <https://www.ieee802.org/1/files/private/60802-drafts/d2/60802-d2-2.pdf>.

**Disposition:** Ballot comments 107, 40, 41, 102 were resolved. Final disposition: <https://www.ieee802.org/1/files/private/60802-drafts/d2/60802-d2-2-dis-v01.pdf>.

14. Thursday AM2 and Friday PM meetings. The 60802 Chair proposed to cancel the meeting initially scheduled on Thursday Mar 14, 2024 from 10:30 to 12:30 MT and on Friday Mar 15, 2024 from 13:30 to 18:00 MT based on anticipated attendance.

**Disposition:** Agreed (informally, none dissenting) to cancel these meetings.

18:00 MT recess

**Call to order** Mar 15, 2024 at 10:30 MT by Ludwig Winkel, IEC 65C/WG18 Convenor and IEC/IEEE 60802 Joint Project Chair (60802 Chair). Dieter Proell, IEC/IEEE 60802 Joint Project Secretary (60802 Secretary), wrote the minutes.

15. Meeting introduction and other administrative items. The 60802 Chair announced that the 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.

The 60802 Chair announced that “An invitation to Ballot on P60802” email was sent for the first SA ballot on IEC/IEEE 60802: important to participate, access to myProject through an IEEE Account is necessary. Potential ballot group members need to enroll in the ballot group by 13 Apr 2024, 23:59 UTC-12.

16. Timeline discussion. The 60802 Chair presented “IEC/IEEE 60802 timeline update rev 14” <https://www.ieee802.org/1/files/public/docs2024/60802-Winkel-timeline-0324-v14.pdf>.

**Disposition:** Presentations discussed and updated as <https://www.ieee802.org/1/files/public/docs2024/60802-Winkel-timeline-0324-v15.pdf> based on discussion.

- Updated with planned electronic meetings from Apr 22, 2024 to Jul 12, 2024.

17. Sync Message Collision Probabilities – Simulation Results. David McCall presented “60802 Time Sync – Sync Message Clashes Potential & Implications”

<https://www.ieee802.org/1/files/public/docs2024/60802-McCall-Sync-Message-Clashes-0324-v01.pdf>.

**Disposition:** Presentation discussed and updated with planned electronic meetings as <https://www.ieee802.org/1/files/public/docs2024/60802-McCall-Sync-Message-Clashes-0324-v02.pdf> based on discussion.

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

12:05 MT adjournment



## 7.2 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 AS 6675 whose minutes are incorporated to these session minutes by reference as follows:

- Minutes of the IEEE P802.1DP/SAE AS6675 meeting held 2024-02-07 10:01 – 12:00 ET <https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;6f38c518.24&S=>
- Minutes of the IEEE P802.1DP/SAE AS6675 meeting held 2024-02-14 10:00 – 12:00 ET <https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;cad0eff0.24&S=>
- Minutes of the IEEE P802.1DP/SAE AS6675 meeting held 2024-02-21 10:02 – 12:02 ET <https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;85a4aed.24&S=>
- Minutes of the IEEE P802.1DP/SAE AS6675 meeting held 2024-02-28 10:00 – 12:02 ET <https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;723de73b.24&S=>

See section 1 for attendance and affiliation information.

**Call to order** Mar 12, 2024 at 13:30 MT by János Farkas, IEEE 802.1 TSN TG Chair. János Farkas, IEEE P802.1DP/SAE AS6675 joint project co-Chairs, presided in-person. Abdul Jabbar, IEEE P802.1DP/SAE AS6675 joint project co-Chairs, presided remotely from the SAE Spring meeting held in Nashville, TN, USA. Jessy Rouyer, IEEE 802.1 Recording Secretary, wrote the minutes.

Agenda items and dispositions:

