Cl **168**　　*SC* **168**　　　　　*P* **45**　　*L* **46**　　　# 1

Schreiner, Stephan　　　　　　Rosenberger Hochfrequenztechnik GmbH & Co. KG

Comment Type **T**　　*Comment Status* **D**　　　　*Mixing Segment*

"The medium supporting the operation of the 10BASE-T1M PHY is defined in terms of performance requirements between the attachment points (TCI), …" is ambiguous. Does it mean, the medium is between two attachment points (so there is more than one medium in the mixing segment), or does it mean a mathematical concatenation of all "cables" between all TCIs.

SuggestedRemedy

In case 1: "... Is defined in terms of performance requirements between two attachment points (TCI)… In case 2: "The medium supporting the operation of the 10BASE-T1M PHY is defined in terms of performance requirements between all TC3 of all attachment points of the TCI

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
The descriptive sentence here is imprecise and it is neither meaning. While there is one medium (one mixing segment for all nodes), the full meaning is that performance is defined at the TCI and between the edge terminators. This is described in detail in 168.7 which is already referenced, and is best left to that section (as it might change). Best to simplify the overview text.

Delete "between the attachment points (TCI)"

Cl **168**　　*SC* **168-10**　　　　　*P* **63**　　*L* **20**　　　# 2

Schreiner, Stephan　　　　　　Rosenberger Hochfrequenztechnik GmbH & Co. KG

Comment Type **T**　　*Comment Status* **D**　　　　*TCI*

The TCI interface defines a 4 wire interface on TC3, and a left side (TC1) and a right side (TC2) both having two wires. The graphic only indicates a 2 wire interface (BI_DA+, BI_DA-) to the PMA. Thus, the figures 168-10 and 168-18 are not well aligned.

SuggestedRemedy

Redraw the figure, showing how the PMA and the TCI is supposed to work

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
TFTD - resolve with comment 8

Cl **168**　　*SC* **168.4.2 b)**　　　*P* **64**　　*L* **29**　　　# 3

Schreiner, Stephan　　　　　　Rosenberger Hochfrequenztechnik GmbH & Co. KG

Comment Type **T**　　*Comment Status* **D**　　　　*TCI*

"Present the minimum impedance described in 168.8.1 at the TCI" does not contain the position (TC1 - TC3) where the minimum impedance should be presented. Because the TCI introduces a more ports than the common MDI, the port needs to be defined. Additionally, a differential impdance can only be defined on one differential port. The TCI will have 4 differential ports (TC1, TC2, TC3-pair one, TC3-pair two). How to handle the remaining ports during the measurement.

SuggestedRemedy

"Present the minimum impedance described in 168.8.1 at all pairs of TCI TC3"

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
(the impedance is presented across the pairs of the interface, in differential mode)

Change "Present the minimum impedance described in 168.8.1 at the TCI" to:
"Present the minimum impedance described in 168.8.1 across TC3"

Cl **168**　　*SC* **168.5.2**　　　　*P* **66**　　*L* **30**　　　# 4

Schreiner, Stephan　　　　　　Rosenberger Hochfrequenztechnik GmbH & Co. KG

Comment Type **T**　　*Comment Status* **D**　　　　*Test modes*

"These test modes shall change only the data symbols provided to the transmitter circuitry and …" contradicts the sentence page 66, line 48-49: "When test mode 4 is enabled, the transmitter shall present a high impedance termination to the line as specified in 168.4.2 for the 'I' symbol.", because high impedance termination is not only a data symbol provided to the transmitter

SuggestedRemedy

"These test modes shall not alter the electrical and jitter characteristics of the transmitter and receiver from those, which can appear in normal (non-test mode) operation.

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general　　　　*Comment ID* **4**　　Page 1 of 21
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed Z/withdrawn　　　　　　1/18/2024 12:03:38 PM
SORT ORDER: Comment ID

Cl **168**   *SC* **168.5.3**   *P* **67**   *L* **1**   # 5

Schreiner, Stephan   Rosenberger Hochfrequenztechnik GmbH & Co. KG

Comment Type **T**   *Comment Status* **D**   *Test modes*

The test fixtures 168-12 and 168-13 represents the measurement setups for measurements with a MDI. The introduction of the TCI, which has more ports and wire pairs requires a different measurement setup.

SuggestedRemedy

Redraw the figures and provide the required descriptive text.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Commenter is correct, but a replacement figure is needed. This is not something purely for the editor.
TFTD.

Cl **168**   *SC* **168.5.4.2**   *P* **68**   *L* **10**   # 6

Schreiner, Stephan   Rosenberger Hochfrequenztechnik GmbH & Co. KG

Comment Type **E**   *Comment Status* **D**   *Test modes*

"When tested using the text fixture"

SuggestedRemedy

"When tested using the test fixture"

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
Not clear what the commenter wants…

Cl **168**   *SC* **168-16**   *P* **70**   *L* **19**   # 7

Schreiner, Stephan   Rosenberger Hochfrequenztechnik GmbH & Co. KG

Comment Type **T**   *Comment Status* **D**   *PMA*

Figure includes the MDI interface, which should be replaced by TCI

SuggestedRemedy

Provide a new figure by replacing the MDI by TCI. This might also require a generally different measurement procedure.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change editor's note at P70 L6 to read:
"Editor's Note (to be removed prior to WG Ballot): - The text below represents an alien crosstalk noise rejection test for point-to-point systems. The test needs to be updated to better reflect the multidrop environment, at least including the TCI, and the location of the transmitter relative to the mixing segment. Contributions are encouraged."

Cl **168**   *SC* **168.7.1**   *P* **72**   *L* **2**   # 8

Schreiner, Stephan   Rosenberger Hochfrequenztechnik GmbH & Co. KG

Comment Type **T**   *Comment Status* **D**   *Mixing Segment*

The insertion loss is specified including any through-path insertion loss for the TCIs. Additionally, the mixing segment insertion loss shall be met without any DTEs attached. With the 4 wire interface on TCI TC3, there will be through path without something attached. The TCI figures indicates, that the DTE will provide the required through path. Thus, the DTE (or the sum of all DTEs) will cause a significant influence to the insertion loss of the over all segment. If the dummy load should act as through connection, the dummy load needs to be specified in accordance to provide the worst channel conditions when impedance constraints of 168.4.2 are met

SuggestedRemedy

"The mixing segment insertion loss, with DTEs or representative dummy loads attached, shall meet the values determinded using Equation (168-3) between the edge termination attachment points"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
TFTD
(The 2-wire to 4-wire nature of the TCI is an issue to be resolved. Some discussion is required, there are multiple ways to go with this).

Cl **168**   *SC* **168.7.2**   *P* **72**   *L* **21**   # 9

Schreiner, Stephan   Rosenberger Hochfrequenztechnik GmbH & Co. KG

Comment Type **T**   *Comment Status* **D**   *TCI*

"The mixing segment at each point TC3, without any DTEs attached, shall meet ..." By having the 4 wire interface on TCI TC3, the measurement on the TC3 interface will cover only the link segment to the right or left side up to the next TCI. At this position - without a DTE attached, the link might be open.

SuggestedRemedy

"The mixing segment return loss, with DTEs or representative dummy loads attached, shall meet…"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
TFTD
Resolve with discussion on 2-wire to 4-wire issue on comment 8.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Comment ID* **9**   Page 2 of 21
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn   1/18/2024 12:03:38 PM
SORT ORDER: Comment ID

Cl **168**　　*SC* **168.8.1.1**　　　　*P* **74**　　*L* **20**　　# 10

Schreiner, Stephan　　　　　Rosenberger Hochfrequenztechnik GmbH & Co. KG

Comment Type **T**　　*Comment Status* **D**　　　　　　　　　*TCI*

This specification can't be met if through connection is provided by DTE, which is suggested by the TCI 4 wire interface on TC3.

