IEEE 802.3 Working Group Opening Plenary 13 March 2023

David Law
Chair, IEEE 802.3 Working Group
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Agenda, voter lists: http://www.ieee802.org/3/minutes/mar23/index.html

IEEE 802.3 Officers, Subgroup Chairs and Vice-Chairs

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IEEE 802.3 Chair: David Law <dlaw@hpe.com>
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IEEE 802.3 Vice Chair: Adam Healey <adam.healey@broadcom.com>

IEEE 802.3 Secretary: Jon Lewis <jon.lewis@dell.com>

IEEE 802.3 Executive Secretary: Steve Carlson <scarlson@ieee.org>

IEEE 802.3 Treasurer: Valerie Maguire <vmaguire@ieee.org>

IEEE 802.3 Task Force chairs

IEEE P802.3cw 400 Gb/s over DWDM systems: John D'Ambrosia <jdambrosia@ieee.org>

IEEE P802.3cx Improved PTP Timestamping Accuracy: Steve Gorshe <steve.gorshe@microchip.com>

IEEE P802.3cy Greater than 10 Gb/s Electrical Automotive Ethernet: Steve Carlson <scarlson@ieee.org>

IEEE P802.3cz Multi-Gigabit Optical Automotive Ethernet: Bob Grow

bob.grow@ieee.org>

IEEE P802.3da 10 Mb/s Single Pair Multidrop Segments Enhancement: Chad Jones <cmjones@cisco.com>

IEEE P802.3df 400 Gb/s and 800 Gb/s Ethernet: John D'Ambrosia <jdambrosia@ieee.org>

IEEE P802.3dg 100 Mb/s Long-Reach Single Pair Ethernet: George Zimmerman <george@cmephyconsulting.com>

IEEE P802.3dh Multi-Gigabit Automotive Ethernet over Plastic Optical Fiber: Yuji Watanabe <yuji.watanabe@agc.com>

IEEE P802.3dj 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet: John D'Ambrosia <jdambrosia@ieee.org>

IEEE P802.3dk Greater than 50 Gb/s Bidirectional Optical Access PHYs: Yuanqiu Luo <yuanqiu.luo@futurewei.com>

IEEE 802.3 Task Force vice-chairs

IEEE P802.3cw 400 Gb/s over DWDM systems: Tom Issenhuth <tissenhuth@outlook.com>

IEEE P802.3cy Greater than 10 Gb/s Electrical Automotive Ethernet: Natalie Wienckowski <nwienckowski@msn.com>

IEEE P802.3df 400 Gb/s and 800 Gb/s Ethernet: Mark Nowell <mnowell@cisco.com>

IEEE P802.3dj 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet: Mark Nowell <mnowell@cisco.com>

General Decorum

- An officer is permitted to make an audio or slideshow recording of this meeting exclusively for the purpose of generating minutes which shall not be copied or distributed. IEEE 802.3 meetings do not use this option. Recording of the proceedings by any other participant or observer, in part or in whole, via any means, is prohibited. (February 2023 IEEE-SA Standards Board Operations Manual 5.3.3.2)
- Press (i.e., anyone reporting publicly on this meeting) are to announce their presence (February 2023 IEEE-SA Standards Board Operations Manual 5.3.3.3)