1. Meeting introduction. The IEEE SA slides on IEEE Patent Policy, IEEE SA Copyright Policy, and Participation Behavior were provided beforehand as part of “MEETING INTRODUCTION” <https://www.ieee802.org/1/files/public/templates/admin-TG-intro-0324-v01.pdf>.  
János Farkas, IEEE P802.1DP/SAE AS6675 co-Chair, announced that the meeting is subject to these Policies as read and displayed at the opening plenary meeting.  
János Farkas, IEEE P802.1DP/SAE AS6675 co-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.  
János Farkas, IEEE P802.1DP/SAE AS6675 co-Chair, explained that the IEEE P802.1DP/SAE AS6675 Joint Project also follows the SAE International code of conduct [https://www.sae.org/about/legal-policies/content\\_policy](https://www.sae.org/about/legal-policies/content_policy) and policy on intellectual property and copyright <https://www.sae.org/about/legal-policies/intellectual-property>.  
János Farkas, IEEE P802.1DP/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.
2. Approval of agenda. János Farkas, IEEE P802.1DP/SAE AS6675 co-Chair, presented the agenda in [https://1.ieee802.org/2024-03-plenary-tsn-agenda/#TSN\\_P8021DPAS6675](https://1.ieee802.org/2024-03-plenary-tsn-agenda/#TSN_P8021DPAS6675).  
**Disposition:** The agenda was reviewed, discussed and updated as recorded by these minutes.
3. Abdul Jabbar, IEEE P802.1DP/SAE AS6675 editor, presented “SAE AS6675/ IEEE P802.1DP TSN Profile for Aerospace Status Overview” <https://www.ieee802.org/1/files/public/docs2024/dp-jabbar-status-overview-0324-v01.pdf>.  
**Disposition:** For information.

4. Abdul Jabbar, IEEE P802.1DP/SAE AS6675 editor, continued leading the resolution of comments received in the Task Group ballot on <https://www.ieee802.org/1/files/private/dp-drafts/d1/802-1DP-d1-1.pdf>.

Discussion also took place on where to do the work on Fault-Tolerant Timing Module (FTTM) considering inclusion as part of P802.1DP/SAE AS6675 would require a PAR modification. Using either a standalone standard other than P802.1DP or an 802.1AS amendment was discussed, among other possibilities.

**Disposition:** Resolved comments 79, 88, 89, 115, 117, 119, 122, 123, 125, 141, 142, 143. Edited resolution of comments 118, 120. Agreed (informally, none dissenting) to continue the discussion for 30 minutes as part of the TSN TG meeting to be held on Mar 13, 2024 immediately following meeting introduction.

15:45 MT adjournment

## 8 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 2024-02-08 09:00-11:00 ET  
<https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;fbc993b1.24&S=>
- Minutes of the Nendica meeting held 2024-02-22 09:00-11:00 ET (revised)  
<https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;1c977b4d.24&S=>
- Minutes of the Nendica meeting held 2024-03-07 09:00-11:00 ET  
<https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;5af98ead.24&S=>

See section 1 for attendance and affiliation information.

**Call to order** Mar 14, 2024 8:03 MT by Roger Marks, Nendica Chair (“Chair”), who presided and wrote the minutes with the assistance of Jessy Rouyer, IEEE 802.1 Recording Secretary.

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” <https://www.ieee802.org/1/files/public/templates/admin-prePAR-intro-0324-v01.pdf>. The Nendica Chair showed this presentation advising that the following applies:

- Participant behavior shall comply with the outlined requirements;
- 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 the Nendica meeting, whether verbal, recorded, or in written form, is a Contribution and shall comply with the IEEE SA Copyright Policy.

The 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 Chair presented the agenda in <https://1.ieee802.org/802-nendica-agenda-2024-03-14/>. The Mentor server document list was noted.