SuggestedRemedy

Remove the first paragraph (without PMA…), because a measurment with the PMA (or PMA load…) is sufficient

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
TFTD
Resolve with comment 8

Cl **168**　　*SC* **168.8.1.2**　　　　*P* **74**　　*L* **27**　　# 11

Schreiner, Stephan　　　　　Rosenberger Hochfrequenztechnik GmbH & Co. KG

Comment Type **T**　　*Comment Status* **D**　　　　　　　　　*TCI*

The NOTE indicates clearly what the purpose of the paragraph is. However, a meaningful physical implementation with a 4 wire TCI TC3 interface might not be able to fulfill the paragraph from line 28 to line 32

SuggestedRemedy

Remove this paragraph

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
TFTD
Resolve with comment 8

Cl **00**　　*SC* **0**　　　　*P* **0**　　*L* **19**　　# 12

Maguire, Valerie　　　　　Copperopolis

Comment Type **E**　　*Comment Status* **D**　　　　　　　　　*EZ*

Reminder to Editor to change copyright date in footer to 2024 when producing the next draft

SuggestedRemedy

Change the copyright date in the footer to 2024

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **00**　　*SC* **0**　　　　*P* **3**　　*L* **8**　　# 13

Maguire, Valerie　　　　　Copperopolis

Comment Type **E**　　*Comment Status* **D**　　　　　　　　　*Editorial*

Missing some keywords

SuggestedRemedy

Add the following words (in alphabetical order) to the Keyword list: MPD, MPSE, MPoE, Multidrop Power, TCI

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **169**　　*SC* **169**　　　　*P* **85**　　*L* **1**　　# 14

Maguire, Valerie　　　　　Copperopolis

Comment Type **E**　　*Comment Status* **D**　　　　　　　　　*EZ*

Clause 169 introduces "multi-drop" with a hyphen. For consistency, it should be "multidrop".

SuggestedRemedy

Replace all occurrences of "multi-drop" with "multidrop"

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **169**　　*SC* **169.4**　　　　*P* **87**　　*L* **14**　　# 15

Maguire, Valerie　　　　　Copperopolis

Comment Type **E**　　*Comment Status* **D**　　　　　　　　　*EZ*

The lettered list is not incrementing from a) to b), etc.

SuggestedRemedy

Fix lettered list formatting so that letters increment

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **168**　　*SC* **168.7.1**　　　　*P* **72**　　*L* **11**　　# 16

Maguire, Valerie　　　　　Copperopolis

Comment Type **E**　　*Comment Status* **D**　　　　　　　　　*EZ*

Equations should be indented, left justified (not centered)

SuggestedRemedy

Fix justification of equations (168-3), (168-4), (168-5), (168-6), and (168-7)

Proposed Response　　　*Response Status* **W**

PROPOSED 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 Z/withdrawn
SORT ORDER: Comment ID

Comment ID **16**　　Page 3 of 21
1/18/2024 12:03:39 PM

Cl **148**   *SC* **148.4.7.2**   *P* **38**   *L* **45**   # 17

Maguire, Valerie   Copperopolis

Comment Type **E**   *Comment Status* **D**   *EZ*

Description of Variable should end with a "."

SuggestedRemedy

Replace, "Counter of BEACON cycles for the short aging time (SOFT claims)" with "Counter of BEACON cycles for the short aging time (SOFT claims)." Check for this formatting error in all other document Variable entries.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **FM**   *SC* **FM**   *P* **8**   *L* **12**   # 18

Jones, Chad   Cisco Systems

Comment Type **E**   *Comment Status* **D**   *EZ*

"0MB/s single pair…"
while the power portion might be 0Mbps, this is the 10Mbps project.

SuggestedRemedy

add a 1 in front of the 0 in three spots.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **148**   *SC* **148.4.4.2**   *P* **30**   *L* **43**   # 19

Jones, Chad   Cisco Systems

Comment Type **E**   *Comment Status* **D**   *DPLCA*

formatting makes this text hard to parse. Lets be kind to the reader and improve it. It looks like it may have been bulletized when imported and the conversion was clunky. Also, there are three options and we only describe two. As we don't describe NONE, it's not clear what the difference is between SOFT and NONE.

SuggestedRemedy

Change paragraph to:
Notifies the D-PLCA state diagrams whether the transmit opportunity indicated by dplca_txop_id was claimed by a node. Additionally, it specifies the type of claim:
- SOFT, meaning that a packet not including a COMMIT indication was received. SOFT claims may be
issued implicitly by nodes not supporting D-PLCA.
- HARD, meaning that a packet including a COMMIT indication was received. HARD claims may be issued by D-PLCA enabled nodes,
and occasionally by statically configured PLCA enabled nodes.
- NONE, (not sure what we write here as it's not clear what the difference is between SOFT and NONE)
Values: NONE, SOFT, or HARD

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Commenter's solution is good (formatting), TFTD the meaning of "NONE" and whether to delete it.

Cl **168**   *SC* **168.1**   *P* **46**   *L* **9**   # 20

Jones, Chad   Cisco Systems

Comment Type **T**   *Comment Status* **D**   *AutoNeg*

Line 9 states that autoneg is not available, NOTE 2 on line 37 states that it is optional. Which is it, not available or optional?

SuggestedRemedy

Assuming the text is correct that the NOTE is a copy/paste error, delete NOTE 2 on line 37. also, does this mean we delete AN on line 37 and the AN box on line 29?

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Accomodated by comment 62.

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 Z/withdrawn
SORT ORDER: Comment ID

Comment ID **20**   Page 4 of 21
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Cl **168**　　*SC* **168.2.3**　　　　*P* **49**　　　*L* **13**　　　# 21

Jones, Chad　　　　　　　　　　Cisco Systems

Comment Type **E**　　*Comment Status* **D**　　　　　　　*EZ*

first appearance of DME in our doc, and we don't define it. Actually, I don't find it anywhere in our doc. I assume it stands for Differential Manchester Encoding, but that's not confirmed in the draft. Therefore, add confirmation.

SuggestedRemedy

change to: Differential Manchester Encoding (DME)

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **168**　　*SC* **168.3.2.1**　　*P* **51**　　　*L* **2**　　　# 22

Jones, Chad　　　　　　　　　　Cisco Systems

Comment Type **E**　　*Comment Status* **D**　　　　　*Editorial*

SSD stands for something? Also on line 6, ESD too? I was unable to locate what these stand for.

SuggestedRemedy

help the reader and provide the full text before using the abbreviation. Could put this in 168.3.2.5.

Proposed Response　　　*Response Status* **W**

PROPOSED REJECT.
This document is part of IEEE Std 802.3-2022, and those terms are widely used prior to this clause.
SSD is Start of Stream Delimiter and ESD is End of Stream Delimiter. See clause 1 (1.4.304, 1.4.542, and abbreviations at 1.5)

Cl **168**　　*SC* **168.3.7**　　　*P* **63**　　　*L* **12**　　　# 23

Jones, Chad　　　　　　　　　　Cisco Systems

Comment Type **E**　　*Comment Status* **D**　　　　　　　*EZ*

note says to delete HB from table and state diagrams. Searching the PDF yields no returns for "HB". Therfore,this note can be deleted.

