

Meeting Minutes: IEEE P802.3dm Asymmetrical Electrical Automotive Ethernet Task Force

July 13-16, 2026
802.3 Plenary, Montreal, QC, Canada

Prepared by George Zimmerman

See Appendix A for Attendance

See Appendix B for Straw Poll and Motion 3 Roll call responses

IEEE P802.3dm Task Force meeting convened at **1:23 PM EDT, Monday, July 13, 2026**, by Natalie Wienckowski, IEEE P802.3dm Task Force Chair.

ALL TIMES ARE IN EDT.

Ms. Wienckowski turned to presentation [agenda_3dm_01_0726.pdf](https://www.ieee802.org/3/dm/public/0726/agenda_3dm_01_0726.pdf) and reviewed the agenda for the meeting.

Presentation: https://www.ieee802.org/3/dm/public/0726/agenda_3dm_01_0726.pdf

Presenter: Natalie Wienckowski, Chair

Approval of Agenda: The chair asked whether there were additions or corrections to the agenda, shown on slide 3 of the presentation [agenda_3dm_01_0726.pdf](https://www.ieee802.org/3/dm/public/0726/agenda_3dm_01_0726.pdf). She then asked if there were any objections to approving the agenda.

There were none.

(1:25 PM)

(NOTE – the presentation “agenda_3dm_01_0726.pdf” or updates will be referred to as “the agenda deck” in these minutes.)

She announced the agenda on slide 2 was considered approved.

Approval of minutes

The chair then turned to approval of previously posted minutes. She entertained the following motion:

MOTION #1

Move to approve the following minutes:

May Interim: https://www.ieee802.org/3/dm/public/0526/minutes_3dm_0526.pdf

June 2 AdHoc: https://www.ieee802.org/3/dm/public/adhoc/060226/minutes_3dm_a_060226.pdf

June 16 AdHoc: https://www.ieee802.org/3/dm/public/adhoc/061626/minutes_3dm_061626.pdf

M: Rich Boyer

S: Valerie Maguire

APPROVED BY VOICE WITHOUT OPPOSITION

The Chair then resumed the review of the agenda deck

Ms. Wienckowski noted that there should be no recording or photography without permission.

Ms. Wienckowski asked if anyone was attending from the press including those who would run a public blog on this meeting – there were no indications from the group. **(1:28 PM)**

The chair discussed decorum and processes for joining the queue using the conference tool.

The chair discussed the goals of the meeting, which were resolution of comments on the task force review draft.

Ms. Wienckowski then continued review of the presentation, reviewing information for the reflector, private area, and ground rules.

The Chair announced that under 802.3 rules, only working group voters may vote on motions, and that anyone in the meeting could vote in straw polls. In the agenda deck she provided a link to the IEEE 802.3 Ethernet Working Group Operations Manual for further information. She further indicated that she planned to defer resolution for comments that did not have consensus today to a future session this week.

Attendance

The chair reminded the group that attendance would be taken from Webex and IMAT. She then reminded attendees that they should show their employer & affiliation, and how to set these to make them correct.

IEEE Structure, Policies

Ms. Wienckowski continued review of the IEEE SA structure, where to find the bylaws, policies & procedures documents, and operations manuals which hierarchically govern IEEE SA, IEEE 802 LMSC, and IEEE 802.3 activities.

She also asked whether anyone in the room or online had not seen the various policy slides. There were no responses. She then proceeded to show the slides and read through them.

IEEE SA Patent Policy, Ms. Wienckowski reviewed the IEEE SA Patent Policy (slides 20-24 in the agenda deck). During this, she read aloud the IEEE SA patent policy from the agenda deck and made the call for patents on the slide labeled "Ways to Inform IEEE" (slide 22) **(1:36PM)**.

There was no response to the call for patents at **1:37 PM**.

She then showed and read aloud slide 3 of the patent policy and showed slide 4 of the patent policy.

Other IEEE Policies

Ms. Wienckowski showed and read aloud the slides on the IEEE SA copyright, Participant behavior (ethics), IEEE individual participation, the fair and equitable consideration policies, the decorum policy, and the IEEE ethics contact information in the agenda deck (slides 25-32). **(1:45 PM)**

(At **1:45 PM**, the chair noticed that individuals online could not be heard in the room. Participants online confirmed that they had heard the presentation, and confirmed that they had no questions or responses to the call for patents.)