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

3. Minutes. The Chair reviewed the draft “Minutes of the Nendica meeting held 2024-03-07 09:00-11:00 ET” <https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;5af98ead.24>.  
**Disposition:** Agreed (informally, none dissenting) to approve the minutes.
  4. Study Items. No discussion.
  5. Vetting and New Topics. The Chair requested that Jessy Rouyer preside as Acting Chair during the following three contributions.
    - Roger Marks presented “Collective Communication in a Layer 2 Clos Fat-tree (R0)” [https://mentor.ieee.org/802.1/documents?is\\_group=ICne&is\\_year=2024&is\\_dcn=012](https://mentor.ieee.org/802.1/documents?is_group=ICne&is_year=2024&is_dcn=012).  
**Discussion:** On how switches are picked and on existing mechanisms (MAP context, root identification) for potential reuse.  
**Disposition:** More discussion needed.
    - Aditya Srivastava presented “Implementation of Layer 2 Clos Fat-tree with Programmable Switches (R0)” [https://mentor.ieee.org/802.1/documents?is\\_group=ICne&is\\_year=2024&is\\_dcn=013](https://mentor.ieee.org/802.1/documents?is_group=ICne&is_year=2024&is_dcn=013).  
**Discussion:** On handling failures and mobility, and potentially using VLANs.  
**Disposition:** For information.
    - Ruchi Dhamnani presented “Observations of a Layer 2 Clos Fat-tree (R0)” [https://mentor.ieee.org/802.1/documents?is\\_group=ICne&is\\_year=2024&is\\_dcn=014](https://mentor.ieee.org/802.1/documents?is_group=ICne&is_year=2024&is_dcn=014).  
**Discussion:** None.  
**Disposition:** For information.
- The Chair resumed presiding of the meeting.
- Lily Lyu presented “Contribution toward AI Computing Networks (R1)” [https://mentor.ieee.org/802.1/documents?is\\_group=ICne&is\\_year=2024&is\\_dcn=015](https://mentor.ieee.org/802.1/documents?is_group=ICne&is_year=2024&is_dcn=015).  
**Discussion:** Many problems and solutions. Tag-based solutions not necessarily needed. Existing solutions might be reusable. Accurate description of the problem a must. Consider scaling, power, heat dissipation, etc. first, then failure probabilities. Study Item should not focus on GPUs and servers. UEC has related work.  
**Disposition:** The following motion, per the final slide in the presentation, was made:  
Motion: “To initiate a Study Item on AI computing network”  
Mover: Lily Lyu  
Second: Yuehua Wei  
Agreed (informally, none dissenting) to approve the motion. The Chair agreed to set up a web page for the new Study Item.
  - Yuehua Wei introduced “Enhance PFC to support quantized flow control” <https://www.ieee802.org/1/files/public/docs2024/new-weiyh-pfc-enhancement-0324-v00.pdf>.  
**Discussion:** None.  
**Disposition:** As insufficient time was available for presentation, the contribution was deferred to the next Nendica meeting.
6. Next Meeting. Nendica intends to meet next electronically on Mar 21, 2024 9:00-11:00 ET. The agenda for the next meeting <https://1.ieee802.org/802-nendica-agenda-2024-03-21> was reviewed.
  7. Any Other Business. No other business was discussed by Nendica in this meeting.

9:59 MT adjournment

## 9 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 2024-01-30 10:06 –10:33 ET  
<https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;2b35e805.24&S=>
- Minutes of the YANGsters meeting held 2024-02-27 10:01 –11:06 ET  
<https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;bb4c802e.24&S=>
- Minutes of the YANGsters meeting held 2024-03-08 10:01 –11:14 ET  
<https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;168b98ab.24&S=>

**Call to order** Mar 12, 2024, at 16:01 MT 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, IEEE SA Copyright Policy, and Participant Behavior (“Policies”) were provided beforehand as part of “MEETING INTRODUCTION” <http://www.ieee802.org/1/files/public/templates/admin-prePAR-intro-0324-v01.pdf>.

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

- Participant behavior shall comply with the outlined requirements;
- 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 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/march-2024-plenary-session-yangsters-agenda/>.

**Disposition:** The agenda was reviewed, discussed, and updated as recorded by these minutes.

3. Introduction to YANGsters. The YANGsters Chair presented the “Introduction” slide of “YANGsters” <https://www.ieee802.org/1/files/public/docs2024/yangsters-smansfield-denver-status-0324-v02.pdf> to introduce the following:

- <https://1.ieee802.org/yangsters/>, and
- <https://1.ieee802.org/yangsters/yangsters-guidelines/yangsters-faq/>.

**Disposition:** For information.

4. Status of YANG Projects. The YANGsters Chair presented the “YANG Status” slides of the presentation in agenda item 3.

**Disposition:** For information.

5. IEEE 802.3 YANG Update. The YANGsters Chair provided the update.

- It is planned to set up a process in IEEE 802.3 to facilitate work on YANG in IEEE 802.3.
- It would be helpful to align the process with what YANGsters has already set up, so YANG processes are aligned across all IEEE 802 groups that provide YANG modules.
- A ballot on P802.3.2a D1.1 has been conducted.

**Discussion:** It was pointed out that YANG and NETCONF are often too heavy weight for applications in the industrial automation area. There, a more lightweight solution would be very interesting.

**Disposition:** For information.

6. Liaison from BBF on New Project for Addressing ONU Management at Scale. The YANGsters Chair presented the liaison from the Broadband Forum at <https://www.ieee802.org/1/files/public/docs2024/liaison-BBF-ONU-Mgmt-at-Scale-feb24.docx>, provided an overview of the history of the issue and the previous discussions, and led the discussion.

**Discussion:**

- The different alternatives in the liaison were again discussed.
- It was suggested to craft a draft liaison response in an ad hoc meeting for approvals during the 802.1 and 802.3 closing plenary meetings.