SuggestedRemedy

delete the note

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **168**　　*SC* **168.4.2**　　　*P* **64**　　　*L* **30**　　　# 24

Jones, Chad　　　　　　　　　　Cisco Systems

Comment Type **E**　　*Comment Status* **D**　　　　　　　*EZ*

extra period at the end of the sentence. Delete it.

SuggestedRemedy

delete the extra period.

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **168**　　*SC* **168.5.2**　　　*P* **66**　　　*L* **29**　　　# 25

Jones, Chad　　　　　　　　　　Cisco Systems

Comment Type **E**　　*Comment Status* **D**　　　　　　　*EZ*

missing comma: "If MDIO is not implemented a similar functionality shall be provided by equivalent means "

SuggestedRemedy

change to: "If MDIO is not implemented, a similar functionality shall be provided by equivalent means."

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **168**　　*SC* **168.5.3**　　　*P* **67**　　　*L* **36**　　　# 26

Jones, Chad　　　　　　　　　　Cisco Systems

Comment Type **T**　　*Comment Status* **D**　　　　　*Test modes*

"To allow an easy synchronization of the measurement equipment, the PHY shall provide access to
TX_CLK." - this is an untestable shall. We specify at the connector interface, it's impossible to know that you've complied with this shall at the connector.

SuggestedRemedy

change to: "To allow an easy synchronization of the measurement equipment, it is recommended that the PHY provide access to
TX_CLK."

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.
(FYI, this same text shows up all over IEEE Std 802.3-2022, maintenance?)

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 Z/withdrawn
SORT ORDER: Comment ID

Comment ID **26**　　Page 5 of 21
1/18/2024 12:03:39 PM

Cl **168**　　*SC* **168.5.4.2**　　　　　*P* **68**　　　*L* **12**　　　# 27

Jones, Chad　　　　　　　　　　Cisco Systems

Comment Type **E**　　*Comment Status* **D**　　　　　　　*EZ*

we've labeled the droop as Vd in the figure but make no mention of this in the text.

SuggestedRemedy

Change: "...the initial peak, depicted by Figure 168–14, shall be less than…"
to: "...the initial peak, depicted as Vd in Figure 168–14, shall be less than…"

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **168**　　*SC* **168.5.4.4**　　　　　*P* **68**　　　*L* **40**　　　# 28

Jones, Chad　　　　　　　　　　Cisco Systems

Comment Type **E**　　*Comment Status* **D**　　　　　　　*Editorial*

The flow of these two paragraphs is off, I recommend we swap the order.

SuggestedRemedy

change section to:
The upper and lower limits OF THE TRANSMITTER POWER SPECTRAL DENSITY (PSD)
are given in Equation (168–1) and Equation (168–2), and shown in Figure 168–15.
When measured using test mode 3 and the test fixture shown in Figure 168–13, or
equivalent, the transmitter Power Spectral Density (PSD) shall be between the upper and
lower masks specified in Equation (168–1)
and Equation (168–2).

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **168**　　*SC* **168.5.4.5**　　　　　*P* **69**　　　*L* **44**　　　# 29

Jones, Chad　　　　　　　　　　Cisco Systems

Comment Type **E**　　*Comment Status* **D**　　　　　　　*Editorial*

another problem with flow in the doc. We are referencing TC3 and we haven't introduced
the concept yet as it happens a couple of pages later. Absent a way to reorder the text
such that things get introduced before we use them, we have to give a pointer for the
reader.

SuggestedRemedy

after TC3 on line 44 add: "(See figure 168-17)"

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **168**　　*SC* **168.5.6**　　　　　*P* **70**　　　*L* **40**　　　# 30

Jones, Chad　　　　　　　　　　Cisco Systems

Comment Type **E**　　*Comment Status* **D**　　　　　　　*Editorial*

this sentence is awkward. I think it needs to be broken into two sentences.

SuggestedRemedy

Change to: "The PMA and PCS Receive functions shall pass to the MII RX the data
decoded from the signal.This data is normally received during a transmission for the
purpose of detecting collisions."

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
(a little more clarity in the first sentence)

Change "The PMA and PCS Receive functions shall pass to the MII RX the data decoded
from the signal which is
normally received during a transmission for the purpose of detecting collisions."

to:"The PMA and PCS Receive functions shall pass the data decoded from the signal to
the MII RX. This data is normally received during a transmission for the purpose of
detecting collisions."

Cl **168**　　*SC* **168.7**　　　　　*P* **71**　　　*L* **5**　　　# 31

Jones, Chad　　　　　　　　　　Cisco Systems

Comment Type **E**　　*Comment Status* **D**　　　　　　　*Editorial*

Flow problem. TCI is used before being introduced.

SuggestedRemedy

replace "TCI" with "Trunk Connection Interface (TCI, see 168.8)"

Proposed Response　　*Response Status* **W**

PROPOSED REJECT.
TCI is introduced and defined in the first paragraph of clause 168. (page 45 line 40)

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 Z/withdrawn
SORT ORDER: Comment ID

Comment ID **31**　　　Page 6 of 21
1/18/2024 12:03:39 PM

Cl **168**   *SC* **168.7**   *P* **71**   *L* **16**   # 32

Jones, Chad   Cisco Systems

Comment Type **E**   *Comment Status* **D**   *TCI*

this paragraph is redundant to 168.8. delete

SuggestedRemedy

delete the paragraph. If not deleted, take out the extra spaces after TCI on line 17.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
The text here has parts that are not in 168.8 (and are not appropriate for that). As such, cleanup is a little more complex, and 168.7 should discuss only what needs to be discussed for specification of the mixing segment, while 168.8 specifies those things that are related to the TCI. As such:

Delete "A TCI may be physically implemented… of a DTE to the trunk." at P71 line 17 (168.7)
Delete extra spaces after TCI on line 17.
Move sentence: "TCIs with compensation… service loop" at page 71 lines 18-19 (168.7)
to replace similar sentence at page 74 line 5 ("TCIs with compensation are expected to be matched to a particular PMA.") so that it reads "TCIs with compensation are expected to be matched to a particular PMA/DTE implementation, including any associated stub or service loop." (168.7 to 168.8)

Cl **168**   *SC* **168.7.1**   *P* **72**   *L* **13**   # 33

Jones, Chad   Cisco Systems

Comment Type **E**   *Comment Status* **D**   *EZ*

two extraneaous periods floating in the doc.

SuggestedRemedy

delete the two decimal points.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **168**   *SC* **168.8**   *P* **73**   *L* **22**   # 34

Jones, Chad   Cisco Systems

Comment Type **E**   *Comment Status* **D**   *TCI*

Need a TCI definition in 1.4.

SuggestedRemedy

TCI (Trunk Connection Interface): an MDI for shared transmission medium for single pair Ethernet.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **169**   *SC* **169.1.1**   *P* **85**   *L* **26**   # 35

Jones, Chad   Cisco Systems

Comment Type **E**   *Comment Status* **D**   *EZ*

"Compliant implementations of PD and PSE systems are defined as compatible…" this sentence is about MPSEs and MPDs. Add the Ms.

SuggestedRemedy

change to "Compliant implementations of MPD and MPSE systems are defined as compatible..."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **169**   *SC* **169.2**   *P* **86**   *L* **27**   # 36

Jones, Chad   Cisco Systems

Comment Type **T**   *Comment Status* **D**   *Power - TCI*

we never mention the allowed DC resistance of the stubs. Is this something we need ot specify?