There were no questions.

Ms. Wienckowski reviewed the standards development process for IEEE 802.3 and where this Task Force is in that process.

LIAISONS

The chair noted that the Task Force had received a late liaison from the IEEE 802.3 working group meeting, and that the liaison document would be addressed later in the week.

Task Force Documents

The chair noted that the task force documents were unchanged since the previous meeting.

There was no discussion.

(1:49 PM)

COMMENT RESOLUTION

The chair then turned to the editor's mid report, covering progress made at the interim meeting on comment resolution and an overview of the remaining work. **(1:49 PM)**

Title: IEEE P802.3dm D2.0 Editor's mid Report

URL: https://www.ieee802.org/3/dm/public/0726/wienckowski_3dm_01_0726.pdf

Authors: Natalie Wienckowski (IVN Solutions/Ethernova & Bosch), Val Maguire (Copperopolis//CME Consulting, Microchip, and NXP)

Discussion: The editors reviewed the status of the initial working group ballot comments received, and where we were in the comment resolution process following the interim meeting on 9 July 2026.

Comment Resolution:

The chair began a discussion of individual comment resolution at **1:51 PM**.

Comment resolution began with marking withdrawn comments final, then proceeded to comments ready for committee action (not addressed yet).

Responses to comments are recorded in the comment resolution database.

At **3:30 PM** the chair called a recess for the afternoon break.

At **3:45 PM** the chair reconvened the meeting and continued comment resolution.

At **5:57 PM** the chair recessed the meeting, to reconvene at **1:15 PM** Tuesday

DAY 2 - TUESDAY

At **1:17 PM** Tuesday, July 14, Ms. Wienckowski, the Chair, reconvened the meeting.

She briefly reviewed the agenda deck, including that attendance required registration and the payment of a fee, the private area, and decorum.

She asked whether there were any members of the press present – there were no responses **(1:18 PM)**

She made the call for patents (slide 22) – there were no responses **(1:18 PM)**

She reminded the group of the IEEE SA copyright policy, the independent participation policy, the IEEE Ethics policy, and the ethics hotline.

Comment resolution resumed at **1:20 PM**.

At **3:15PM** the Chair called a recess for the afternoon break, reconvening at **3:31 PM**.

Comment resolution continued.

At **6:13 PM** the chair called a recess for the day, to resume Wednesday **1:15PM**

DAY 3 – WEDNESDAY

The Chair reconvened the meeting on Wednesday, 15 July 2026 at **1:17 PM**.

She briefly reviewed the agenda deck, including that attendance required registration and the payment of a fee, the private area, and decorum.

She asked whether there were any members of the press present – there were no responses **(1:18 PM)**

She made the call for patents (slide 22) – there were no responses **(1:19 PM)**

She reminded the group of the IEEE SA copyright policy, the independent participation policy (reading the slide), the IEEE Ethics policy and the ethics hotline.

Comment resolution resumed at **1:20 PM**.

During comment resolution, in connection with late comment 521, the following presentation was heard:

Title: Better use for reserved bits in ACT

URL: https://www.ieee802.org/3/dm/public/0726/jonsson_3dm_01_0726.pdf

Presenter: Ragnar Jonsson [Infineon]

Abstract: the presenter proposed using the 6 vendor specific bits as a CRC-6 for better error detection in clause 191 low-rate direction.

At **3:20 PM** the chair recessed the meeting for the afternoon break.

The meeting was reconvened at **3:46PM**, resuming comment resolution.

At **4:57 PM**, the chair paused comment resolution due to the remaining time in the day being insufficient for consideration of the remaining topic. With the remaining time in the day, a few small topics were addressed out of agenda order.

There was no objection.

Liaison Response

The chair reminded the group that the 802.3 WG had assigned a liaison letter for the task force to review and consider a response. The letter is [ITU-T SG15 to IEEE 802.3: Study of in-vehicle optical network based on FIP technologies](https://www.ieee802.org/3/minutes/jul26/incoming/oLS104_Redacted.pdf) (url: https://www.ieee802.org/3/minutes/jul26/incoming/oLS104_Redacted.pdf). The task force proceeded to review the draft liaison response.