**Disposition:** Agreed (internally, none dissenting) to create a draft liaison response for approvals during the 802.1 and 802.3 closing plenary meetings.

7. LS 95 on Inclusive Terminology and YANG (ITU-T SG15). The YANGsters Chair presented “LS on Inclusive Terminology and YANG” <https://www.ieee802.org/1/files/public/docs2023/liaison-itu-t-sg15-LS95-InclusiveTerminologyandYANG-dec23.pdf>.

**Disposition:** For information.

8. LS 94 on Consented Recommendations (ITU-T SG15). The YANGsters Chair presented the topic by showing “LS on Consented Recommendations” <https://www.ieee802.org/1/files/public/docs2023/liaison-itu-t-SG15-LS94-ConsentedRecs-dec23.pdf>.

**Disposition:** For information.

9. LS 93 on IM/DM modelling coordination (ITU-T SG15). The YANGsters Chair presented the topic by showing “LS on IM/DM modelling coordination” <https://www.ieee802.org/1/files/public/docs2023/liaison-itu-t-SG15-LS93-IMDMModellingCoord-dec23.pdf>.

**Disposition:** For information.

10. Guidelines Review. The YANGsters Chair provided an overview of the following YANGsters guidelines:
  - OID/URN: <https://www.ieee802.org/1/files/public/docs2024/yangsters-smansfield-urn-oid-status-0224-v01.pdf>
  - Augment: <https://www.ieee802.org/1/files/public/docs2024/yangsters-smansfield-augment-when-0224-v01.pdf>
  - Numbers: <https://www.ieee802.org/1/files/public/docs2024/yangsters-smansfield-numbers-in-yang-0124-v01.pdf>

**Disposition:** For information.

11. IETF YANG Status. The YANGsters Chair provided an overview of the status of IETF YANG work, including:
  - An overview of the status of the IETF Netmod work.
    - Further information can be found at <https://datatracker.ietf.org/meeting/119/materials/slides-119-netmod-1-session-intro-wg-status-01>.
  - An overview of YANG versioning.
    - Further information can be found at <https://datatracker.ietf.org/meeting/119/materials/slides-119-netmod-3-yang-versioning-intro-00>, <https://datatracker.ietf.org/meeting/119/materials/slides-119-netmod-3a-yang-module-versioning-update-00>, and <https://datatracker.ietf.org/meeting/119/materials/slides-119-netmod-3b-yang-versioning-update-yang-semver-00>.
  - Information on Netconf, which can be found at <https://datatracker.ietf.org/meeting/119/materials/slides-119-netconf-chair-slides-04>.

**Disposition:** For information.

12. AXdz YANG discussion continued. Postponed by lack of time.
13. Request for Next Calls. Intersession YANGsters electronic meetings would be held every other week, starting Tuesday, Mar 26, 2024, tentative on 802.1 approval during the 802.1 closing plenary meeting.
14. Any Other Business. No other business was discussed by YANGsters in this session.

18:01 MT adjournment

## 10 Closing Plenary Meeting

**Call to order** Mar 14, 2023 at 13:30 MT by the Chair who presided. The Recording Secretary wrote the minutes.

See section 1 for attendance and affiliation information.

The Chair presented “Closing Plenary July 2023” finalized as <https://www.ieee802.org/1/files/public/minutes/2024-03-closing-plenary-slides.pdf>.

During this presentation, the Chair:

- Introduced the agenda on slide 2 that was tacitly approved, and noted, regarding elections, that no one had expressed a desire to run against incumbent candidates.
- Reminded all participants that access to this session requires a registration fee (slide 3).
- Reviewed mixed mode guidelines (slides 4 and 5), audio guidelines for in-person attendees (slide 6), web conferencing guidelines supporting mixed mode (slide 7), meeting decorum including the policies on public reporting, and on photography or recording (slide 8), 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 9).
- Reminded participants of their obligation to declare affiliation(s) which includes employer(s) (slide 10).
- Announced that this closing plenary meeting remains subject to the IEEE Patent Policy (slides 11 to 16), IEEE SA Copyright Policies (slides 17 to 19) and IEEE SA Participation policies (slides 20 to 22) made available beforehand (as announced in the opening plenary meeting – see section 3) and noted related subgroup announcements (slide 23).
- Reminded participants of the various plenary session registration fees applying and attendant registration details (slide 24).
- Provided general information regarding meeting contributions, minutes, schedule for all Working Groups, website (slide 25).
- Showed 802.1 officers and leadership (slide 26), noting that the role of IEEE P802.1DP/SAE AS6675 joint project Secretary is still vacant, recognizing Craig Gunther for his service as TSN TG Vice Chair (eliciting a round of applause), and noting the appointment in that role of David McCall and the appointment of Johannes Specht in the new role of Nendica Vice Chair (both appointments eliciting another round of applause).
- Recognized the editors of current projects (slide 27), noting that the role of P802.1Qdw editor is still vacant.