SuggestedRemedy

add a specification for max DC resistance of the stub if needed.

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
TFTD
The stub is considered part of the DTE. The power entity interfaces at TC1 or TC2, beyond the stub. We MAY need to specify the DC resistance on the through-path of the TCI though…

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Comment ID* **36**   Page 7 of 21
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn   1/18/2024 12:03:39 PM
SORT ORDER: Comment ID

Cl **169** *SC* **169.3** *P* **86** *L* **37** # 37

Jones, Chad Cisco Systems

Comment Type **E** *Comment Status* **D** *Editorial*

Table 169-1 has a bunch of notes below referenced via superscript. Much easier to parse if these notes are in an "additional info" column in the table.

SuggestedRemedy

add an additional info column to table 169-1 and move the footnotes into this column.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **169** *SC* **169.3** *P* **87** *L* **7** # 38

Jones, Chad Cisco Systems

Comment Type **T** *Comment Status* **D** *Power levels*

footnote d: we say Pmpd(max) is the average allowed power draw, but I don't find that we bound the average. I can average 1W if I draw 100W for 10ms once a second. Surely, that's not compliant.

SuggestedRemedy

define the bounds and add them to the text. Then add (see 169.x to this note to point the reader there).

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
TFTD
Need an agreed value.

Cl **169** *SC* **169.4.3.4** *P* **90** *L* **6** # 39

Jones, Chad Cisco Systems

Comment Type **E** *Comment Status* **D** *EZ*

missing space after colon for mpd_type_discovered

SuggestedRemedy

add space after the colon.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **169** *SC* **169.4.6** *P* **94** *L* **27** # 40

Jones, Chad Cisco Systems

Comment Type **T** *Comment Status* **D** *Power levels*

DC MPS current is defined as 4A min and 9A max. this seems to be an error. I don't know what the numbers wer supposed to me (perhaps mA?), but we need to fix this.

SuggestedRemedy

find the right values and replace them in the table.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
TFTD to discuss - needs proposal

Cl **169** *SC* **169.4.8** *P* **94** *L* **44** # 41

Jones, Chad Cisco Systems

Comment Type **T** *Comment Status* **D** *Power - misc.*

"sliding window of TDB second width". The other PoE sections use a 1 second sliding window. Is this not also appropriate here?

SuggestedRemedy

replace "TBD" with "1"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **22** *SC* **22.1** *P* **20** *L* **5** # 42

Jones, Peter Cisco Systems

Comment Type **E** *Comment Status* **D** *EZ*

"Change the text" should become an editor's note

SuggestedRemedy

Convert to Editors note

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Replace editorial instruction of "Change the text" with Editor's Note (to be removed prior to WG Ballot): If changes are necessary to clause 22, they would go here"

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 Z/withdrawn
SORT ORDER: Comment ID

Comment ID **42** Page 8 of 21
1/18/2024 12:03:39 PM

Cl **30**   *SC* **30.16.1.1.12**   *P* **22**   *L* **41**   # 43

Jones, Peter   Cisco Systems

Comment Type **T**   *Comment Status* **D**   *DPLCA*

Editor's note says "Comments are encouraged to determine value if not set".
Set aDPLCAWaitBeaconTimer default value to the same value used for
"148.4.4.4 Timers invalid_beacon_timer
Timer used for BEACON validation. This timer is stopped any time rx_cmd = BEACON.
Duration: 4000 ns.
Tolerance: ± 400 ns."

SuggestedRemedy

Change the aDPLCAWaitBeaconTimer "BEHAVIOUR DEFINED AS:" text to
Controls the time the D-PLCA state diagram waits for a node to indicate BEACON as
defined by
the wait_beacon_timer in 148.4.7.4 specified in nano-seconds. The default value is 4000. "

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Cl **30**   *SC* **30.16.1.1.12**   *P* **22**   *L* **41**   # 44

Jones, Peter   Cisco Systems

Comment Type **T**   *Comment Status* **D**   *DPLCA*

Editor's note says "Comments are encouraged to determine value if not set, and whether it
is preserved across reset, including
loss of power."

SuggestedRemedy

Add "The value of this attribute is preserved across reset including loss of power." to the
end of the aDPLCAWaitBeaconTimer "BEHAVIOUR DEFINED AS:" text.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
(Discuss in TF - need at least to determine loss of power TO WHAT? DTE? All nodes on
mixing segment? Managing device?)

Cl **45**   *SC* **45**   *P* **24**   *L* **1**   # 45

Jones, Peter   Cisco Systems

Comment Type **E**   *Comment Status* **D**   *EZ*

It looks like clause 45 is all boilerplate.
Why include it? If it stays, add editors note?

SuggestedRemedy

Remove or convert to ediotor's note

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Insert Editor's Note (to be removed prior to WG Ballot): Contributions are needed to make
any necessary updates to clause 45 for the clause 168 PHY and clause 169 powering. Text
shown here is boilerplate for editor's use in creating new text as added.

Cl **78**   *SC* **78.1**   *P* **26**   *L* **6**   # 46

Jones, Peter   Cisco Systems

Comment Type **E**   *Comment Status* **X**   *EZ*

"Change the text" should become an editor's note

SuggestedRemedy

Convert to Editors note

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Replace editorial instruction of "Change the text" with Editor's Note (to be removed prior to
WG Ballot): If changes are necessary to clause 78, they would go here"

Cl **79**   *SC* **79.1**   *P* **27**   *L* **6**   # 47

Jones, Peter   Cisco Systems

Comment Type **E**   *Comment Status* **X**   *EZ*

"Change the text" should become an editor's note

SuggestedRemedy

Convert to Editors note

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Replace editorial instruction of "Change the text" with Editor's Note (to be removed prior to
WG Ballot): If changes are necessary to clause 79, they would go here"

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Comment ID* **47**   Page 9 of 21
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn   1/18/2024 12:03:39 PM
SORT ORDER: Comment ID

Cl **147**   *SC* **147.1**   *P* **29**   *L* **6**   # 48
Jones, Peter   Cisco Systems
Comment Type   **E**   *Comment Status* **X**   *EZ*
"Change the text" should become an editor's note

SuggestedRemedy
Convert to Editors note

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE.
Replace editorial instruction of "Change the text" with Editor's Note (to be removed prior to
WG Ballot): If changes are necessary to clause 147, they would go here"

Cl **148**   *SC* **148.4.4.6**   *P* **32**   *L* **1**   # 49
Jones, Peter   Cisco Systems
Comment Type   **E**   *Comment Status* **D**   *Editorial*
Page is blank.

SuggestedRemedy
remove black page.

Proposed Response   *Response Status* **W**
PROPOSED REJECT.
Page includes header for section containing state diagrams to be edited. Reformatting, if
necessary, to align with pagination of IEEE Std 802.3-2022 best occurs at late stages of
document production, as it will need to be redone should anything change…

Cl **148**   *SC* **148.4.4.6**   *P* **33**   *L* **24**   # 50
Jones, Peter   Cisco Systems
Comment Type   **TR**   *Comment Status* **D**   *EZ*
In the RESYNC state, the variable plca_txop_end should be dplca_txop_end.

SuggestedRemedy
Change plca_txop_end to dplca_txop_end

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT.

Cl **148**   *SC* **148.4.7.1**   *P* **38**   *L* **11**   # 51
Jones, Peter   Cisco Systems
Comment Type   **E**   *Comment Status* **D**   *EZ*
"over statically configured PLCA" does not read well.

SuggestedRemedy
Change "over statically configured PLCA" to "compared to statically configured PLCA"

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT.