Title: Liaison Response to ITU-T SG15 LS104 LS

Presenter: Steve Gorshe

URL: https://www.ieee802.org/3/dm/public/0726/liaison_3dm-to-SG15-Q3-IVN-draft1.pdf

Discussion: The presenter discussed the proposed response to a liaison from ITU-T SG15 on optical vehicular networking.

The Chair indicated that participants may review the draft overnight, and she expected a motion to approve the liaison the following day.

Presentation

The chair then turned to a non-comment presentation she had received before the deadline, in the interest of consensus building.

Title: Consideration for Shield Performance in the Frequency Range of 10 kHz to 100 MHz

URL: https://www.ieee802.org/3/dm/public/0726/Boyer_Sharma_3dm_01_0726.pdf

Presenter: Rich Boyer (Aptiv) & Rohit Sharma (Molex)

Abstract: The presenter described measuring surface transfer impedance and recommended specifying it informatively to measure shield performance.

Discussion: Questions were asked and answered.

5:29 PM – the chair indicated that she had received a late presentation and asked whether there was any objection to hearing it the next day when the meeting convened.

She announced that the presentation was related to comments adding 1 Gb/s as the low-speed direction. There was no objection to hearing the presentation.

5:31 PM - The Chair asked if there was any objection to the closing of the comments completed to this point. There was no response.

The chair announced that the discussion 1 Gb/s comments would be time limited to end at the end of the AM1 session (10:15 AM).

The meeting was recessed for the day at **5:34 PM**, to reconvene at **8:00 AM** the following morning.

DAY 3 – THURSDAY

The chair reconvened the meeting Thursday 16 July at **8:21 AM** (following some delays to test meeting tools). She briefly reviewed the agenda deck, including that attendance required registration and the payment of a fee, the private area, and decorum.

She asked whether there were any members of the press present – there were no responses **(8:21 AM)**
She made the call for patents (slide 22) – there were no responses **(8:23 AM)**
She reminded the group of the IEEE SA copyright policy, the independent participation policy (reading the slide), the IEEE Ethics policy, and the ethics hotline. **(8:24 AM)**

Comment resolution resumed at **8:26 AM**

The chair turned to a presentation related to the remaining comments.

Title: Consideration Regarding a 1 Gb/s Uplink Rate for Clause 192.

URL: https://www.ieee802.org/3/dm/public/0726/Schedl_3dm_01_0726.pdf

Presenter: Tony Schedl, BMW Group

Abstract: The presenter discussed considerations and needs for supporting a 1 Gb/s link in the low data rate direction. The presenter explained his opinion as to how and why an aggregator connected to multiple cameras in an integrated module constituted an 'end node camera link' in alignment with the PAR, and how he saw this relating to statements made in the CFI.

Discussion: Questions were asked and answered. Participants voiced disagreement with the presenter from multiple perspectives, including: the assumptions driving 1 Gbps in the application presented and whether > 100 Mbps would be needed, the broad market potential of the architecture presented, whether the 'aggregator' would be an ethernet bridge (making the link a link to a bridge), whether the example was in line with the use case presented for the project, and whether there was a relative cost increase. Another participant mentioned the possibility of pursuing a process to amend the PAR to put the application in scope. Another participant suggested that he thought the notion of a higher data rate had been discussed earlier. Several disagreed.

MOTION #2

Approve response to liaison as posted and direct chair to move the approval on behalf of the Task Force at the working group meeting.

M: Steve Gorshe

S: Rich Boyer

(Procedural >= 50%)

APPROVED BY VOICE WITHOUT OPPOSITION

Meeting was recessed at **9:51 AM** for morning break and to debug straw polls.

Meeting was reconvened at **10:11 AM**.

At this time, the following straw polls related to the presentation were offered.

(note – at the time of the straw polls, the meeting attendance count was approximately 93 unique webex participants (varies from 90 to 95 over the time period))

Straw poll roll call results are recorded in Appendix B.

Straw Poll #1

Based on the current CFI/PAR would you support including 1 Gb/s low speed (upstream) with 5 Gb/s or 7.5 Gb/s high speed (downstream) rate combinations in Clause 192 of 802.3dm? Yes/No

Y: 38

N: 26

Straw Poll #2

Would you support proceeding with the process of a narrowly focused CFI/study group leading to a PAR amendment of the dm PAR to include 1 Gb/s low speed with 5 Gb/s or 7.5 Gb/s high speed rates combinations in Clause 192 of 802.3dm?