- Recognized IEEE SA Staff supporting IEEE 802.1 (slide 28) now and going forward.
- Reminded 802.1 participants and voting members of obligations regarding 802.1 voting membership and how voting membership may be requested and retained (slide 29).
- Reminded 802.1 voting members of their obligations regarding responding to WG letter ballot series (WG ballots + ePolls) as well as regarding the consequences of not responding to WG letter ballot series (slide 30).
- Reviewed the list of 802.1 voting members (slide 31), including information about individuals who gained (slide 32), may gain (slide 33), could lose (slide 34), or will lose (slide 35) 802.1 voting membership.
- Reminded individual participants of 802.11 reciprocal credit, which was continued at this session (slide 36).
- Provided information about the LMSC elections at this plenary session (slides 37 and 38), the WG election process (slide 39), and DirectVoteLive for WG elections (slide 40).
- Had the Vice Chair conduct the Chair confirmation vote using the following motion that passed (slide 41):
  - Motion
    - 802.1 confirms Glenn Parsons as the chair of the 802.1 working group
    - Proposed: Johannes Specht
    - Seconded: Stephan Kehrer
    - Y: 42 N: 0 A: 0
- Conducted the Vice Chair confirmation vote using the following motion that passed (slide 42):
  - Motion
    - 802.1 confirms Jessy Rouyer as the vice-chair of the 802.1 working group
    - Proposed: Nader Zein
    - Seconded: Geoff Garner
    - Y: 42 N: 0 A: 0
- Asked the 802.1 Executive Secretary to summarize information about upcoming sessions, starting with the May 2024 (slide 43), Sep 2024 (slide 44), Jan 2025 (slide 45) and May 2025 (slides 46) interim sessions, and continuing with the schedule for future interim (slide 47) and plenary (slide 48) sessions, which remained unchanged from the opening plenary meeting.
  - In Jan 2025, 802.1 is welcome to join 802.3 that is tentatively planning to meet in St Petersburg, FL, USA (exact dates to be confirmed).
  - In Sep 2025, 802.1 may be able to join 802.11.
- Conducted the following straw polls (slide 49):
  - 1. Would you like to come back to this venue?
    - Yes 25
    - No 12
    - Did not respond 13
  - 2. Did you go to the social?
    - Yes 26
    - No 16
    - Did not respond 11
  - 3. Did you like the social?
    - Yes 18
    - No 8
    - Did not respond 28
- Provided the anticipation of next actions with respect to projects in the WG's current workload (slide 50).
- Showed the schedule of 802.1 meetings at this plenary session (slide 51).

- Requested that the subgroup Chairs provide reports on the activities of their subgroups during this plenary session (slide 52) (see individual subgroup minutes above for details):
  - The Maintenance TG Chair presented the report on slides 53-54.
  - The Security TG Chair presented the report on slide 55.
  - The IEC/IEEE 60802 Joint Project Chair, the TSN TG Vice-Chair, and the TSN TG Chair presented the report on slide 56.
  - The Nendica Chair presented the report on slide 57.
  - The YANGsters Chair presented the report on slides 58-61.
- Summarized the various types of IEEE Awards encouraging nominations (slide 62).
- Had the Liaison Secretary summarize liaison resources (slide 63), review the WG's liaison relationship (slide 64), summarize the set of new and previously-received (slide 65) incoming liaisons, and lead the final review of draft outgoing liaison statements (slide 66).
- Discussed promotion of the work of the WG (slide 67).
  - The webinar for "Aerospace" could take place before or after summer 2024.
  - TSN aerospace marketing collateral could be prepared prior to that.
- Pointed out the 802.1 PARs (slide 68) and other 802 PARs and CSDs (and attendant 802.1 comments, slide 69) that are up for approval during this IEEE 802 plenary session.
- Provided guidance on using DirectVoteLive to vote on motions (slide 70).
- Following 15:14 - 15:48 MT recess, showed the 802.1 consent agenda items for the LMSC closing plenary meeting (slides 71-73).
- Conducted votes on the following motions (slides 74-137) that all passed unless indicated otherwise. (Supporting information is available in "Closing Plenary March 2024" finalized as <https://www.ieee802.org/1/files/public/minutes/2024-03-closing-plenary-slides.pdf>.)