In-Person Decorum







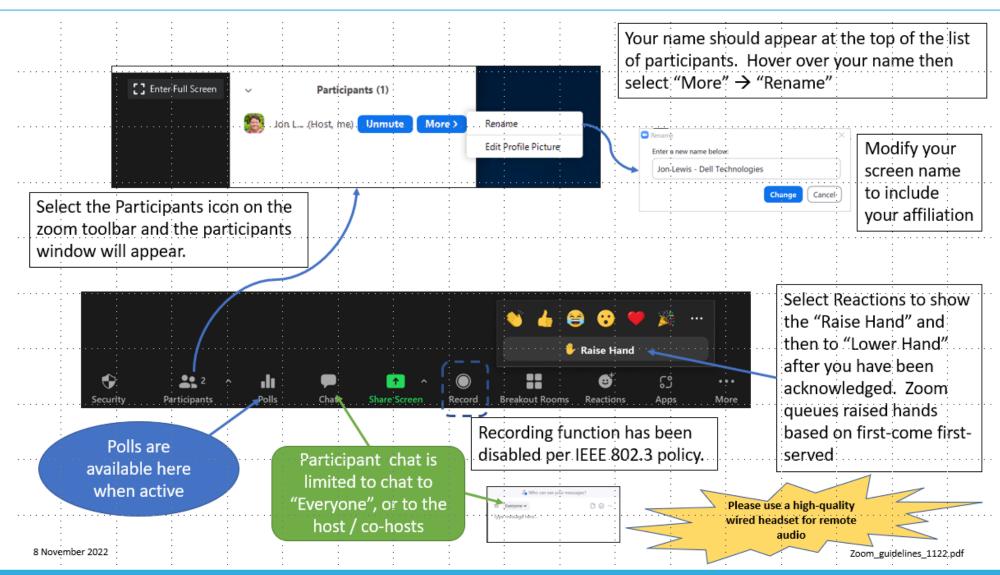
- Cell phone ringers off
- Wear your badges at all times in meeting areas
 - Help the hotel security staff improve the general security of the meeting rooms
 - PCs HAVE BEEN STOLEN at previous meetings
 - DO NOT assume that meeting areas are secure
- Please sign into the teleconference without audio and video
- Please line up at the floor mic(s) to join the queue
- Please don't speak from your seat—you won't be heard on the teleconference
- Please observe proper decorum in meetings—no sidebar conversations

Teleconference Decorum

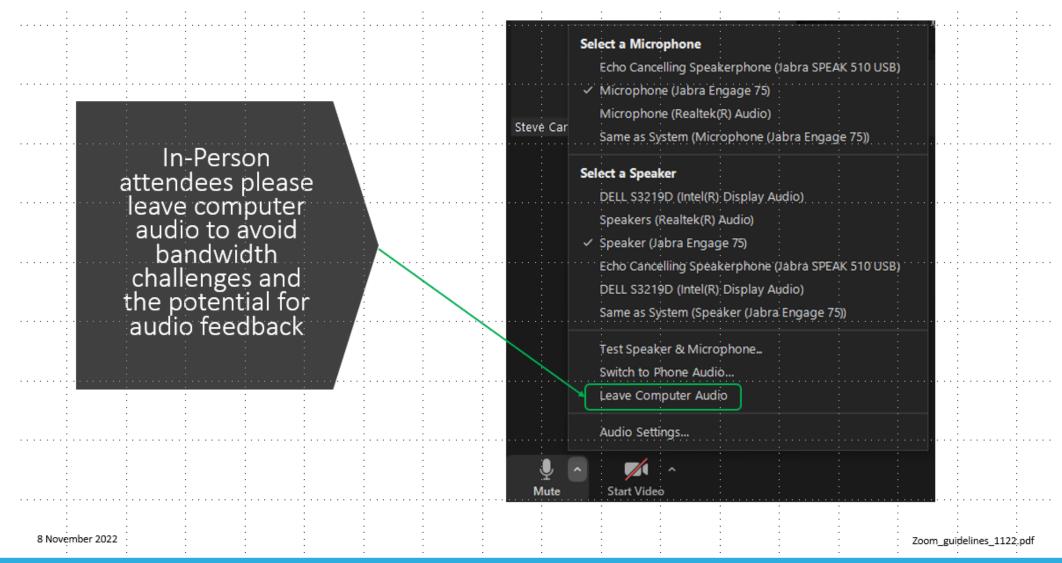


- Please MUTE unless called on
- Use the "Raise Hand" function to be placed into the queue
 - Don't forget to lower your hand once recognized
- The chat can only send to "Everyone" or the WG officers
- Please observe proper decorum in meetings

IEEE 802.3 Working Group Zoom Guidelines



IEEE 802.3 Working Group Zoom Guidelines In Person Audio



Meeting registration fee

- This March 2023 plenary session is subject to registration fee
 - Anybody that attends any meeting by any means (e.g., by teleconference) or in person) held during this plenary session shall pay the meeting fee
 - Single fee allows you to attend all IEEE 802 meetings during the plenary session
- The registration fee is now 1000.00 USD
- The registration web site can be accessed at https://cvent.me/1L90q9>
- You will not need any code or special sign-in to attend the teleconferences
 - Attendance records will be compared with the paid registration list