Y: 39

N: 30

Straw Poll #3

Would you support a CFI for a new project that clearly had the proposed use cases clearly in scope?

Y: 36

N: 29

(11:09 AM)

Comment resolution resumed with the remaining comments which were related to adding 1 Gb/s in the low speed direction.

In the context of comment 358, requesting 1 Gb/s in the low speed direction, the following motion was offered:

MOTION #3

Move to accept the resolution of comment 358 as follows: Incorporate changes indicated with green highlights from

https://www.ieee802.org/3/dm/public/adhoc/060226/chini_3dm_02a_D2d0_1G_comments-preview.pdf into the draft, with editorial license granted to conform with Style, etc.

M: Rich Boyer

S: Valerie Maguire

Technical ($\geq 75\%$)

(11:17 AM)

In connection with discussion of the motion, the Chair indicated that discussion would end at **11:30 AM**. Discussion reflected the previous discussion of concerns about the PAR scope and delays to the project. Discussion ended at 11:30AM with speakers left in the queue.

Vote was taken with Direct Vote Live – 802.3 voters only – results are shown in Appendix B.

The Chair asked if anyone had difficulty responding, and the following voter responses were manually added into the DVL database: Jay Cordaro – Infineon (No), Saied Benyamin – Ethernovia (No), Karthik Rajagopal – Texas Instruments (Abstain).

Y: 33 N: 25 A:11 (MOTION FAILS)

(comment was rejected, no consensus to change)

Following the vote, the remaining comments which were substantially the same were considered, and based on the discussion of the issue and the results of Motion #3, marked as rejected, no consensus to make the change.

Following the closing of comments, the Chair asked each commenter in the group who had marked their comment as required (or “Must be Satisfied”) During closing of comments, there was considerable back and forth with commenters reversing themselves later in discussion from satisfied or withdrawn status to unsatisfied.

MOTION #4

Move to instruct the editors to create draft 2.1 based on closed comments to draft 2.0 with editorial license and initiate recirculation ballot.

M: Valerie Maguire

S: Peter Jones

(Technical $\geq 75\%$)

MOTION PASSES BY VOICE WITHOUT OPPOSITION.

Closing Business

The editor announced estimated draft 2.1 timing

Draft 2.1 available - July 30

Recirculation closed/comments due - August 14

Comment proposed responses available - August 28

Comment resolution at the IEEE 802.3 September interim meeting (and out of cycle interim below)

The contingent interims for July 21 & 23 will be cancelled.

The chair announced an out of cycle interim for comment resolution September 8.

The chair announced that 802.3dm would meet at the September 802.3 interim, Sept 14-17.
A participant requested, and the chair announced, an ad hoc for Thursday August 13, 10am-noon EDT.
Having exhausted the agenda, the chair announced the meeting was adjourned at 12:01 PM.

Appendix A: Attendees at the IEEE P802.3dm Asymmetrical Electrical Automotive Ethernet Task Force Meeting, July 13-16 2026

[illegible]

[illegible]

[illegible]

Peter	Wu			X		X				Marvell
Kinya	YAMAZAKI							X	X	APRESIA Systems
Yumeng	Yang					X	X	X	X	Huawei Technologies Co., Ltd
Conrad	Zerna	X	X	X	X	X	X	X	X	NXP Semiconductors
Tingting	Zhang			X	X	X				Huawei Technologies Co., Ltd
Wei	Zhang	X	X	X	X	X	X	X	X	Broadcom Corporation
YUE	ZHU	X	X	X	X	X	X	X	X	Huawei Technologies Co., Ltd
Yan	Zhuang	X						X		Huawei
George	Zimmerman	X	X	X	X	X	X	X	X	CME Consulting; Analog Devices; Cisco; Eliyan; Infineon; OnSemi; Sony

Appendix B: Straw Poll (all) and Motion #3 Results

Straw Poll #1 (Y: 38 N: 26)

Based on the current CFI/PAR would you support including 1 Gb/s low speed (upstream) with 5 Gb/s or 7.5 Gb/s high speed (downstream) rate combinations in Clause 192 of 802.3dm?