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

- Motion
  - Approve forwarding P802.1ASeb PAR documentation in <https://www.ieee802.org/1/files/public/docs2024/eb-PAR-0324-v01.pdf> to NesCom
  - Approve CSD documentation in <https://www.ieee802.org/1/files/public/docs2024/eb-CSD-0324-v01.pdf>
  - In the WG, Proposed: Don Pannell, Second: Craig Gunther
    - PAR (y/n/a): 30, 1, 4
    - CSD (y/n/a): 30, 0, 4

**Motions for 802 EC  
Consent Agenda  
Drafts to SA Ballot**

- Motion
  - Conditionally approve sending IEC/IEEE 60802 D3.0 to Standards Association ballot
  - Confirm the CSD for IEC/IEEE 60802 in <https://mentor.ieee.org/802-ec/dcn/18/ec-18-0088-01-ACSD-p60802.pdf>
  - IEC/IEEE 60802 D2.2 had 98% approval at the end of the last WG ballot



- In the WG, Proposed: Ludwig Winkel, Second: János Farkas
  - Sending draft (y/n/a): 41, 0, 0
  - CSD (y/n/a): 39, 0, 2
- The Chair delayed consideration of a further motion for 802 EC consent agenda (drafts to SA ballot) until its supporting information (slide 97) was edited for accuracy, continuing with the following instead:

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

- Motion
  - Approve sending P802.1Qdj to RevCom
  - Approve CSD documentation in <https://mentor.ieee.org/802-ec/dcn/19/ec-19-0139-00-ACSD-p802-1qdj.pdf>
  - P802.Qdj D2.2 had 100% approval at the end of the last SA ballot
  - In the WG, Proposed: Stephan Kehrer, Second: János Farkas
    - Sending draft (y/n/a): 41, 0, 1
    - CSD (y/n/a): 41, 0, 1
- Motion
  - Conditionally approve sending P802.1Qdx to RevCom
  - Approve CSD documentation in <https://mentor.ieee.org/802-ec/dcn/23/ec-23-0075-00-ACSD-p802-1qdx.pdf>
  - P802.1Qdx D2.0 had 98% approval at the end of the last SA ballot
  - In the WG, Proposed: János Farkas, Second: Mick Seaman
    - Sending draft (y/n/a): 37, 0, 2
    - CSD (y/n/a): 37, 0, 2

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

- Motion
  - Approve submission of the following drafts when published to ISO/IEC JTC1/SC6 for adoption under the PSDO agreement:
    - IEEE 802.1Qdj, IEEE 802.1Qdx
      - In the WG, Proposed: Mark Hantel Second: Karen Randall
      - Sending draft (y/n/a): 35, 0, 2
- Motion
  - Approve submission of the following comment responses to ISO/IEC JTC1/SC6 under the PSDO agreement:
    - IEEE 802.1Qcw-2023
      - <https://www.ieee802.org/1/files/public/docs2024/liaison-randall-SC6CommentResponseQcw-0324.pdf>
    - IEEE 802.1Qcj-2023
      - <https://www.ieee802.org/1/files/public/docs2024/liaison-randall-SC6CommentResponseQcj-0324.pdf>
  - In the WG, Proposed: Mark Hantel Second: Karen Randall
    - Sending draft (y/n/a): 37, 0, 3

- Motion
  - Approve <https://www.ieee802.org/1/files/public/docs2024/liaison-itu-t-sg15-LS89-OTNTSWP33-ieee8021status-0324.pdf> as communication to ITU-T SG15 on LS89: LS on OTNT Standardization Work Plan Issue 33, 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: Mark Hantel      Second: Karen Randall
    - Sending draft (y/n/a): 34, 0 ,5
- Motion
  - Approve <https://www.ieee802.org/1/files/public/docs2024/liaison-response-itu-t-JCA-RoadmapIMT2020-0324.pdf> as communication to ITU-T JCA on LS14: LS on Invitation to update the information in the IMT2020 roadmap, 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: Mark Hantel      Second: Karen Randall
    - Sending draft (y/n/a): 36, 0, 2

