

# IEEE 802.3 Working Group November 2024 Plenary Session

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

# Current IEEE 802.3 activities

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## 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 P802.3.1 (IEEE 802.3.1b) SMIv2 Data Models (Revision)
- IEEE P802.3.2 (IEEE 802.3.2a) YANG Data Model (Revision)

## IEEE 802.3 Study Group

- IEEE 802.3 Ethernet Powering Cabling Restrictions

## IEEE 802.3 Call for Interest

- IEEE 802.3 MII Optimized for an Exposed Interconnect call for interest

## IEEE 802.3 Ad Hoc

- IEEE 802.3 New Ethernet Applications
- IEEE 802.3 Power Distribution Coordinating Committee (PDCC)

# IEEE 802.3 Maintenance

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## 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

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## 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

Progressing towards a technically complete draft

Task Force review of IEEE P802.3da draft D1.5 closed on 20 October 2024

Comments received considered during 30 October 2024 IEEE P802.3da meeting

IEEE P802.3da draft D2.0 submitted to the IEEE 802.3 Working Group for preview in preparation for a request to proceed to initial Working Group ballot during plenary

## Meeting plan

Progress project towards initial Working Group ballot

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

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## 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

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## 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

Progressing towards a technically complete draft

Task Force review of IEEE P802.3dj draft D1.2 closed on 23 October 2024

## Meeting plan

Consider comments received during IEEE P802.3dj draft D1.2 Task Force review

Comment consideration completed, if necessary, during contingent electronic meetings after plenary

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

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## 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

Progressing towards a technically complete draft

Task Force review of IEEE P802.3dk draft D1.0 closed on 31 October 2024

## Meeting plan

Consider comments received during IEEE P802.3dk draft D1.0 Task Force review

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

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## 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

Selecting set of baseline proposals to satisfy project objectives

## Meeting plan

Continue to work on selection of a set of baseline proposals

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

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## 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 submit to RevCom agree by IEEE 802.3 on 19 September 2024

Second Standards Association ballot of IEEE 802.3.1b draft D3.2 closed 8 October 2024

No comments received

IEEE 802.3.1b draft D3.2 submitted to December 2024 RevCom agenda based on the conditional approval granted at the September 2024 IEEE 802.3 interim meeting

## Meeting plan

As IEEE 802.3.1b has been submitted to RevCom, the Task Force is not planning to meet

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

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## 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

Initial Standards Association ballot of IEEE 802.3.2a draft D3.0 closed 29 September 2024

Comment responses developed on 14 October 2024 meeting

Editors preparing IEEE 802.3.2a draft D3.1 for First Standards Association ballot

## Meeting plan

As editors are preparing IEEE 802.3.2a draft D3.1 the Task Force is not planning to meet

# IEEE 802.3 Ethernet Powering Cabling Restrictions Study Group

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## Description

Develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for clarification on the cabling requirements for Ethernet powering

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

## Status

Developing PAR, CSD responses and objectives

## Meeting plan

Progress towards completing PAR, CSD responses and objectives

# MII Optimized for an Exposed Interconnect

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This is a call for interest to initiate a Study Group to develop a PAR and CSD for an Ethernet Media Independent Interface (MII) optimized for an exposed interconnect, e.g., chip-to-chip. The growing body of IEEE 802.3 Copper PHY standards that operate at lower speeds has intensified the demand for a modern, optimized MII. Application of PHYs such as 10BASE-T1L, 10BASE-T1S, proposed 100BASE-T1L, proposed 10BASE-T1M, and potentially future PHYs would see benefit in both single and multi-port implementations. Such an effort may afford reduced pin count and implementation complexity while enabling data for multiple ports on a single interface and support for features such as PHY-Level Collision Avoidance (PLCA). Most importantly, it could provide a modern alternative interface for PHYs that would otherwise use various industry specifications not currently in IEEE Std 802.3.

This request for agenda time for this CFI has been received from Jason Potterf <jpotterf@cisco.com>

# IEEE 802.3 New Ethernet Applications (NEA) Ad Hoc

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## 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

Two meetings held since July 2024 plenary session

IEEE 802.3 NEA Consensus Building - Building a Better MII for Single-Pair Ethernet and Beyond

IEEE 802.3 NEA Consensus Building: Future SMF Needs

## Meeting plan

No meetings are planned for the November 2024 plenary session

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

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## 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

# IEEE 802.3 Officers, Subgroup Chairs and Vice-Chairs

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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 P802.3.1 (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 Study Group chair**

IEEE 802.3 Ethernet Powering Cabling Restrictions: Chad Jones <cmjones@cisco.com>

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

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/Berlin**

Today <span>◀</span> <span>▶</span> October 2024 <span>▼</span>							Print	Week	Month	Agenda
Sun	Mon	Tue	Wed	Thu	Fri	Sat				
29	30	1 Oct	2	3	4	5				
		16:00 [802.3dj] COM ad hoc	16:00 IEEE 802.3 NEA Consensus Building							
6	7	8	9	10	11	12				
	16:00 IEEE 802.3 NEA Consensus Building		19:00 PDCC AdHoc Weekly meeting	15:00 802.3dm ad hoc 15:30 [802.3dj] Electrical ad hoc meeting	18:00 IEEE P802.3.1b interim electronic r					
13	14	15	16	17	18	19				
	19:00 IEEE P802.3.2a interim electronic r	15:00 P802.3dk October Meeting 16:00 [802.3dj] COM ad hoc	16:00 802.3dg Ad hoc: Recommendation: 16:00 IEEE P802.3dj - Joint Ad Hoc Meeti 19:00 PDCC AdHoc Weekly meeting	16:00 P802.3dj Joint Optics/Logic ad hoc						
20	21	22	23	24	25	26				
			19:00 PDCC AdHoc Weekly meeting							
27	28	29	30	31	1 Nov	2				
		15:00 Electronic Interim of IEEE P802.3d 15:00 [802.3dj] COM ad hoc	15:00 IEEE P802.3da off-cycle interim for 18:00 PDCC AdHoc Weekly meeting	15:00 P802.3dj Joint Optics/Logic track a 15:00 IEEE 802.3 PAR review teleconfere						

Events shown in time zone: Central European Time - Berlin

[+ Google Calendar](#)

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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.