Straw Poll #2 (Y: 39 N: 30)

Would you support proceeding with the process of a narrowly focused CFI/study group leading to a PAR amendment of the dm PAR to include 1 Gb/s low speed with 5 Gb/s or 7.5 Gb/s high speed rates combinations in Clause 192 of 802.3dm?

Straw Poll #3 (Y: 36 N: 29)

Would you support a CFI for a new project that clearly had the proposed use cases clearly in scope?

MOTION #3 Technical (>= 75%) Y: 33 N: 25 A:11 (MOTION FAILS)

Move to accept the resolution of comment 358 as follows: Incorporate changes indicated with green highlights from

https://www.ieee802.org/3/dm/public/adhoc/060226/chini_3dm_02a_D2d0_1G_comments-preview.pdf into the draft, with editorial license granted to conform with Style, etc.

Name	SP 1	SP 2	SP3	Motion 3	Affiliation
Abraham, Shiju	Yes	Yes	No	Yes	Acsia Technologies
Ahuja, Ramanjit	Yes	Yes	Yes	Yes	ON Semiconductor
Baggett, Tim	#N/A	#N/A	#N/A	Abstain	Microchip Technologies
Bar-Niv, Amir	No	No	Yes	No	Infineon Technologies
Benyamin, Saied	No	Yes	No	No	Ethernovia
Boyer, Rich	No	No	Yes	No	Aptiv Signal and Power Solutions
Budweiser, Karl	Yes	Yes	Yes	Yes	BMW AG; BMW Group
Chang, Jae-yong	Yes	Yes		#N/A	Keysight Technologies Inc
Cheng, Xiaoyue	No	No	Yes	No	Infineon Technologies
Chidambaram, Valliaappan	Yes	Yes	No	Yes	Acsia Technologies
Chimento, Nicholas	No	No	Yes	No	Analog Devices Inc.
Chini, Ahmad	Yes	No	No	Yes	Broadcom Corporation
Cordaro, Joseph	No	No	Yes	No	Infineon Technologies
Dai, Shaoan	No	No	Yes	No	Infineon Technologies
de Koos, Andras	#N/A	Yes	No	#N/A	Microchip Technology Inc
Djahanshahi, Hormoz	Yes	Yes	Yes	Yes	Microchip Technology, Inc.
Edele, Jonas	Yes	Yes	No	Yes	BMW AG; BMW Group
Estrakh, Daniel	No	No		No	Valens Semiconductor
Fuller, Paul	No	No		No	Infineon Technologies
Gorshe, Steve	Yes	Yes	No	Abstain	Microchip Technology, Inc.
Goto, Hideki	Yes	Yes	Yes	Yes	Toyota Motor Corporation
Hameed, Anil		Yes	No	Yes	Acsia Technologies
Hogenmueller, Thomas	No		Yes	No	Robert Bosch GmbH
Houck, TJ	No	No	Yes	No	Infineon Technologies
Hutchison, Guy	Yes	Yes	Yes	Yes	NXP Semiconductors
Hyakutake, Yasuhiro				Abstain	Orbray Co., Ltd.
Jeffries, Brad	No	Yes	Yes	No	Analog Devices Inc.
Jones, Peter	#N/A	#N/A	Yes	No	Cisco Systems, Inc.

