

# IEEE 802.3 Working Group July 2024 Plenary Session

David Law

Chair, IEEE 802.3 Working Group  
dlaw@hpe.com

Web site: [www.ieee802.org/3](http://www.ieee802.org/3)

# Current IEEE 802.3 activities

---

## IEEE 802.3 Task Forces

IEEE P802.3da 10 Mb/s Single Pair Multidrop Segments Enhancement

IEEE P802.3dg 100 Mb/s Long-Reach Single Pair Ethernet

IEEE P802.3dj 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet

IEEE P802.3dk Greater than 50 Gb/s Bidirectional Optical Access PHYs

IEEE P802.3dm Asymmetrical Electrical Automotive Ethernet

IEEE P802.3-2022/Cor 1 (IEEE 802.3dn) Multi-Gigabit Automotive MDI return loss

IEEE P802.3.1 (IEEE 802.3.1b) SMlv2 Data Models (Revision)

IEEE P802.3.2 (IEEE 802.3.2a) YANG Data Model (Revision)

## IEEE 802.3 Call for Interest

IEEE 802.3 Single-Pair Ethernet Powering Cabling Restrictions

## IEEE 802.3 Ad Hoc

IEEE 802.3 New Ethernet Applications

IEEE 802.3 Power Distribution Coordinating Committee (PDCC)

# IEEE 802.3 Maintenance

---

## Description

Maintenance of the IEEE 802.3 standards are performed by the IEEE 802.3 Maintenance Task Force.

## Plan

Consider new maintenance requests

Review status of outstanding maintenance requests

Consider any other maintenance business

## Web page

<http://www.ieee802.org/3/maint/index.html>

# IEEE P802.3da 10 Mb/s Single Pair Multidrop Segments Enhancement Task Force

---

## Description

Specify additions and modifications of the Physical Layer (including reconciliation sublayers), management parameters, Ethernet support for time synchronization protocols, and optional power delivery supporting multiple powered devices on the 10 Mb/s mixing segment.

Web site: <http://ieee802.org/3/da/index.html>

## Status

Working towards a technically complete draft for Working Group ballot

Task Force review of IEEE P802.3da draft D1.3 due to close on 3 July 2024

## Meeting plan

Consider comments received during IEEE P802.3da draft D1.3 Task Force review

# IEEE P802.3dg 100 Mb/s Long-Reach Single Pair Ethernet Task Force

---

## Description

Specify additions to and appropriate modifications of IEEE Std 802.3 to add 100 Mb/s Physical Layer specifications and management parameters for operation, and associated optional provision of power, using a single balanced pair of conductors

Web site: <https://ieee802.org/3/dg/index.html>

## Status

Selecting set of baseline proposals to satisfy project objectives

## Meeting plan

Continue to work on selection of a set of baseline proposals

# IEEE P802.3dj 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet Task Force

---

## Description

Define Ethernet MAC parameters for 1.6 Tb/s. Define physical layer specifications, and management parameters for the transfer of Ethernet format frames at 800 Gb/s and 1.6 Tb/s over copper and single-mode fiber physical medium dependent (PMD) sublayers based on 200 Gb/s or greater per lane signaling technologies. Using these new definitions for 800 Gb/s and 1.6 Tb/s, define physical layer specifications and management parameters for the transfer of Ethernet format frames at 200 Gb/s and 400 Gb/s, when applicable.

Web site: <https://ieee802.org/3/dj/index.html>

## Status

Working towards a technically complete draft for Working Group ballot

Consideration of IEEE P802.3dj draft D1.0 Task Force review comments complete

Plan to circulate an updated draft to IEEE P802.3dj Task Force the week before plenary

## Meeting plan

Prepare for IEEE P802.3dj draft D1.1 Task Force review

# IEEE P802.3dk Greater than 50 Gb/s Bidirectional Optical Access PHYs Task Force

---

## Description

Define physical layer specifications and management parameters for symmetric bidirectional operation at greater than 50 Gb/s over a single strand of single mode fiber of at least 10 km.

Web site: <https://ieee802.org/3/dk/index.html>

## Status

Selecting set of baseline proposals to satisfy project objectives

## Meeting plan

Continue to work on selection of a set of baseline proposals

# IEEE P802.3dm Asymmetrical Electrical Automotive Ethernet Task Force

---

## Description

Specify additions to and appropriate modifications of IEEE Std 802.3 to add Physical Layer specifications and management parameters for electrical media and operating conditions that are optimized for automotive end-node camera links for operation up to 10 Gb/s in one direction and with a lower data rate in the other direction.

