

IEEE 802.3 motions

IEEE 802 LMSC

Friday 1 August 2025

5.031 ME: IEEE P802.3da 10 Mb/s Single Pair Multidrop Segments Enhancements to Standards Association ballot

IEEE P802.3da 10 Mb/s Single Pair Multidrop Segments Enhancements to Standards Association ballot

Date the ballot closed

The third Working Group recirculation ballot on IEEE P802.3da D2.3 closed on 15 June 2025 at 23:59 AoE

Vote tally

	Initial Draft D2.0			1 st Recirculation Draft D2.1			2 nd Recirculation Draft D2.2			3 rd Recirculation Draft D2.3			Req %
	#	%	Status	#	%	Status	#	%	Status	#	%	Status	
Abstain	32	20	PASS	36	20	PASS	36	20	PASS	36	18	PASS	< 30
Dis with comment	14	-	-	13	-	-	10	-	-	1	-	-	-
Dis w/o comment	0	-	-	0	-	-	0	-	-	0	-	-	-
Approve	111	71	PASS	131	90	PASS	140	93	PASS	157	99	PASS	≥ 75
Ballots returned	157	66	PASS	180	75	PASS	186	77	PASS	194	81	PASS	> 50
Voters	239	-	-	239	-	-	239	-	-	239	-	-	-
Comments	329	-	-	123	-	-	117	-	-	7	-	-	-

IEEE P802.3da 10 Mb/s Single Pair Multidrop Segments Enhancements to Standards Association ballot

Comments that support the remaining disapprove votes and responses

2 unsatisfied TR comments and 0 ER comments from 1 commenter.

See <https://mentor.ieee.org/802-ec/dcn/25/ec-25-0169-00-LMSC-ieee-p802-3da-unsatisfied-comments.pdf>

Summary:

Both comments are against Return Loss (RL) specifications. A RL ad hoc has been chartered to update in D3.0 and a group is working on a solution.

Note: Clause 12 'Procedure for conditional approval to forward a draft standard' of IEEE 802 LMSC Operations Manual includes the text 'Where a voter has accepted some comment resolutions and rejected others, only the comments of which the voter has not accepted resolution should be presented.'

Changes to draft prior to Standards Association Ballot

Changes to draft prior to Standards Association Ballot

Change draft number to 3.0, change front matter to refer to initial Standards Association ballot

IEEE P802.3da 10 Mb/s Single Pair Multidrop Segments Enhancements to Standards Association ballot

Motion

Approve sending IEEE P802.3da D3.0 to IEEE-SA Ballot

Confirm the CSD for IEEE P802.3da in <<https://mentor.ieee.org/802-ec/dcn/20/ec-20-0096-00-ACSD-p802-3da.pdf>>

M: Law S: D'Ambrosia

Y: ??, N: ??, A: ??

Working Group vote

Y: 86 N: 0 A: 10

5.032 ME: IEEE P802.3dk Greater than 50 Gb/s Bidirectional Optical Access PHYs to Standards Association ballot

IEEE P802.3dk Greater than 50 Gb/s Bidirectional Optical Access PHYs to Standards Association ballot

The 3rd Working Group recirculation ballot on IEEE P802.3dk draft D2.3 closed on 22 July 2025 at 23:59 AoE

Vote tally

	Initial Draft D2.0			1 st Recirculation Draft D2.1			2 nd Recirculation Draft D2.2			3 rd Recirculation Draft D2.3			Req %
	#	%	Status	#	%	Status	#	%	Status	#	%	Status	
Abstain	29	19	PASS	30	18	PASS	31	17	PASS	30	16	PASS	< 30
Dis with comment	11	-	-	8	-	-	7	-	-	0	-	-	-
Dis w/o comment	0	-	-	0	-	-	0	-	-	0	-	-	-
Approve	116	91	PASS	130	94	PASS	142	95	PASS	156	100	PASS	≥ 75
Ballots returned	156	64	PASS	168	69	PASS	180	73	PASS	186	76	PASS	>50
Voters	244	-	-	244	-	-	244	-	-	244	-	-	-
Comments	271	-	-	72	-	-	54	-	-	6*	-	-	-