Name	SP 1	SP 2	SP3	Motion 3	Affiliation
Jonsson, Ragnar	No	No	Yes	No	Infineon Technologies
Joseph, Gloria	Yes	Yes	No	Yes	Acsia Technologies
Kagami, Manabu	No			#N/A	Nagoya Institute of Technology (NITech)
Kandarpa, Venkata	Yes	No	No	#N/A	NXP Semiconductors
KIM, DOKYUN	Yes	Yes		#N/A	LG ELECTRONICS
Kim, Gyudong	No	No	Yes	No	Analog Devices Inc.
Kim, Yongbum	No	No	Yes	No	General Motors Company
Kleinwaechter, Mathias	Yes	Yes	No	Yes	in-tech GmbH
Kock, Joerg	#N/A	Yes	Yes	#N/A	NXP Semiconductors
Kotani, Yasuhiro	Yes	Yes		Yes	DENSO
Lasry, Ariel		No		Abstain	Qualcomm Technologies, Inc
Lee, Ching-Yen	Yes	Yes	Yes	Yes	Realtek Semiconductor Corp.
Lee, Dongjae	No	No	No	#N/A	Newracom Inc.
Lim, Hoei	Yes	Yes		Yes	NXP Semiconductors
Lin, YK	Yes	Yes	Yes	Yes	Realtek Semiconductor Corp.
Little, Terry	#N/A	Yes	Yes	#N/A	Foxconn Electronics Inc.
Lo, William	No	No	Yes	No	Axonne Inc.
Long, Richard	No	No	Yes	No	TE Connectivity
Lou, Wei	Yes	Yes	No	Yes	Broadcom Corporation
Lu, Chao	Yes	Yes	No	Yes	BMW Group
Maguire, Valerie			Yes	Abstain	Copperopolis (affl with CME Consulting, Microchip, and NXP)
Mecklenburg, Ben				#N/A	Huawei Technologies Duesseldorf GmbH
Miskho, Michael	No	No	Yes	No	Analog Devices Inc.
Muma, Scott	Yes	Yes	Yes	Yes	Microchip Technology, Inc.
Niihara, Yoshihiro			#N/A	Abstain	Fujikura Ltd.
Oishi, Eiichiro	No	No	Yes	#N/A	Yazaki Corporation
Pal, Debajyoti	Yes	Yes	No	Yes	ON Semiconductor
Pan, Chunpo	Yes	Yes	No	Yes	Broadcom Corporation
Rajagopal, Karthik	Yes	No	No	Abstain	Texas Instruments Inc.
Ran, Adee	#N/A	#N/A	Yes	No	Cisco Systems, Inc.
Razavi, Alireza	Yes	No		Abstain	Eliyan
Reinhard, Michael	No	#N/A	#N/A	Abstain	SEI Automotive Europe GmbH
Schedl, Anton	Yes	Yes	No	Yes	BMW Group
Schreiner, Stephan				#N/A	Rosenberger
Sedarat, Hossein	No	No	No	No	Ethernovia
Shiino, Masato	Yes	Yes	Yes	Yes	FURUKAWA ELECTRIC
Stencel, Len			Yes	#N/A	TDK Corporation of America
Strohmeier, Heiko		No	Yes	Abstain	Robert Bosch GmbH

Name	SP 1	SP 2	SP3	Motion 3	Affiliation
Sun, jingcong	#N/A	No	Yes	#N/A	Motorcomm Electronic Technology Co
Takeuchi, Junichi	Yes		No	#N/A	JAE Electronics, Inc.
Tan, Yuxuan			#N/A	No	Motorcomm
Tanc, Ahmet	#N/A	Yes		Yes	NXP Semiconductors; NXP Semiconductors
Tanz, Simon	Yes	Yes	No	Yes	BMW AG; BMW Group
Tazebay, Mehmet	Yes	Yes	Yes	Yes	Broadcom Corporation
Thomas, Rajan	Yes	Yes	No	Yes	Acsia Technologies
Thompson, Geoff	No	No	No	No	INDEPENDENT
Torres, Luisma	#N/A	#N/A	No	No	KD
Tu, Mike	Yes	Yes	Yes	Yes	Broadcom Corporation
Turner, Max	No	No	No	Abstain	Ethernovia
Vakilian, Kambiz	Yes	Yes	No	Yes	Broadcom Corporation
Veloso, Gumersindo	Yes	Yes	No	Yes	BMW AG; BMW Group
Wang, Frank, S.-S.	Yes	No	Yes	Yes	Realtek Semiconductor Corp.
Wienckowski, Natalie				#N/A	IVN Solutions LLC; Ethernovia, Bosch
Withey, James				#N/A	Fluke Corporation
Wu, Dance	#N/A	No		#N/A	Infineon Technologies
Zerna, Conrad	Yes	Yes	No	Yes	NXP Semiconductors
Zhang, Wei	Yes	Yes	No	Yes	Broadcom Corporation
Zimmerman, George	No	No		No	CME Consulting; Analog Devices; Cisco; Eliyan; Infineon; OnSemi; Sony
Tallies from Above					
Yes	38	39	36	33	
No	26	30	29	25	
Blank (did not respond)	12	12	17		Straw polls only - in webex at the time, no response given
Abstain				11	
#N/A	10	5	4	17	No response recorded Straw Polls- not in the Webex at the time Motion 3: Not a WG voter or no response