Non-payment of registration fees

- If an individual is in arrears for a previous meeting:
 - The individual is not permitted to register for any future IEEE 802
 Plenary or IEEE 802 Subgroup Interim (if registration is required)
 - As a result of the above, the individual is not permitted to attend any portion of a technical meeting that is part of an IEEE 802 plenary session. They are also not permitted to attend any portion of a technical meeting that is part of an IEEE 802 Subgroup Interim if that IEEE 802 Subgroup Interim required registration
 - Other sanctions include loss of all attendance credit, and the individual will need to regain membership voting rights as though they had never previously attended once they are no longer in arrears

Agenda and Minutes

- Approve agenda
 - https://ieee802.org/3/minutes/mar23/0323_agenda_open.pdf
 - Any modifications, additions or deletions?
- Approve November 2023 plenary minutes
 - https://ieee802.org/3/minutes/nov22/1122_minutes_draft.pdf
 - Published 16 December 2022
- Approve January 2023 interim minutes
 - https://ieee802.org/3/minutes/jan23/0123_minutes_draft.pdf
 - Published 7 February 2023
 - Any corrections, modifications, additions?

INSTRUCTIONS FOR THE WG CHAIR

The IEEE SA strongly recommends that at each WG meeting the chair or a designee:

- Show slides 1 through 4 of this presentation
- Advise the 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.
- Instruct the WG Secretary to record in the minutes of the relevant WG meeting:
 - That the foregoing information was provided and that slides 1 through 4 (and this slide 0, if applicable) were shown;
 - That the chair or designee 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
 - Any responses that were given, specifically the patent claim(s)/patent application claim(s) and/or the holder of the patent claim(s)/patent application claim(s) that were identified (if any) and by whom.
- The WG Chair shall ensure that a request is made to any identified holders of potential essential patent claim(s) to complete and submit a Letter of Assurance.
- It is recommended that the WG Chair review the guidance in *IEEE SA Standards Board Operations Manual* 6.3.5 and in FAQs 14 and 15 on inclusion of potential Essential Patent Claims by incorporation or by reference.

Note: **WG** includes Working Groups, Task Groups, and other standards-developing committees with a PAR approved by the IEEE SA Standards Board.





PARTICIPANTS HAVE A DUTY TO INFORM THE IEEE

- Participants <u>shall</u> inform the IEEE (or cause the IEEE to be informed) of the identity of each holder of any potential Essential Patent Claims of which they are personally aware if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents
- Participants <u>should</u> inform the IEEE (or cause the IEEE to be informed)
 of the identity of any other holders of potential Essential Patent Claims

Early identification of holders of potential Essential Patent Claims is encouraged





WAYS TO INFORM IEEE

- Cause an LOA to be submitted to the IEEE SA (patcom@ieee.org); or
- Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible; or
- Speak up now and respond to this Call for Potentially Essential Patents

If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance, please respond at this time by providing relevant information to the WG Chair





OTHER GUIDELINES FOR IEEE WORKING GROUP MEETINGS

- *All IEEE SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.
 - *Don't discuss the interpretation, validity, or essentiality of patents/patent claims.
 - Don't discuss specific license rates, terms, or conditions.
 - Relative costs of different technical approaches that include relative costs of patent licensing terms may be discussed in standards development meetings.
 - Technical considerations remain the primary focus.
 - Don't discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.
 - Don't discuss the status or substance of ongoing or threatened litigation.
 - Don't be silent if inappropriate topics are discussed. Formally object to the discussion immediately.

For more details, see IEEE SA Standards Board Operations Manual, clause 5.3.10 and Antitrust and Competition Policy: What You Need to Know at http://standards.ieee.org/develop/policies/antitrust.pdf





PATENT-RELATED INFORMATION

The patent policy and the procedures used to execute that policy are documented in the:

- IEEE SA Standards Board Bylaws (http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6)
- IEEE SA Standards Board Operations Manual (http://standards.ieee.org/develop/policies/opman/sect6.html#6.3)

Material about the patent policy is available at http://standards.ieee.org/about/sasb/patcom/materials.html

If you have questions, contact the IEEE SA Standards Board Patent Committee Administrator at patcom@ieee.org





INSTRUCTIONS FOR CHAIRS OF STANDARDS DEVELOPMENT ACTIVITIES

At the beginning of each standards development meeting the chair or a designee is to:

- Show the following slides (or provide them beforehand)
- Advise the standards development group participants that:
- 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;
- Instruct the Secretary to record in the minutes of the relevant meeting:
- That the foregoing information was provided and that the copyright slides were shown (or provided beforehand).