Cl **148**   *SC* **148.4.7.1**   *P* **38**   *L* **15**   # 52
Jones, Peter   Cisco Systems
Comment Type   **E**   *Comment Status* **D**   *EZ*
Delete "at a later time" unneeded text at end of first sentence of paragraph.

SuggestedRemedy
Change
D-PLCA allows nodes to start with a possibly non-unique PLCA node ID and autonomously
select a unique node ID at a later time.
To
D-PLCA allows nodes to start with a possibly non-unique PLCA node ID and autonomously
select a unique node ID .

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT.

Cl **148**   *SC* **148.4.7.1**   *P* **38**   *L* **19**   # 53
Jones, Peter   Cisco Systems
Comment Type   **E**   *Comment Status* **D**   *EZ*
Typo

SuggestedRemedy
Change:
the current state of activity (transmit opportunities claims) of the nodes
To :
the current state of activity (transmit opportunity claims) of the nodes

Proposed Response   *Response Status* **W**
PROPOSED 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 Z/withdrawn
SORT ORDER: Comment ID   *Comment ID* **53**   Page 10 of 21
1/18/2024 12:03:39 PM

Cl **148**　　*SC* **148.4.7.1**　　　　*P* **38**　　*L* **21**　　　# 54

Jones, Peter　　　　　　　　　　Cisco Systems

Comment Type **E**　　*Comment Status* **D**　　　　　　　　*EZ*

Remove unneeded text.

SuggestedRemedy

Change:
the D-PLCA capable nodes eventually select IDs
To :
the D-PLCA capable nodes select IDs

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **148**　　*SC* **148.4.7.1**　　　　*P* **38**　　*L* **22**　　　# 55

Jones, Peter　　　　　　　　　　Cisco Systems

Comment Type **E**　　*Comment Status* **D**　　　　　　　*DPLCA*

Simplify language.

SuggestedRemedy

Change:
PHYs may detect collisions until every node eventually selects a unique ID.
To :
PHYs may detect collisions until the end of node ID selection.

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
(avoid the use of "may" which is reserved for "are permitted to", and correct meaning)
Change:
PHYs may detect collisions until every node eventually selects a unique ID.
To:
PHYs detect collisions which may occur until the every node selects a unique ID.

Cl **148**　　*SC* **148.4.7.1**　　　　*P* **38**　　*L* **29**　　　# 56

Jones, Peter　　　　　　　　　　Cisco Systems

Comment Type **T**　　*Comment Status* **D**　　　　　　　*DPLCA*

The text says " It is recommended to keep the value of HARD_AGING_CYCLES much greater than the value of SOFT_AGING_CYCLES". "much greater than" is not very specific. Maybe we add something in the definition of HARD_AGING_CYCLES to say it's expected to be at least (N x SOFT_AGING_CYCLES) (I'm not sure what N should be).

SuggestedRemedy

Clean up language to provide clear guidance.

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Worded to address comment, and remove the word "ensure", and to separate stability of the DPLCA algorithm from interoperability with static nodes. TFTD, particularly if we can provide more precise guidance on the relationship of the two values.

Replace: "It is recommended to
keep the value of HARD_AGING_CYCLES much greater than the value of
SOFT_AGING_CYCLES. This
condition ensures both stability and interoperability with statically configured PLCA nodes."
with

"The value of HARD_AGING_CYCLES should be sufficiently greater than the value of
SOFT_AGING_CYCLES to maintain stability of the DPLCA process as well as
interoperability with statically configured PLCA nodes."

Cl **148**　　*SC* **148.4.7.1**　　　　*P* **38**　　*L* **30**　　　# 57

Jones, Peter　　　　　　　　　　Cisco Systems

Comment Type **E**　　*Comment Status* **D**　　　　　　　*DPLCA*

I think we should move the last sentence of the paragraph (see below) to the definition of HARD_AGING_CYCLES in 148.4.7.2 Variables
This condition ensures both stability and interoperability with statically configured PLCA nodes.

SuggestedRemedy

Move the text

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Move the text, but align with rewording in the resolution of comment 56.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general　　　　*Comment ID* **57**　　　Page 11 of 21
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed Z/withdrawn　　　　　　　1/18/2024 12:03:39 PM
SORT ORDER: Comment ID

Cl **148**　　*SC* **148.4.7.2**　　　　*P* **39**　　*L* **51**　　# 58
Jones, Peter　　　　　　　　Cisco Systems
Comment Type　**E**　　*Comment Status* **D**　　　　　　*Editorial*
Why is HARD_AGING_CYCLES in all-caps? The other variables aren't. We normally use all-caps for constants.
SuggestedRemedy
Change variable name to match others.
Proposed Response　　*Response Status* **W**
PROPOSED ACCEPT.

Cl **148**　　*SC* **148.4.7.2**　　　　*P* **40**　　*L* **3**　　# 59
Jones, Peter　　　　　　　　Cisco Systems
Comment Type　**E**　　*Comment Status* **D**　　　　　　*Editorial*
Why is SOFT_AGING_CYCLES in all-caps? The other variables aren't. We normally use all-caps for constants.
SuggestedRemedy
Change variable name to match others.
Proposed Response　　*Response Status* **W**
PROPOSED ACCEPT.
(note - align with comment 58)

Cl **148**　　*SC* **148.5.3.7**　　　　*P* **44**　　*L* **20**　　# 60
Jones, Peter　　　　　　　　Cisco Systems
Comment Type　**TR**　　*Comment Status* **D**　　　　　　*EZ*
Both DP1 and DP2 are mandatory if DPLCA is supported.
SuggestedRemedy
For both DP1 and DP2.
Change:
O:DP
To :
DP:M
Proposed Response　　*Response Status* **W**
PROPOSED ACCEPT.

Cl **168**　　*SC* **168**　　　　*P* **45**　　*L* **52**　　# 61
Jones, Peter　　　　　　　　Cisco Systems
Comment Type　**TR**　　*Comment Status* **D**　　　　*Mixing Segment*
The text says "the mixing segment is compliant with 147.8.". I think it should be 168.7.
SuggestedRemedy
Change:
the mixing segment is compliant with 147.8.
To :
the mixing segment is compliant with 168.7.
Proposed Response　　*Response Status* **W**
PROPOSED REJECT.
This statement refers to the condition under which a clause 168 PHY is expected to work with a clause 147 PHY. Therefore, the requirements are those under which a clause 147 PHY is expected to work (which are expected to be a subset of the 168 mixing segment requirements).

Cl **168**　　*SC* **168.1**　　　　*P* **46**　　*L* **28**　　# 62
Jones, Peter　　　　　　　　Cisco Systems
Comment Type　**T**　　*Comment Status* **D**　　　　　　*AutoNeg*
AN is not supported for 10BASE-T1M
SuggestedRemedy
Remove AN from Figure 168–1 figure and delete "NOTE 2—Auto-Negotiation is optional"
Proposed Response　　*Response Status* **W**
PROPOSED ACCEPT.

Cl **168**　　*SC* **168.1.1**　　　　*P* **46**　　*L* **43**　　# 63
Jones, Peter　　　　　　　　Cisco Systems
Comment Type　**T**　　*Comment Status* **D**　　　　　　*Editorial*
Cause 147 has "147.1.1 Relationship of 10BASE-T1S to other standards" and "147.1.2 Operation of 10BASE-T1S" before the "Conventions" subclause.
 Seems like we should have similar subclauses.
SuggestedRemedy
Need someone to write "Relationship" and "Operation" subclauses.
Proposed Response　　*Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE.
(Relationship subclause exists)
Insert Editor's note (to be removed prior to WG ballot), "Comments are encouraged for short description of the operation of 10BASE-T1M. Commenters are discouraged from explicitly describing applications, node counts, and lengths, as these cause confusion with the actual specifications."