* An additional 12 comments we received after the close of the ballot

IEEE P802.3dk Greater than 50 Gb/s Bidirectional Optical Access PHYs to Standards Association ballot

Editorial changes to draft prior to Standards Association Ballot

Change draft number to 3.0, change front matter to refer to Standards Association ballot

Correct order of two subclauses on precoding ability registers

In TOC, add missing spaces after clause numbers

In TOC, delete the extra text "Introduction to 50 Gb/s networks" from CL135 title

In the frontmatter Introduction, replace the blank clause number with 168 in the description of amendment 11 (IEEE P802.3dk)

In Table 56-1, correct "Two single-mode fiber" to "Two single-mode fibers" (change fiber to fibers)

In 91.7.4.1, correct typo "KP4" to "KR4" in the TP10 entry (change P to R)

In 135.5.7.2, correct typo " $1/(1+D)$ mode 4" to " $1/(1+D) \bmod 4$ "

In three editing instructions for CL 56 and 157, delete "(as modified by IEEE Std 802.3cp-2021/2)"

IEEE Std 802.3cp-2021 has already been integrated into the IEEE 802.3-2022 revision

In two editing instructions for CL 161, add the missing text "(as added by IEEE Std 802.3ck-2022)"

In Table 161-2 title, correct typo "stauts" to "status"

IEEE P802.3dk Greater than 50 Gb/s Bidirectional Optical Access PHYs to Standards Association ballot

Motion

Approve sending IEEE P802.3dk D3.0 to IEEE-SA Ballot

Confirm the CSD for IEEE P802.3dk in <<https://mentor.ieee.org/802-ec/dcn/22/ec-22-0268-00-ACSD-ieee-p802-3dk.pdf>>

M: Law S: D'Ambrosia

Y: ??, N: ??, A: ??

Working Group vote

Y: 93 N: 0 A: 5

5.033 ME: IEEE P802.3.2 (IEEE 802.3.2a)
YANG Data Model Definitions RevCom
submittal (conditional)

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

Date ballot closed

The 3rd Standards Association recirculation ballot on IEEE P802.3.2 (IEEE 802.3.2a) YANG Data Model Definitions (Revision) D3.1 closed on 15 May 2025 at 23:59 UTC-12

Vote tally

	Initial Draft D3.0			1 st Recirculation Draft D3.1			2 nd Recirculation Draft D3.2			3 rd Recirculation Draft D3.3			Req %
	#	%	Status	#	%	Status	#	%	Status	#	%	Status	
Abstain	6	9	PASS	6	8	PASS	6	8	PASS	6	8	PASS	< 30
Dis with comment	1	-	-	1	-	-	1	-	-	0	-	-	-
Dis w/o comment	0	-	-	0	-	-	0	-	-	0	-	-	-
Approve	59	98	PASS	62	98	PASS	65	98	PASS	67	100	PASS	≥ 75
Ballots returned	66	75	PASS	69	78	PASS	72	81	PASS	73	82	PASS	≥ 75
Voters	88	-	-	88	-	-	88	-	-	88	-	-	-
Comments	26	-	-	6	-	-	3	-	-	3	-	-	-
Public comments	0	-	-										

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

Comments that support the remaining disapprove votes and WG responses

There are no remaining disapprove votes (100 % approval)

Note: Clause 12 'Procedure for conditional approval to forward a draft standard' of IEEE 802 LMSC Operations Manual includes the text 'Where a voter has accepted some comment resolutions and rejected others, only the comments of which the voter has not accepted resolution should be presented.'

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

Recirculation ballot and comment resolution meeting schedule

4 th Standards Association recirculation ballot day one	21 July 2025
RevCom submittal deadline	31 July 2025
4 th Standards Association recirculation ballot close	5 August 2025
IEEE P802.3.2 comment resolution meeting	Week of 11 August 2025
5 th Standards Association recirculation ballot day one	19 August 2025
5 th Standards Association recirculation ballot close	2 September 2025
IEEE P802.3.2 comment resolution meeting	Week of 8 September 2025
RevCom meeting	9 September 2025
SASB meeting	10 September 2025
RevCom submittal deadline	12 September 2025
RevCom meeting	22 October 2025

Note: 5th Standards Association recirculation ballot only if required

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

Motion

Conditionally approve sending IEEE P802.3.2 (IEEE 802.3.2a) YANG Data Model
Definitions (Revision) to RevCom

M: Law S: D'Ambrosia

Y: ??, N: ??, A: ??