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

- Motion
  - Approve <https://www.ieee802.org/1/files/public/docs2024/liaison-response-BroadbandForum-YANG-0324-v01.pdf> as communication to Broadband Forum, granting the IEEE 802.1 WG chair (or his delegate) editorial license.
  - Proposed: Stephan Kehrer
  - Second: Jessy Rouyer
  - In the WG (y/n/a): 38, 0, 3
- The Chair noted that 802.3 approved the preceding motion unchanged.
- Motion
  - Approve <https://www.ieee802.org/1/files/public/docs2024/liaison-response-ieee1588-P8021ASebPARcomments-0324-v01.pdf> as communication to IEEE 1588 WG, granting the IEEE 802.1 WG chair (or his delegate) editorial license.
  - Proposed: Don Pannell
  - Second: Jessy Rouyer
  - In the WG (y/n/a): 33, 1, 5
- The Chair resumed consideration of a further motion for 802 EC consent agenda (drafts to SA ballot) as follows:

**Motions for 802 EC  
Consent Agenda  
Drafts to SA Ballot**

- Motion
  - Conditionally approve sending P802-REVc D2.0 to Standards Association Ballot
    - Note: there is no CSD statement since this maintenance project is not intended to provide any new functionality
  - P802-REVc D1.2 had 83% approval at the end of the last WG ballot
  - In the WG, Proposed: Mark Hantel, Second: Karen Randall
    - Sending draft (y/n/a): 30, 1, 6

### **Administrative WG Motions**

- Motion
  - 802.1 approves:
    - November 2023 (plenary) session minutes:
      - <https://www.ieee802.org/1/files/public/minutes/2023-11-minutes.pdf>
    - January 2024 (interim) session minutes:
      - <https://www.ieee802.org/1/files/public/minutes/2024-01-minutes.pdf>
  - Proposed: Jessy Rouyer
  - Seconded: Johannes Specht
  - Approved by acclamation
- Meetings motion
  - 802.1 authorizes the noted subgroups to hold the meetings in the following future meetings table with announcement requirement, agenda and access information as indicated
  - Proposed: Jessy Rouyer
  - Seconded: János Farkas
  - Passed by acclamation

IEEE 802.1 March 11-15, 2024 Plenary Session (Denver, CO, USA – Mixed Mode)

Future meetings table

Subgroup	Topic	Date	Time	Recurrence	Date announcements (days prior)	Agenda	Agenda	Access Information	
YANGsters	per agenda	Tue 2024-03-26	10:00 - 11:00 ET	every two weeks	motion	5 days	<a href="#">802.1 Minutes email list</a>	<a href="https://1.ieee802.org/yangsters/yangsters-call-information/">https://1.ieee802.org/yangsters/yangsters-call-information/</a>	
YANGsters	per agenda	as announced				10 days	10 days	<a href="#">802.1 Minutes email list</a>	<a href="https://1.ieee802.org/yangsters/yangsters-call-information/">https://1.ieee802.org/yangsters/yangsters-call-information/</a>
Maintenance TG	address TG matters and progress resolution of maintenance items in <a href="https://1.ieee802.org/maintenance/database/">https://1.ieee802.org/maintenance/database/</a>	as announced				10 days	10 days	<a href="#">802.1 Minutes email list</a>	<a href="https://1.ieee802.org/category/maintenance-tg-agenda/">https://1.ieee802.org/category/maintenance-tg-agenda/</a>
Maintenance TG	progress P802-REVC	as announced				10 days	10 days	<a href="#">802.1 Minutes email list</a> <a href="#">802 Architecture list</a>	<a href="https://1.ieee802.org/category/maintenance-tg-agenda/">https://1.ieee802.org/category/maintenance-tg-agenda/</a>
Security TG	P802.1Qdt and TG matters arising	as announced				10 days	10 days	<a href="#">802.1 Minutes email list</a>	<a href="https://1.ieee802.org/security/security-task-group-agenda/">https://1.ieee802.org/security/security-task-group-agenda/</a>
TSN TG	per agenda	Mon 2024-07-15	8:00 - 10:00	none	motion	14 days	<a href="https://1.ieee802.org/category/tsn-tg-agenda/">https://1.ieee802.org/category/tsn-tg-agenda/</a>	<a href="https://1.ieee802.org/meetings/">https://1.ieee802.org/meetings/</a>	
TSN TG	progress IEC/IEEE 60802 Joint Project and other TSN TG work	Fri 2024-07-19	8:00 - 12:00	none	motion	14 days	<a href="https://1.ieee802.org/category/tsn-tg-agenda/">https://1.ieee802.org/category/tsn-tg-agenda/</a>	<a href="https://1.ieee802.org/meetings/">https://1.ieee802.org/meetings/</a>	
TSN TG	per agenda	Mon 2024-03-18	11:00 - 13:00 ET	weekly	motion	5 days	<a href="#">802.1 Minutes email list</a>	<a href="http://www.ieee802.org/1/tsn">http://www.ieee802.org/1/tsn</a>	
TSN TG	progress TG projects and TG matters arising	as announced				10 days	10 days	<a href="#">802.1 Minutes email list</a>	<a href="http://www.ieee802.org/1/tsn">http://www.ieee802.org/1/tsn</a>
TSN TG	progress IEC/IEEE 60802 Joint Project work with IEC 65C/WG18	Mon 2024-04-08	9:00 - 11:00 ET	weekly	motion	5 days	<a href="#">802.1 Minutes email list</a>	<a href="http://www.ieee802.org/1/tsn">http://www.ieee802.org/1/tsn</a>	
TSN TG	progress IEC/IEEE 60802 Joint Project work with IEC 65C/WG18	Fri 2024-04-12	9:00 - 11:00 ET	weekly	motion	5 days	<a href="#">802.1 Minutes email list</a>	<a href="http://www.ieee802.org/1/tsn">http://www.ieee802.org/1/tsn</a>	
TSN TG	progress P802.1DG	Tue 2024-04-02	9:00 - 11:00 ET	every two weeks	motion	5 days	<a href="#">802.1 Minutes email list</a>	<a href="http://www.ieee802.org/1/tsn">http://www.ieee802.org/1/tsn</a>	
TSN TG	progress P802.1DP / SAE AS6675 Joint Project work with SAE AS6675	Wed 2024-03-20	10:00 - 12:00 ET	weekly	motion	5 days	<a href="#">802.1 Minutes email list</a>	<a href="http://www.ieee802.org/1/tsn">http://www.ieee802.org/1/tsn</a>	
Nendica	per agenda	Thu 2024-03-21	9:00 - 11:00 ET	every two weeks	motion	5 days	<a href="#">802.1 Minutes email list</a>	<a href="https://1.ieee802.org/802-nendica/">https://1.ieee802.org/802-nendica/</a>	
Nendica	per agenda	as announced				10 days	10 days	<a href="#">802.1 Minutes email list</a>	<a href="https://1.ieee802.org/802-nendica/">https://1.ieee802.org/802-nendica/</a>

