

Meeting Minutes PDCC Ad Hoc
Prepared by: Chad Jones
27 September 2023
1:00 PM EDT

1:01 Meeting called to order.

Meeting started by the Ad Hoc Chair, Chad Jones.

1:02 The Chair reviewed agenda slides, covered the IEEE patent policy, code of ethics and conduct, individual process, equitable consideration of all viewpoints, and copyright rules (slides 3-7 in the agenda deck).

1:04 There is one agenda item for today, discussing the IEEE 802.3 delegation to IEC SC25 WG3. The CDV failed ballot and the group needs to discuss the options. Things discussed: the IEEE 802.3 delegation can act as a full member of WG3 at the meeting, save for voting. There is historic precedence for 802.3 participation.

There hasn't been mention of hybrid options, but some of the ad hocs will reported be hybrid to accommodate some members who can't attend.

There is no indication that the WG meetings will be hybrid.

The comments that forced the CDV to fail revolve around 0.75A – an issue that IEEE 802.3 was long solved. As this will be contentious, this will be likely be deferred to a WG meeting. This means that only in person delegates will be able to participate.

The objections raised by the countries that voted against are identical – it's a cut and paste ask of 0.75A and rescinding of the concessions and consensus that was previously built.

The chair shared a draft maintenance request that was considered during the previous engagement, reproduced here:

Warning to system designers:

Not all cabling supports 2A per conductor, and the current carrying capacity of both single pair cabling and multi-pair cabling used for cable sharing within the link segment may not be sufficient to the support the power supplied by the PSE.

In particular, the ISO/IEC 11801-1 Amd1 specification contains two cabling options for Single Pair Ethernet (SPE) with power, one of which supports 2.0 A per conductor and another supporting only up to 0.75 A per conductor. Generally, the 0.75 A option is constructed by combining four SPE links into the typical 4P category cable, (i.e. Cat5e, Cat6, etc.).

IEEE 802.3 Clause 104 compliant PSEs can supply more than 0.75 A and have no way to know what type of cable is connected to the PSE. Therefore, it is expressly disallowed that a complaint IEEE 802.3 SPE PoDL system use any cabling where the current capacity is less than the highest supported current for the PSEs attached to that link segment. As of this publication, this current is 1.58 A as defined by Clause 104, Table 104-2.

Ignoring this warning could result in premature degradation of your cabling, which could cause performance issues or yield inoperable links.

Installing cabling with a capacity less than the listed PSE output current may violate installation requirements. Please consult any local and national safety regulations. IEEE 802.3 strives to publish interoperability standards that result in a 'plug-and-play' experience. Use of cabling that does not support the full current capacity results in an engineered system design, eliminating the desired plug-and-play interoperability.

It was pointed out that the comment file indicates that SC25 WG3 intend to rescind the CDV and move back to a CD, which means that this document will likely take a year to finish. This means there is no need to hurry in a maintenance request.

1:35 The next scheduled meeting is 4 October 2023, 1:00PM EDT via teleconference. See the 802.3 call and meeting calendar for details: <https://www.ieee802.org/3/calendar.html>.

1:37 The Chair asked if there was any other business, none responded. Having exhausted the agenda, the meeting was adjourned.

Attendance (from Webex, IMAT, and In Person – noted by W, I, P):

Name	Employer; Affiliation	Present
Chad Jones	Cisco Systems, Inc.; Cisco Systems, Inc.	W
Eric Horsma	ADI; ADI	W
George Zimmerman	CME Consulting; CME Consulting/APL Group, Cisco Systems, Marvell, OnSemi, and SenTekse	W
James Withey	Fluke Corporation; Fluke Corporation	W
Marek Hajduczenia	Charter Communications; Charter Communications	W
Peter Fischer	BKS Kabel-Service AG; BKS Kabel-Service AG	W