IEEE SA COPYRIGHT POLICY

By participating in this activity, you agree to comply with the IEEE Code of Ethics, all applicable laws, and all IEEE policies and procedures including, but not limited to, the IEEE SA Copyright Policy.

- Previously Published material (copyright assertion indicated) shall not be presented/submitted to the Working Group nor incorporated into a Working Group draft unless permission is granted.
- Prior to presentation or submission, you shall notify the Working Group Chair of previously Published material and should assist the Chair in obtaining copyright permission acceptable to IEEE SA.
- For material that is not previously Published, IEEE is automatically granted a license to use any material that is presented or submitted.





IEEE SA COPYRIGHT POLICY

- The IEEE SA Copyright Policy is described in the IEEE SA Standards Board Bylaws and IEEE SA Standards Board Operations Manual
 - IEEE SA Copyright Policy, see
 Clause 7 of the IEEE SA Standards Board Bylaws
 https://standards.ieee.org/about/policies/bylaws/sect6-7.html#7
 Clause 6.1 of the IEEE SA Standards Board Operations Manual https://standards.ieee.org/about/policies/opman/sect6.html
- IEEE SA Copyright Permission
 - https://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/other/permissionltrs.zip
- IEEE SA Copyright FAQs
 - http://standards.ieee.org/faqs/copyrights
- IEEE SA Best Practices for IEEE Standards Development
 - http://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/other/best_practices_for_ieee_standards_development_051215.pdf
- Distribution of Draft Standards (see 6.1.3 of the SASB Operations Manual)
 - https://standards.ieee.org/about/policies/opman/sect6.html





Participant behavior in IEEE-SA activities is guided by the IEEE Codes of Ethics & Conduct

- All participants in IEEE-SA activities are expected to adhere to the core principles underlying the:
 - IEEE Code of Ethics
 - IEEE Code of Conduct
- The core principles of the IEEE Codes of Ethics & Conduct are to:
 - Uphold the highest standards of integrity, responsible behavior, and ethical and professional conduct
 - Treat people fairly and with respect, to not engage in harassment, discrimination, or retaliation, and to protect people's privacy.
 - Avoid injuring others, their property, reputation, or employment by false or malicious action
- The most recent versions of these Codes are available at http://www.ieee.org/about/corporate/governance

Participants in the IEEE-SA "individual process" shall act independently of others, including employers

- The <u>IEEE-SA Standards Board Bylaws</u> require that "participants in the IEEE standards development individual process shall act based on their qualifications and experience"
- This means participants:
 - Shall act & vote based on their personal & independent opinions derived from their expertise, knowledge, and qualifications
 - Shall not act or vote based on any obligation to or any direction from any other person or organization, including an employer or client, regardless of any external commitments, agreements, contracts, or orders
 - Shall not direct the actions or votes of other participants or retaliate against other participants for fulfilling their responsibility to act & vote based on their personal & independently developed opinions
- By participating in standards activities using the "individual process", you are deemed to accept these requirements; if you are unable to satisfy these requirements then you shall immediately cease any participation

IEEE-SA standards activities shall allow the fair & equitable consideration of all viewpoints

- The <u>IEEE-SA Standards Board Bylaws</u> (clause 5.2.1.3) specifies that "the standards development process shall not be dominated by any single interest category, individual, or organization"
 - This means no participant may exercise "authority, leadership, or influence by reason of superior leverage, strength, or representation to the exclusion of fair and equitable consideration of other viewpoints" or "to hinder the progress of the standards development activity"
- This rule applies equally to those participating in a standards development project and to that project's leadership group
- Any person who reasonably suspects that dominance is occurring in a standards development project is encouraged to bring the issue to the attention of the Standards Committee or the project's IEEE-SA Program Manager

Important Bylaws and Rules

- IEEE-SA Operations Manual
 - https://standards.ieee.org/about/policies/sa-opman/
- IEEE-SA Standards Board Bylaws
 - https://standards.ieee.org/about/policies/bylaws/
- IEEE-SA Standards Board Operations Manual
 - https://standards.ieee.org/about/policies/opman/
- IEEE 802 LAN/MAN Standards Committee (LMSC) Policies and Procedures
 - https://ieee.app.box.com/v/PandP-LMSC
- IEEE 802 LAN/MAN Standards Committee (LMSC) Operations Manual
 - http://www.ieee802.org/devdocs.shtml
- IEEE 802 LAN/MAN Standards Committee (LMSC) Working Group (WG) Policies and Procedures
 - http://www.ieee802.org/devdocs.shtml
- IEEE 802.3 Working Group Operating Rules
 - http://ieee802.org/3/rules/P802_3_rules.pdf