**Nendica  
WG Motions**

**YANGsters  
WG Motions**

**Maintenance TG  
WG Motions**

**Security TG  
WG Motions**

- Motion
  - 802.1 authorizes the Security TG to hold an electronic interim session with 30 days announcement notice.
  - Proposed: Jessy Rouyer
  - Seconded: János Farkas
  - Passed by acclamation
- The Chair noted that there would be no registration fee required to attend the session mentioned in the preceding motion.

**TSN TG  
WG Motions**

- Motion
  - 802.1 authorizes Max Turner, the Editor of P802.1DG Standard for Local and Metropolitan Area Networks: Time-Sensitive Networking Profile for Automotive In-Vehicle Ethernet Communications to prepare drafts for and conduct Working Group balloting.
  - Proposed: Craig Gunther
  - Second: János Farkas
  - In the WG (y/n/a): 36, 1, 0
- Motion
  - 802.1 authorizes Abdul Jabbar, the Editor of IEEE P802.1DP / SAE AS6675 Time-Sensitive Networking for Aerospace Onboard Ethernet Communications to prepare drafts for and conduct Working Group balloting.
  - Proposed: János Farkas
  - Second: Craig Gunther
  - In the WG (y/n/a): 36, 2, 1
- Motion
  - 802.1 authorizes the TSN TG to develop a new PAR for fault-tolerant timing functionality at the May 2024 interim session for pre-circulation to the EC.
  - Proposed: János Farkas
  - Second: Don Pannell
  - In the WG (y/n/a): 32, 1, 6
- The wording of the preceding motion was discussed with clarification made that a rogue comment had been added to <https://www.ieee802.org/1/files/private/dp-drafts/d1/802-1DP-d1-1-pdis-v06.pdf>.

- Motion
  - 802.1 authorizes the TSN TG to develop a new PAR for the Resource Allocation Protocol at the May 2024 interim session for pre-circulation to the EC.
  - Proposed: Mick Seaman
  - Second: Max Turner
  - In the WG (y/n/a): 26, 5, 8
- Called for Any Other Business (slide 138).
  - No other business was discussed in this meeting.

17:17 MT adjournment

## **11 Next Session**

May 13-17, 2024 mixed mode interim session in Warsaw, Poland.