Working Group vote

Y: 87 N: 0 A: 2

Note: there is no CSD statement since this is a revision project.

5.035 ME: IEEE P802.3dq Optimized PHY Interface to NesCom

IEEE P802.3dq Optimized PHY Interface to NesCom

Motion

Approve forwarding IEEE P802.3dp PAR documentation in <<https://mentor.ieee.org/802-ec/dcn/25/ec-25-0127-02-LMSC-ieee-p802-3dq-draft-par.pdf>> to NesCom

Approve CSD documentation in <<https://mentor.ieee.org/802-ec/dcn/25/ec-25-0128-02-LMSC-ieee-p802-3dq-draft-csd.pdf>>

M: Law, S: D'Ambrosia

Y: ??, N: ?, A: ?

Working Group vote

CSD: Y: 80 N: 0 A: 5

PAR: Y: 89 N: 0 A: 5

Compare files:

PAR changes: <<https://mentor.ieee.org/802-ec/dcn/25/ec-25-0127-01-LMSC-ieee-p802-3dq-draft-par.pdf>>

CSD changes: <<https://mentor.ieee.org/802-ec/dcn/25/ec-25-0128-01-LMSC-ieee-p802-3dq-draft-csd.pdf>>

6.012 MI: IEEE 802.3 200 Gb/s per
wavelength Multimode Fibre (MMF) optical
PHYs PAR Study Group

IEEE 802.3 200 Gb/s per wavelength MMF optical PHYs PAR Study Group

Links comprising multimode fiber (MMF) cable and VCSEL-based transceivers have played a key role in implementing multiple generations of Ethernet data rates in data centers for short reach. Ethernet has a proven track record of reusing and leveraging technology to enable new cost-optimized solutions for broad market adoption in these short-reach applications. IEEE 802.3db and IEEE 802.3df Ethernet projects defined specifications for 100 Gb/s, 200 Gb/s, 400 Gb/s, and 800 Gb/s operation over MMF using 100 Gb/s signaling. These Ethernet standards have gained market adoption in high bandwidth, high growth artificial intelligence (AI) back-end networks, as well as front-end networks for server-attachment, due to their lower power and lower cost than other optical technologies and their longer reaches than copper technologies. The continual growth of bandwidth demand has driven the evolution of even higher Ethernet speeds, most recently with 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet using 200 Gb/s signaling specifications being developed by the P802.3dj project. Now, the technology for 200 Gb/s per wavelength VCSEL-MMF links has reached a level that suggests the time is right to study an interoperable Ethernet MMF specification that will have broad market adoption.

This is a call for interest to initiate a Study Group to explore the potential market requirements and feasibility of addressing AI/Data Center networks, and to develop a PAR and CSD for 200 Gb/s per wavelength MMF optical PHYs.

IEEE 802.3 200 Gb/s per wavelength MMF optical PHYs PAR Study Group

Motion:

Approve the formation of an IEEE 802.3 Working Group PAR Study Group to develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for 200 Gb/s per wavelength Multimode Fibre (MMF) optical PHYs.

M: Law S: D'Ambrosia

Y: ??, N: ??, A: ??

Working Group vote

Y: 102 N: 1 A: 4

6.013 MI: IEEE 802.3 Ethernet Metadata Services PAR Study Group

Call For Interest

One can view IEEE 802.3 Ethernet's primary function to be exchanging Ethernet frames between endpoints. It can be useful in many applications to augment those frames with additional control information to provide extra functionality between endpoints. This control information is considered metadata and can be associated with the frame or communicated as information that is independent of the frames.