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 Z/withdrawn
SORT ORDER: Comment ID

Comment ID **63**　　　Page 12 of 21
1/18/2024 12:03:39 PM

Cl **168**   *SC* **168.2.1.3**   *P* **48**   *L* **32**   # 64

Jones, Peter   Cisco Systems

Comment Type   **T**   *Comment Status* **D**   *Editorial*

In 36.3.1.2.3 & 51.2.2.3 it says "The effect of receipt of this primitive by the client is unspecified by the PMA sublayer." which makes more sense. It's defined somewhere.

SuggestedRemedy

Change:
"The effect of receipt of this primitive by the client is unspecified."
To :
"The effect of receipt of this primitive by the client is unspecified by the PMA sublayer."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
(the PMA wouldn't specify what the PCS does with a primitive that the PMA sends out - it is specified in the PCS receive section. See Clause 101 as an example - FYI, this language shows up in many clauses and is wrong - a (number of) maintenance request(s) should be considered.)

Change to:

The effect of receipt of this primitive is specified in 168.3.3

Cl **168**   *SC* **168.3.1**   *P* **50**   *L* **22**   # 65

Jones, Peter   Cisco Systems

Comment Type   **E**   *Comment Status* **D**   *EZ*

In Figure 168–3—PCS reference diagram, there is a floating dot to the left of "COLLISION DETECTION".

SuggestedRemedy

Remove the dot.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **168**   *SC* **168.3.2.9**   *P* **57**   *L* **34**   # 66

Jones, Peter   Cisco Systems

Comment Type   **E**   *Comment Status* **D**   *Editorial*

In the sentence
"During the descrambler locking time, the special value 5 is conveyed to the MII via the RXD variable in order to rebuild the original preamble transmitted by the MAC.", why don't we use a named & defined constant with a value of 5 rather than using the numeral directly?

SuggestedRemedy

Add a constant for this and update text accordingly.

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
Text is clear as is. Adding a constant just requires the user to go look up the value.

Cl **168**   *SC* **168.3.3.3**   *P* **58**   *L* **24**   # 67

Jones, Peter   Cisco Systems

Comment Type   **E**   *Comment Status* **D**   *EZ*

Aren't constants supported to be upper case?

SuggestedRemedy

Change:
fc_supported
To :
FC_SUPPORTED

Proposed Response   *Response Status* **W**

PROPOSED 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 Z/withdrawn
SORT ORDER: Comment ID

Comment ID **67**   Page 13 of 21
1/18/2024 12:03:39 PM

Cl **168** *SC* **168.3.4** *P* **62** *L* **34** # 68

Jones, Peter Cisco Systems

Comment Type **TR** *Comment Status* **D** *Management*

45.2.3.1.2 Loopback (3.0.14) doesn't include behavior definitions for 10BASE-T1L/T1L/T1M. For all these PHYs I think it should match the first case defined for "100BASE-T1, any MultiGBASE-T, or the 5/10GBASE-R".

SuggestedRemedy

Change:
When bit 3.0.14 is set to a one, the 100BASE-T1, 5/10GBASE-R, or any PCS in the MultiGBASE-T set shall accept data on the transmit path and return it on the receive path.
To :
When bit 3.0.14 is set to a one, the 10BASE-T1S, 10BASE-T1L, 10BASE-T1M, 100BASE-T1, 5/10GBASE-R, or any PCS in the MultiGBASE-T set shall accept data on the transmit path and return it on the receive path.
OR:
When bit 3.0.14 is set to a one, the 100BASE-T1, 5/10GBASE-R, or any PCS in the MultiGBASE-T or 10BASE-T set shall accept data on the transmit path and return it on the receive path.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
802.3da can't add the other projects - a maintenance request is suggested.

Add 45.2.3.1.2 to the draft, and change:
When bit 3.0.14 is set to a one, the 100BASE-T1, 5/10GBASE-R, or any PCS in the MultiGBASE-T set shall accept data on the transmit path and return it on the receive path.
To:
When bit 3.0.14 is set to a one, the 10BASE-T1M, 100BASE-T1, 5/10GBASE-R, or any PCS in the MultiGBASE-T set shall accept data on the transmit path and return it on the receive path.

Cl **168** *SC* **168.4** *P* **63** *L* **22** # 69

Jones, Peter Cisco Systems

Comment Type **E** *Comment Status* **D** *Editorial*

In "Figure 168–10—PMA functional block diagram", there is lots of open space where the "LINK MONITOR" was deleted.

SuggestedRemedy

Adjust the figure.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **168** *SC* **168.5.2** *P* **66** *L* **48** # 70

Jones, Peter Cisco Systems

Comment Type **T** *Comment Status* **D** *Test modes*

Is this paragraph also affected by question raised in the editor's note in 168.4.2?
"This specification either needs to be changed to reflect maintaining the TCI RL specification approach …"

SuggestedRemedy

If yes, then add or update editor's note.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
TFTD. Whether this needs to be updated depends on whether we add a minimum impedance or we describe the TCI RL.

Cl **168** *SC* **168.8.1.2** *P* **74** *L* **39** # 71

Jones, Peter Cisco Systems

Comment Type **T** *Comment Status* **D** *EZ*

Given we have the following text in the intro, why can't we just delete this note.
"The TCI is an MDI for the shared transmission media".

SuggestedRemedy

Delete the note.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **168** *SC* **168.11.3** *P* **78** *L* **8** # 72

Jones, Peter Cisco Systems

Comment Type **TR** *Comment Status* **D** *PICS*

INS-P2P is not relevant to 10BASE-T1M.

SuggestedRemedy

Remove INS-P2P.

Proposed Response *Response Status* **W**

PROPOSED REJECT.
For the time being, we do not know whether there will be installation requirements. Suggest the commenter reconsider this comment on initial WG ballot, when the draft should be technically complete.

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 Z/withdrawn
SORT ORDER: Comment ID

Comment ID **72** Page 14 of 21
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Cl **168**　　*SC* **168.11.4.1**　　　　*P* **78**　　*L* **40**　　# 73

Jones, Peter　　　　　　　　　　Cisco Systems

Comment Type **T**　　*Comment Status* **D**　　　　　　*Editorial*
Consistency/readability

SuggestedRemedy
Replace PCST4 Value/Comment formula with a link to 168.3.2.8 to match PCSR3.

Proposed Response　　*Response Status* **W**
PROPOSED ACCEPT.

Cl **169**　　*SC* **169.1**　　　　*P* **85**　　*L* **8**　　# 74

Jones, Peter　　　　　　　　　　Cisco Systems

Comment Type **E**　　*Comment Status* **D**　　　　　　*Editorial*
The text says "for use with supported single pair Ethernet Physical Layers.".
Where do we state what they are? Should we list the supported PHYs?

SuggestedRemedy
Change:
for use with supported single pair Ethernet Physical Layers.
To :
for use with the 10BASE-T1M Physical Layer.

Proposed Response　　*Response Status* **W**
PROPOSED ACCEPT.

