Cl **FM**　　　*SC* **FM**　　　　　　　*P* **10**　　　*L* **36**　　　# I-1

Zimmerman, George　　　　　　ADI, APL Group, Cisco, CommScope, Marvell, SenTe

Comment Type　**E**　　　*Comment Status*　**A**　　　　　　　*Editorial*

Section One of IEEE Std 802.3-202x includes through Annex K, not Annex H.

SuggestedRemedy

Change "Annex H" to "Annex K"

Response　　　　　　*Response Status*　**C**

ACCEPT.

Cl **146**　　　*SC* **146.5.4.2**　　　　　*P* **26**　　　*L* **24**　　　# I-2

Zimmerman, George　　　　　　ADI, APL Group, Cisco, CommScope, Marvell, SenTe

Comment Type　**T**　　　*Comment Status*　**A**　　　　　　　*Droop*

Implementers indicate that receivers are insensitive to droop of 30%, and that it improves economic feasibility for 10BASE-T1L transceivers with inline power.

SuggestedRemedy

Change "25%" to "30%" at P26 L24

Response　　　　　　*Response Status*　**C**

ACCEPT IN PRINCIPLE.
Instead of changing the droop as the commenter suggests, make it clear that droop is allocated to the PHY and not measurement. Additionally, align the MDI return loss with the droop specified.

Change the 3rd paragraph of 146.5.4.2 to read:
When a Clause 104 Type E PSE or PD PI is encompassed within the MDI, the magnitude of both the positive and negative droop shall be less than 25% measured with respect to an initial value at 400 ns after the zero crossing and a final value at 1066.7 ns after the zero crossing. Implementers should consider transmitter amplitude limitations when appropriate to the application such as those applications addressed in Annex 146A. This specification is at the MDI with the MDI loaded as specified in 146.5.4. Addition of power coupling networks and measurement noise can increase the apparent droop. For example, a power coupling network might add 3% and noise might further increase droop by 2%, adding up to 5%. Limiting additional apparent droop due to test setup is strongly encouraged and should be corrected for according to the measurement configuration being used.

Change Equation 146-17a from 0.1 MHz to 0.5 MHz to read:
$20 - 21.5 \cdot \log_{10}(f/0.5)$ dB

Cl **146**　　　*SC* **146.8.3**　　　　　*P* **27**　　　*L* **6**　　　# I-3

Ran, Adee　　　　　　　　　　Cisco Systems, Inc.

Comment Type　**T**　　　*Comment Status*　**A**　　　　　　　*Editorial*

Equation 146–17a has f ranges expressed as "0.1 <= f < 0.5 MHz" etc.

The variable definition below the equation states that "f is the frequency in MHz", so f itself a pure number (as it is used in the equation), and the MHz unit is out of place.

Same in equation 146–17 on the previous page. As this is an existing equation, it may be corrected in the currently running 802.3dc revision project.

SuggestedRemedy

Delete "MHz" from the four ranges in equation 146–17a.

Response　　　　　　*Response Status*　**C**

ACCEPT.

Cl **0**　　　*SC* **0**　　　　　　　*P* **18**　　　*L* **44**　　　# I-4

Maytum, Michael　　　　　　　None-Retired

Comment Type　**TR**　　　*Comment Status*　**R**　　　　　　　*Editorial*

text states "exceed Vpup as defined in Table 104–12"

SuggestedRemedy

No Vpup value in Table 104–12, insert Vpup value

Response　　　　　　*Response Status*　**W**

REJECT.
The CRG disagrees with the commenter.
The Vpup value is item 1 in Table 104-12, and is unchanged from the base standard. Unchanged rows are not shown in keeping with editorial practice (and noted in the editing instruction). See Table 104-12 of the base standard for the unchanged values on page 4407 line 49 of IEEE P802.3dc D3.0.