There have been proprietary implementations in the industry that use metadata to provide features such as channelized Ethernet. Recently the AI/ML/HPC market has been identifying new extensions that provide capabilities such as retry for lost frames and new, richer, flow control functionality. Many of these are considering different mechanisms to provide very similar functionality.

Historically, there are several amendments to the Ethernet standard that provide extensions to allow transmission of metadata such as EPON, Packet Preemption, and Link Degradation signaling as examples.

There is an opportunity for 802.3 to provide the industry with a set of clean, extensible, per-frame and frame-independent multi-vendor interoperable mechanisms for metadata exchange which should facilitate future innovations using a common approach. This will allow extensions to ethernet to be defined by other SDOs for new or unforeseen features to meet evolving industry needs while maintaining the interoperability that makes ethernet ubiquitous.

This Call for Interest is to assess the support for formation of an "Ethernet Metadata Services" study group in IEEE 802.3 to consider the development of a PAR and CSD to address adding a common approach to support per-frame and frame-independent metadata services to IEEE 802.3 Ethernet.

Proposal

Add support for Metadata Services with new service interfaces

IEEE 802.3 Ethernet MAC unchanged

MAC Service Interface unchanged

Add support for Metadata Services to appropriate PHYs

Client can provide per-packet metadata

Client can provide packet-independent metadata channel

PHY type (data rate and media) specific

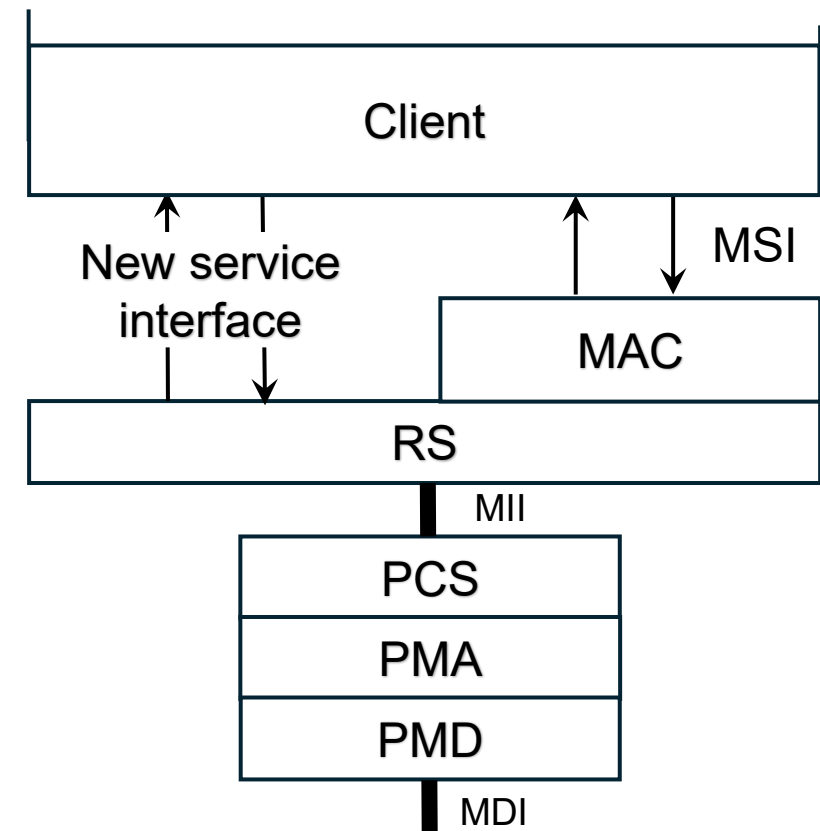
Management entity queries the PHY type

Certain PHY types cannot support this service

Can be optional in all supported PHY types

Both ends need to support

Use can be negotiated with LLDP



MSI: MAC abstract service interface

MII: Media Independent Interfaces

MDI: Medium Dependent Interfaces

IEEE 802.3 Ethernet Metadata Services PAR Study Group

Motion:

Approve the formation of an IEEE 802.3 Working Group PAR Study Group to develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for Ethernet Metadata Services.

M: Law S: D'Ambrosia

Y: ??, N: ??, A: ??

Working Group vote

Y: 94 N: 0 A: 7