Membership and attendance recording Membership requirements (gaining and retaining)

- Membership requirements
 - 75% attendance at 2 of last 4 plenary sessions
 - A qualifying interim may be substituted for one plenary
 - Request to become member during potential voter agenda item at IEEE 802.3 opening or closing plenary
 - Participate in <u>two</u> out of the last <u>three</u> IEEE 802.3
 Working Group ballots to retaining membership
 - Maintain valid contact information
 - Consistent declaration of affiliation

Membership and attendance recording Membership requirements (gaining and retaining)

- The requirement for attendance credit is 3 out of 4 days
 - Must attend the IEEE 802.3 plenary on a day with an IEEE 802.3 plenary for credit
 - Monday 13 March 2023 and Thursday 16 March 2023 during this plenary session
- Payment of meeting registration fee
 - You must pay the meeting registration fee to receive meeting credit for this session
- Ignore the percentage reported by IMAT (now and always)
 - The 3 out of 4 days attendance credit calculation is performed offline
 - The days an individual attended a meeting will be published (as always)
- IEEE 802.3 Attendance credit summary, November 2021 to January 2023
 - See <<u>https://ieee802.org/3/minutes/mar23/0323_attendance_summary.pdf</u>>
- IEEE 802.3 Member ballot return records
 - See <<u>https://ieee802.org/3/ballots/ballot_returns.pdf</u>>

Membership and attendance recording Meeting attendance tool procedures

Jon Lewis
IEEE 802.3 Working Group Secretary
Jon.lewis@dell.com

Membership and attendance recording Meeting attendance tool procedures

- The IEEE-SA Meeting Attendance Tool will be the basis of the official attendance record for this meeting: http://imat.ieee.org
- You only need to login in one meeting per day to get credit for that day
 - You are certifying that you are attending a "substantial" portion of that meeting
- Check that your affiliation (slide 24) and employer (slide 25) are correct per presentation below
- Full details of how to record attendance are available at the URL below: https://ieee802.org/3/minutes/mar23/0323_imat.pdf

Membership and attendance recording Review of membership

- IEEE 802.3 voters
 - http://www.ieee802.org/3/minutes/mar23/0323_voters.pdf
- IEEE 802.3 voters in peril
 - http://www.ieee802.org/3/minutes/mar23/0323_peril.pdf
- IEEE 802.3 potential voters
 - http://www.ieee802.org/3/minutes/mar23/0323_potential.pdf

IEEE 802.3 Ethernet Working Group Treasury Report

Valerie Maguire, IEEE 802.3 Treasurer
Copperopolis
Atlanta, GA
March 13, 2023

IEEE 802.3 Ethernet Working Group Treasury Report

 IEEE 802.3 funds are deposited in a Wells Fargo Concentration Banking account supported by IEEE NextGen Banking

Automated 2022 tax filing

IEEE SA Financial Certification tool

Opening 2022 balance: \$12,080.85

Deposits:0.00

Interest paid: \$74.37

– Debits: (0.00)

Closing 2022 balance: \$12,155.22

IEEE 802.3 Ethernet Working Group Treasury Report

Account balance

Opening Nov 2022 balance: \$12,126.24

- Deposits: (0.00)

– Interest paid: \$75.62

– Debits: (0.00)

Closing Feb 2023 balance: \$12,201.86

Questions?

Thank you!

IEEE 802 Executive Committee report

Treasury

- Committed Reserves as of 3/12/2023 \$87,500
 - Atlanta 2025 (deposit reduced by use of this meeting's deposit)
- Payments made to vendors for future Sessions \$42,500
 - F2F for initial work on upcoming sessions (meetings through 7/2024)
- Cash on Hand (Bank Balance) as of March 12, 2023 \$1,776,885.59
- Includes income from this meeting
 - But NOT expenses for venue and final payments to meeting planner, network, and other vendors

Other items

- Further meeting planning
 - Preliminary discussion this week (e.g., what polls to conduct) 8:30 to 9:00 in Future Venues Ad Hoc
 - Block of time to discuss at the next IEEE 802 EC telecom 4 April 2023

IEEE 802 Executive Committee report (con't)