## Status

IEEE P802.3dm PAR approved on 21 March 2024

Initial Task Force meetings occurred on 13 to 17 May 2024

Selecting set of baseline proposals to satisfy project objectives

## Meeting plan

Continue to work on selection of a set of baseline proposals



# IEEE P802.3-2022/Cor 1 (IEEE 802.3dn) Multi-Gigabit Automotive MDI return loss

---

## Description

This corrigendum is to make corrections to MDI return loss Equations (149–27) and (165–42) and to Figure 165–38 ‘MDI return loss calculated limit in Equation (165–42)’.

Web site: <https://ieee802.org/3/dn/index.html>

## Status

Initial Standards Association ballot of IEEE 802.3dn draft D3.0 due to close on 4 July 2024

## Meeting plan

Consider comments received during IEEE 802.3dn initial Standards Association ballot

# IEEE P802.3.1 (IEEE 802.3.1b) SMlv2 Data Models (Revision)

---

## Description

This revision is to address accumulated maintenance changes as well as appropriate updates to the IEEE Std 802.3.1 Structure of Management Information version 2 (SMlv2) MIB modules to support IEEE Std 802.3 amendments published since IEEE Std 802.3.1 was last revised in 2013.

Web site: <https://ieee802.org/3/1/b/index.html>

## Status

Conditional approval to forward to Standards Association ballot was granted on 4 June 2024

Third Working Group recirculation ballot of IEEE 802.3.1b draft D1.3 closed 5 June 2024

Meeting to consider comments received held on 24 June 2024

Conditional approval criteria met based on agreed comment responses

Initial Standards Association ballot of IEEE 802.3.1b draft D2.0 initiated on XX June 2024

Initial Standards Association ballot closes XX July 2024

## Meeting plan

Task Force is not planning to meet during July 2024 plenary session

# IEEE P802.3.2 (IEEE 802.3.2a) YANG Data Model (Revision)

---

## Description

This revision is to address accumulated maintenance changes as well as appropriate updates to the IEEE Std 802.3.2 YANG modules to support IEEE Std 802.3 amendments published since IEEE Std 802.3.2 was first published.

Web site: <https://ieee802.org/3/2/a/index.html>

## Status

Third Working Group recirculation ballot of IEEE 802.3.2a draft D1.3 closed 18 June 2024

## Meeting plan

Consider comments received during IEEE 802.3.2a third Working Group recirculation ballot  
Seek conditional approval to forward to IEEE 802.3.2a Standards Association ballot

# IEEE 802.3 New Ethernet Applications (NEA) Ad Hoc

---

## Description

The goal of this activity is to assess requirements for new Ethernet-based applications, identify gaps not currently addressed by IEEE 802.3 standards, and facilitate building industry consensus towards proposals to initiate new standards development efforts

Web site: [http://ieee802.org/3/ad\\_hoc/ngrates/index.html](http://ieee802.org/3/ad_hoc/ngrates/index.html)

## Status

No meetings held since March 2024 plenary session

## Meeting plan

No meetings are planned for the July 2024 plenary session

# IEEE 802.3 Power Distribution Coordinating Committee (PDCC) Ad Hoc

---

## Description

The Chair of the IEEE 802.3 Working Group has established an ad hoc to review output and build consensus on input for liaisons regarding power delivery over cabling cited in IEEE 802.3 standards and projects, e.g.,

- Build consensus on public inputs and public comments for the next edition of NFPA70; and

- Build consensus on input to IEC 60364-7-716, and proposed direction of the IEEE 802.3 Category C liaison expert to IEC TC64/MT2; and

- Build consensus on input to IEC TC108/PT63315, and proposed direction of the IEEE 802.3 Category C liaison expert; and

- Build consensus on input to ITU-T SG5; and

- Build consensus on input to IEC SC25/WG3

The output of this Ad Hoc is subject to approval of the 802.3 Working Group

Web site: [https://ieee802.org/3/ad\\_hoc/PDCC/index.html](https://ieee802.org/3/ad_hoc/PDCC/index.html)

## Meeting plan

Continue reviewing output and building consensus on input for liaisons regarding power delivery over cabling cited in IEEE 802.3 standards and projects

Serve as the consensus-building meeting for the Single-Pair Ethernet Powering Cabling Restrictions call for interest (see below)

# IEEE 802.3 Single-Pair Ethernet Powering Cabling Restrictions Call for Interest

---

This is a call for interest (CFI) to initiate a Study Group to develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD), for a project to provide clarification on the cabling requirements for single-pair Ethernet powering.

The IEEE 802.3 Working Group's Power Delivery Coordinating Committee (PDCC) is working with other SDOs to avoid potential issues but has serious concerns about a currently proposed approach that an international cabling SDO has taken. In particular, the SDO is proposing to specify cabling at different current carrying capacities that do not support all the power classes that are presently defined in IEEE 802.3. This threatens the historic assumption that PoE is plug-and-play. It may be necessary to have additional information in IEEE Std 802.3 to provide guidance regarding the usage of such cabling.