Cl **104**　　　*SC* **104.3**　　　　　*P* **15**　　　*L* **17**　　　# I-5

Thompson, Geoffrey　　　　　　GraCaSI S.A.

Comment Type　**TR**　　　*Comment Status*　**A**　　　　　　　*Editorial*

The definition is not sufficiently complete and precise.

SuggestedRemedy

Change the text to read: VPSE is the voltage at the PSE PI. VPSE is measured between any positive conductor and any negative conductor at the PI of the PSE.

Response　　　　　　*Response Status*　**C**

ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Comment ID

Comment ID I-5

Page 1 of 2
3/8/2022 11:20:48 AM

Cl **104**　　*SC* **104.3**　　　　　　*P* **15**　　　*L* **19**　　　# I-6

Thompson, Geoffrey　　　　　GraCaSI S.A.

Comment Type **TR**　　*Comment Status* **A**　　　　　　*Editorial*

The definition is not sufficiently complete and precise.

SuggestedRemedy

Change the text to read: VPD is the voltage at the PD PI. VPD is measured between any positive conductor and any negative conductor at the PI of the PD.

Response　　　　　*Response Status* **C**

ACCEPT.

Cl **146**　　*SC* **146.8.6**　　　　　*P* **27**　　　*L* **40**　　　# I-7

Thompson, Geoffrey　　　　　GraCaSI S.A.

Comment Type **T**　　*Comment Status* **A**　　　　　　*MDI faults*

It seems odd to me that this is the only Cu SPE clause that needs to have this requirement imposed. Doesn't this text need to be in each SPE copper PHY clause?

SuggestedRemedy

Spread req't across SPE copper PHY clauses as appropriate. Alternatively, if this requirement is not applicable and is not implemented for cost reasons in a particular application area then provisions are needed to make sure that the port does not get connected to PoDL.

Response　　　　　*Response Status* **C**

ACCEPT IN PRINCIPLE.
Clauses 96, 97, and 149 (100BASE-T1, 1000BASE-T1, and 2.5G/5G/10GBASE-T1) all refer to 96.8.3 which has a different form of MDI fault requirement, which already has a current limit and does does not need the change. Change to align clause 147 with this change is below, believing commenter intended both the change to both the DC voltage tolerance and the fault tolerance sections.

Add Clause 147 to the draft, inserting 147.9.3 and 147.9.4
Change the first sentence of 147.9.3 as follows:
The DTE <UL>, with the exception of MDIs encompassing Clause 104 PSEs, <UL>shall…

Change the first paragraph of 147.9.4 as follows:
The wire pair of the MDI<UL>, with the exception of MDIs encompassing Clause 104 PSEs,<UL> shall withstand without damage the application of short circuits of any wire to the other wire of the same pair or ground potential, as per Table 147–5, under all operating conditions indefinitely<UL> with the source
current limited to 2000 mA where applicable due to applied voltage<UL>. Normal operation shall resume after all short circuits have been removed.<UL> Clause 104 PSE fault tolerance requirements are defined in 104.6.2.<UL>

Add 147.12.3 to the draft,
Insert new row at the end of Table in 147.12.3:
*PPSE | MDI encompasses a Clause 104 PSE | 147.9.3 and 147.9.4 | O | Yes[] No[]

Add table 147.12.4.9 to the draft,
Change PICS entries for MDI3 and MDI4 as shown
(unchanged rows not shown):
MDI 3 | MDI line powering voltage tolerance | 147.9.3 | Up to 60 V dc with the source current limited to 2000 mA | <UL>!PPSE:<UL>M | Yes [ ]

MDI 4 | MDI fault tolerance | 147.9.4 | Withstand without damage the application of a short circuit of any wire to the other wire of
the same pair or ground potential. Normal operation resumes after all short circuits are removed. | <UL>!PPSE:<UL>M | Yes [ ]

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Comment ID

Comment ID **I-7**　　　Page 2 of 2
3/8/2022 11:20:48 AM