Tutorials

- IEEE 802 Standards on Light Communications (18h00 to 19h20 EDT)
 - IEEE 802 recently finished new standards for optical wireless communications. IEEE 802.15.13 introduced a new MAC and two PHY layers enabling high reliability, low latency, and low power transmission for industrial wireless applications, and IEEE 802.11bb defines how to reuse the 802.11 MAC and OFDM-based PHYs over optical links, aiming at large-volume applications e.g., in enterprise and home scenarios. The tutorial presents major use cases, technical solutions, and recent technology demos in a variety of applications.
- IEEE SA Open (19h30 to 20h50 EDT)
 - This tutorial introduces Open Source at IEEE with an emphasis on its use in standards. Topics include Open Source and Standards, Open Source projects at IEEE, and Open Source infrastructure at IEEE.

IEEE 802 Executive Committee report Cross-IEEE 802 topics and IEEE 802 meetings

LMSC Rules	18:30- 20:30	Sun
Opening EC Meeting	08:00- 10:30	Mon
Tutorial #1 Light Communications	18:00- 19:20	Mon
Tutorial #2 Open Source	19:30- 20:50	Mon
Tutorial #3 none	21:00- 22:30	Mon
802/JTC1 Standing Committee	15:00- 17:00	Tues
802 Public Visibility Standing Committee	none	
802/IETF Standing Committee	none	
802/ITU Standing Committee	15:00- 17:00	Wed
Future Venues Ad Hoc	07:30- 9:00	Thu
Closing EC Meeting	13:00- 18:00	Fri

See https://calendar.google.com/calendar/u/0/embed?src=b1i61797rqce8ks5fd9fi7k2nc@group.calendar.google.com&ctz=UTC

Other IEEE 802 PARs under consideration at this plenary session

- New standard PAR:
 - IEEE P802.1DU Standard: Cut-Through Forwarding Bridges and Bridged Networks PAR and CSD
- Amendment project PAR:
 - IEEE P802.1Qdx Amendment: YANG Data Models for the Credit-Based Shaper PAR and CSD
 - IEEE P802.15.4 Amendment: Privacy Enhancements, <u>PAR</u> and <u>CSD</u>
- PAR modification request:
 - IEEE P802.1ASdm Hot Standby and Clock Drift Error Reduction PAR and CSD
 - IEEE P802.1CS-2020/Cor 1 Corrections to Management Modules and Protocol Encoding PAR
 - IEEE P802.1Qdt Priority-based Flow Control Enhancements <u>PAR</u> and <u>CSD</u>

Liaisons

Liaison letters

- External Liaison letters (old)
 - ISO/IEC JTC 1/SC 25/WG 3: Single pair cabling liaison letter
 - IEEE 802.3 Power Delivery Coordinating Committee Ad Hoc
 - ITU-T SG15: Latest version of ANT and HNT Standards Overviews and Work Plans liaison letter
 - ITU-T SG15: New version of ANT Standards Overview and Work Plan liaison letter.
 - ITU-T SG15: New version of the HNT Standards Overview and Work Plan liaison letter.
 - ITU-T SG15: OTNT Standardization Work Plan Issue 31 liaison letter and attachment
 - Bob Grow (HNT), Marek Hajduczenia (ANT) and Tom Huber (OTNT)
 - ITU-T Q13/15: Timestamping capabilities available in the IEEE 802.3 standard liaison letter
 - IEEE P802.3cx Improved PTP Timestamping Accuracy Task Force
 - OIF: 800LR IA Project update liaison letter
 - IEEE P802.3df 400 Gb/s and 800 Gb/s Ethernet Task Force and IEEE P802.3dj 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet Task Force

Assigned group or individual to review letter and make a recommendation at the IEEE 802.3 closing plenary if there should be a reply, and if so, propose a draft reply

Liaison letters (continued)

- External Liaison letters (new)
 - ITU-T Q11/15: Reply on OTN mapping reference point for 800GBASE-R liaison letter
 - IEEE P802.3df 400 Gb/s and 800 Gb/s Ethernet Task Force
 - OIF: Progress on OIF CEI-112G-XSR+-PAM4 project liaison letter and attachment
 - IEEE P802.3df 400 Gb/s and 800 Gb/s Ethernet Task Force

Liaisons

ISO/IEC SC25/WG3 report TIA TR-42 report

Continuing Agenda ...

DirectVote Live URL

https://vote.directvotelive.net/login.aspx?o=223