Cl **169**　　*SC* **169.1**　　　　*P* **85**　　*L* **13**　　# 75

Jones, Peter　　　　　　　　　　Cisco Systems

Comment Type **E**　　*Comment Status* **D**　　　　　　*Editorial*
Consistency/readability

SuggestedRemedy
Change:
The characteristics of a power source to add power to the cabling system.
To :
The characteristics of an MPSE to add power to the cabling system.

Proposed Response　　*Response Status* **W**
PROPOSED ACCEPT.

Cl **169**　　*SC* **169.1**　　　　*P* **85**　　*L* **16**　　# 76

Jones, Peter　　　　　　　　　　Cisco Systems

Comment Type **TR**　　*Comment Status* **D**　　　　　　*Editorial*
Text says "an MPD" where it should be "one or more MPDs"

SuggestedRemedy
Change:
an MPD
To :
one or more MPDs

Proposed Response　　*Response Status* **W**
PROPOSED ACCEPT.

Cl **169**　　*SC* **169.1.2**　　　　*P* **85**　　*L* **34**　　# 77

Jones, Peter　　　　　　　　　　Cisco Systems

Comment Type **T**　　*Comment Status* **D**　　　　　　*Editorial*
Compared to PoDL, this sub-clause is missing some of the "non-data" and "OSI reference model" discussion compared to 104.1.2, and the related figures 104-1 and 102-2? Should these be added?

SuggestedRemedy
Need new text submitted

Proposed Response　　*Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE.
Need contribution with text. TFTD

Cl **169**　　*SC* **169.3**　　　　*P* **86**　　*L* **40**　　# 78

Jones, Peter　　　　　　　　　　Cisco Systems

Comment Type **E**　　*Comment Status* **D**　　　　　　*Editorial*
Comparing Table 169–1 to Table 104–1, Table 104-1 uses "regulated" and "unregulated" where Table 169–1 uses "Nominal" and "Max". Why are these different?

SuggestedRemedy
Harmonize Table 169–1 and Table 104–1.

Proposed Response　　*Response Status* **W**
PROPOSED REJECT.
Suggest we make Table 169-1 as good as we can rather than forcing it to look like clause 104. The nomenclature in 169-1 is clearer.

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 Z/withdrawn
SORT ORDER: Comment ID

Comment ID **78**　　Page 15 of 21
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Cl **169**   *SC* **169.3**   *P* **86**   *L* **44**   # 79

Jones, Peter   Cisco Systems

Comment Type **T**   *Comment Status* **D**   *Voltage classes*

Comparing Table 169–1 to Table 104–1,, Table 104-1 has the max voltage for the 24 V regulated PSE (class 6&7) as 36V, why are we only at 30V (class 10/11/12?

SuggestedRemedy

Consider changing 30V to 36V.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
TFTD

Cl **169**   *SC* **169.4**   *P* **87**   *L* **20**   # 80

Jones, Peter   Cisco Systems

Comment Type **E**   *Comment Status* **D**   *State diagrams*

The text says "To remove power when no longer requested or required, returning to the idle state.", but I don't see how the MPD determines the difference between requested or required.

SuggestedRemedy

Change:
"To remove power when no longer requested or required, returning to the idle state."
To :
"To remove power when no longer required, returning to the idle state."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **169**   *SC* **169.4.3.4**   *P* **89**   *L* **42**   # 81

Jones, Peter   Cisco Systems

Comment Type **E**   *Comment Status* **D**   *EZ*

Typo - double colon.

SuggestedRemedy

Change:
open_circuit::The MPSE has detected an open circuit
To :
open_circuit:The MPSE has detected an open circuit

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **169**   *SC* **169.4.3.4**   *P* **89**   *L* **53**   # 82

Jones, Peter   Cisco Systems

Comment Type **E**   *Comment Status* **D**   *EZ*

Formatting error "Discovery" should be a subscript.
Fix formatting

SuggestedRemedy

Formatting error "Discovery" should be a subscript.
Fix formatting

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **169**   *SC* **169.4.4**   *P* **92**   *L* **38**   # 83

Jones, Peter   Cisco Systems

Comment Type **T**   *Comment Status* **D**   *State diagrams*

The text says "the MPSE shall remove full operating voltage in response to a command from the management entity.".
Which variable is used for this? Is it mpse_enable?

SuggestedRemedy

Change:
"the MPSE shall remove full operating voltage in response to a command from the management entity.".
To :
"the MPSE shall remove full operating voltage in response to a command from the management entity that results in mpse_enable being set to disable."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.
TFTD

Cl **169**   *SC* **169.4.5**   *P* **92**   *L* **53**   # 84

Jones, Peter   Cisco Systems

Comment Type **E**   *Comment Status* **D**   *Editorial*

Consistency/readability

SuggestedRemedy

Change:
An MPSE may successfully discover but then opt not to power the link.
To :
An MPSE may successfully complete discovery but then opt not to power the link.

Proposed Response   *Response Status* **W**

PROPOSED 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 Z/withdrawn
SORT ORDER: Comment ID

Comment ID **84**   Page 16 of 21
1/18/2024 12:03:40 PM

Cl **169**　　*SC* **169.4.10**　　　　*P* **95**　　*L* **4**　　# 85

Jones, Peter　　　　　　　　　　Cisco Systems

Comment Type **E**　　*Comment Status* **D**　　　　　　　　　*EZ*

Typo, PD should be MPD.

SuggestedRemedy

Change:
in the absence of the PD MPS,
To :
in the absence of the MPD MPS,

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **169**　　*SC* **169**　　　　　　*P* **86**　　*L* **51**　　# 86

Chauve, Vincent　　　　　　　　Schneider Electric

Comment Type **TR**　　*Comment Status* **D**　　　　　*Power levels*

1W to low for or application See V.CHAUVE Presentation

SuggestedRemedy

change Pmdp(max) from 1W to 16W for type 0

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
TFTD with contribution

Cl **169**　　*SC* **169**　　　　　　*P* **86**　　*L* **51**　　# 87

Chauve, Vincent　　　　　　　　Schneider Electric

Comment Type **TR**　　*Comment Status* **D**　　　　　*Power levels*

1W to low for or application See V.CHAUVE Presentation

SuggestedRemedy

change Pmdp(max) from 2W to 32W for type 1

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
TFTD with contribution

Cl **169**　　*SC* **169**　　　　　　*P* **101**　　*L* **16**　　# 88

Chauve, Vincent　　　　　　　　Schneider Electric

Comment Type **TR**　　*Comment Status* **D**　　　　　*Power levels*

1W to low for or application See V.CHAUVE Presentation

SuggestedRemedy

change Pmdp(max) from 1W to 16W for type 0

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
TFTD with contribution

Cl **169**　　*SC* **169**　　　　　　*P* **101**　　*L* **17**　　# 89

Chauve, Vincent　　　　　　　　Schneider Electric

Comment Type **TR**　　*Comment Status* **D**　　　　　*Power levels*

1W to low for or application See V.CHAUVE Presentation

SuggestedRemedy

change Pmdp(max) from 2W to 32W for type 1

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
TFTD with contribution

Cl **169**　　*SC* **169.1**　　　　*P* **85**　　*L* **5**　　# 90

Paul, Michael　　　　　　　　　Analog Devices

Comment Type **E**　　*Comment Status* **D**　　　　　　　*Editorial*

The first sentence says that the MPSE and MPDs are optional. When I wrote that, I meant 'optional' in terms of 802.3da defining a standard where power is an option. MPSEs and MPDs are not optional for Clause 169.

SuggestedRemedy

Strike the word optional from the sentence.