This request for agenda time for this CFI has been received from Chad Jones <cmjones@cisco.com>

# IEEE 802.3 Officers, Subgroup Chairs and Vice-Chairs

---

IEEE 802.3 Chair: David Law <dlaw@hpe.com>

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: Chad Jones <cmjones@cisco.com>

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

## **IEEE 802.3 Task Force chairs**

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

IEEE P802.3dg 100 Mb/s Long-Reach Single Pair Ethernet: George Zimmerman <george@cmephyconsulting.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 P802.3dm Asymmetrical Electrical Automotive Ethernet: Jon Lewis <jon.lewis@dell.com>

IEEE P802.3-2022/Cor 1 (IEEE 802.3dn) Multi-Gigabit Automotive MDI return loss Brett McClellan <bmc@marvell.com>

IEEE P802.3.1 (IEEE 802.3.1b) SMIv2 Data Models (Revision) Marek Hajduczenia <mxhajduczenia@gmail.com>

IEEE P802.3.2 (IEEE 802.3.2a) YANG Data Model (Revision) Marek Hajduczenia <mxhajduczenia@gmail.com>

## **IEEE 802.3 Task Force vice-chairs**

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

# Upcoming meetings

Please see <http://www.ieee802.org/3/calendar.html> for latest calendar of meetings

**NOTE: Calendar set to detected computer time zone: Europe/London**

| Today |     |       |     |     |     |     | July 2024   |  |  |  |     |       |   | Print | Week | Month | Agenda |  |
|-------|-----|-------|-----|-----|-----|-----|---|--|--|--|-----|-------|---|-------|------|-------|--------|--|
| Sun   | Mon | Tue   | Wed | Thu | Fri | Sat | Sun   | Mon                                      | Tue                                      | Wed                                      | Thu | Fri   | Sat                                     | Sun   | Mon  | Tue   |        |  |
|       |     | 1 Jul |     |     |     |     | 30  |  | 2  | 3  | 4   | 5     | 6                                       |       |      |       |        |  |
|       |     |       |     |     |     |     |   | 15:00 IEEE 802.3 PAR Review ad hoc tele  | 15:00 [802.3dj] COM ad hoc               | 18:00 PDCC AdHoc Weekly meeting          |     |       |   |       |      |       |        |  |
|       |     |       |     |     |     |     | 7   |  | 8  | 9  | 10  | 11    | 12                                      | 13    |      |       |        |  |
|       |     |       |     |     |     |     | No Meetings   |  |  |  |     |       |   |       |      |       |        |  |
|       |     |       |     |     |     |     | 14  |  | 15                                       | 16                                       | 17  | 18    | 19                                      | 20    |      |       |        |  |
|       |     |       |     |     |     |     | IEEE 802.3 July 2024 hybrid plenary REGISTRATION FEE REQUIRED |  |  |  |     |       |   |       |      |       |        |  |
|       |     |       |     |     |     |     | 15:15 IEEE 802.3 Opening plenary meetin                       | 13:00 Registration Fee Required - IEEE P | 13:00 Registration Fee Required - IEEE P | 13:00 Registration Fee Required - IEEE P |     |       | 18:15 IEEE 802.3 Closing plenary meetin |       |      |       |        |  |
|       |     |       |     |     |     |     | 18:00 Registration Fee Required - IEEE P                      | 13:00 IEEE P802.3dm July plenary meetin  |  |  |     |       |   |       |      |       |        |  |
|       |     |       |     |     |     |     | 18:15 IEEE P802.3dm July plenary meetin                       |  |  |  |     |       |   |       |      |       |        |  |
|       |     |       |     |     |     |     | 21  |  | 22                                       | 23                                       | 24  | 25    | 26                                      | 27    |      |       |        |  |
|       |     |       |     |     |     |     |   |  |  | 18:00 PDCC AdHoc Weekly meeting          |     |       |   |       |      |       |        |  |
|       |     |       |     |     |     |     | 28  |  | 29                                       | 30                                       | 31  | 1 Aug | 2                                       | 3     |      |       |        |  |
|       |     |       |     |     |     |     |   |  |  | 18:00 PDCC AdHoc Weekly meeting          |     |       |   |       |      |       |        |  |

Events shown in time zone: United Kingdom Time

[+ Google Calendar](#)

If the calendar above does not display, please try [the alternate calendar view](#) which will always display in UTC.

To subscribe to this calendar in your personal logged-in Google account calendar, use the "+ Google Calendar" button in the lower right corner of the calendar view above.

To subscribe to this calendar using other calendar applications use this [iCalendar subscription link URL](#).

As an example, for Outlook follow these [instructions](#) using the above iCalendar subscription link URL as the address of the internet calendar to add to Outlook.