Proposed Response　　　*Response Status* **W**

PROPOSED 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 Z/withdrawn
SORT ORDER: Comment ID

Comment ID **90**　　　Page 17 of 21
1/18/2024 12:03:40 PM

Cl **169**　　*SC* **169.1.1**　　　　*P* **85**　　　*L* **27**　　　# 91

Paul, Michael　　　　　　　　　　Analog Devices

Comment Type **E**　　　*Comment Status* **D**　　　　　　　　　*EZ*

"PD and PSE" should be "MPD and MPSE"

SuggestedRemedy

Fix typo

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT. (see comment 35)

Cl **169**　　*SC* **169.1.1**　　　　*P* **85**　　　*L* **29**　　　# 92

Paul, Michael　　　　　　　　　　Analog Devices

Comment Type **E**　　　*Comment Status* **D**　　　　　　　　　*EZ*

"PD and PSE" should be "MPD and MPSE"

SuggestedRemedy

Fix typo

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT. (see comment 35)

Cl **169**　　*SC* **169.1.2**　　　　*P* **85**　　　*L* **38**　　　# 93

Paul, Michael　　　　　　　　　　Analog Devices

Comment Type **E**　　　*Comment Status* **D**　　　　　*Power - TCI*

TC3 is probably not the right place to specify compliance and may not even be accessable in final products. I think we need to stick to TC1 and TC2 as the interface specification points.

SuggestedRemedy

For now change the sentence From: "Compliance is specified on each pairset at the TC3 interface" to: "Compliance is specified at the trunk connection interfaces (see Figure 169-1)."

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **169**　　*SC* **169.1.2**　　　　*P* **86**　　　*L* **1**　　　# 94

Paul, Michael　　　　　　　　　　Analog Devices

Comment Type **E**　　　*Comment Status* **D**　　　　　　　*Editorial*

This line should be removed. "MPSEs and MPDs are compatible with 10BASE-T1M PHYs (see Clause 168)." The first sentence in subclause 169.1.2 says "MPoE is an optional power entity to be used in conjunction with supported single pair Ethernet Physical Layers." - which allows compliance with future single pair standards. I don't think clause 168 needs to be specifically addressed at the end of this subclause and I don't think we want to edit this text every time a new clause is compatible with clause 169.

SuggestedRemedy

Remove this sentence: "MPSEs and MPDs are compatible with 10BASE-T1M PHYs (see Clause 168)."

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.
See comment 74 - we need to say which PHYs are compatible in one place. Right now we only have one. When we add the second, we can consider a table or other simple means.

Cl **169**　　*SC* **169.1.2**　　　　*P* **86**　　　*L* **3**　　　# 95

Paul, Michael　　　　　　　　　　Analog Devices

Comment Type **T**　　　*Comment Status* **D**　　　　　　　*Editorial*

This picture is not a good representation of the system interfaces as we have discussed several times in the task force. We need to update it.

SuggestedRemedy

Change to a new picture. I don't have a solution today but we need presentations and to keep this as an item on the future work list.

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
TFTD - need contributions with a new figure. (hand drawn is OK for now, but the editor needs something to work with)

Cl **169**　　*SC* **169.3**　　　　*P* **86**　　　*L* **39**　　　# 96

Paul, Michael　　　　　　　　　　Analog Devices

Comment Type **E**　　　*Comment Status* **D**　　　　　*Voltage classes*

24V nominal MPSE is an odd label because 24V is below VMPSE(min) for system type 0.

SuggestedRemedy

Change label to "30V Nominal MPSE"

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Incorporate commenters remedy & do a global check for 24V nominal MPSE

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 Z/withdrawn
SORT ORDER: Comment ID

Comment ID **96**　　　Page 18 of 21
1/18/2024 12:03:40 PM

Cl **169**   *SC* **169.3**   *P* **87**   *L* **2**   # 97

Paul, Michael   Analog Devices

Comment Type **E**   *Comment Status* **D**   *Power - TCI*

Try to remove references to TC3

SuggestedRemedy

Change "TC3 Interface" to "TCI"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **169**   *SC* **169.3**   *P* **87**   *L* **6**   # 98

Paul, Michael   Analog Devices

Comment Type **E**   *Comment Status* **D**   *Power - TCI*

Try to remove references to TC3

SuggestedRemedy

Change "TC3" to "TCI"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **169**   *SC* **169.3**   *P* **87**   *L* **8**   # 99

Paul, Michael   Analog Devices

Comment Type **E**   *Comment Status* **D**   *Power - TCI*

Try to remove references to TC3

SuggestedRemedy

Change "TC3" to "TCI"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **169**   *SC* **169.4**   *P* **87**   *L* **14-20**   # 100

Paul, Michael   Analog Devices

Comment Type **E**   *Comment Status* **D**   *EZ*

The list labes are all "a)"

SuggestedRemedy

Enumerate the list properly

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **169**   *SC* **169.4**   *P* **87**   *L* **15**   # 101

Paul, Michael   Analog Devices

Comment Type **E**   *Comment Status* **D**   *Power levels*

This text was coplied from point to point system.

SuggestedRemedy

Change from: "To supply power to an MPD through the mixing segment." to: "To supply power to at least 16 MPD unit loads through the mixing segment."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
TFTD - need to discuss whether 16 MPD unit loads becomes the requirement, as this seems to imply.

Cl **169**   *SC* **169.4**   *P* **87**   *L* **22**   # 102

Paul, Michael   Analog Devices

Comment Type **E**   *Comment Status* **D**   *Power - TCI*

Try to remove references to TC3

SuggestedRemedy

Change from "…as seen at the TC3 Interface" to "…as seen at the MPSE Trunk Connection Interface (TCI)"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **169**   *SC* **169.4.3.2**   *P* **88**   *L* **27**   # 103

Paul, Michael   Analog Devices

Comment Type **E**   *Comment Status* **D**   *EZ*

"equal to or greater" should be "less than"

SuggestedRemedy

change from: "equal to or greater" to "less than"

Proposed Response   *Response Status* **W**

PROPOSED 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 Z/withdrawn
SORT ORDER: Comment ID

Comment ID **103**   Page 19 of 21
1/18/2024 12:03:40 PM

Cl **169**　　　*SC* **169.5**　　　　　　*P* **95**　　　*L* **28**　　　# 104

Paul, Michael　　　　　　　　　　Analog Devices

Comment Type **E**　　*Comment Status* **D**　　　　　*Power - TCI*

Try to remove references to TC3

SuggestedRemedy

change from: "specified at the TC3 interface." to: "specified at the MPD Trunk Connection Interfaces."

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **169**　　　*SC* **169.5.3.2**　　　　*P* **96**　　　*L* **17**　　　# 105

Paul, Michael　　　　　　　　　　Analog Devices

Comment Type **E**　　*Comment Status* **D**　　　　　*EZ*

Subscripts are missing from all constants in this subclause

SuggestedRemedy

Subscript all text in the constant names after the first character.

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **169**　　　*SC* **169.5.5**　　　　　*P* **101**　　　*L* **5**　　　# 106

Paul, Michael　　　　　　　　　　Analog Devices

Comment Type **E**　　*Comment Status* **D**　　　　　*Power - TCI*

Try to remove references to TC3

SuggestedRemedy

change "TC3" to from the "MPD Trunk Connection Interface."

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **169**　　　*SC* **169.5.5.1**　　　　*P* **101**　　　*L* **42**　　　# 107

Paul, Michael　　　　　　　　　　Analog Devices

Comment Type **E**　　*Comment Status* **D**　　　　　*Power - TCI*

Try to remove references to TC3

SuggestedRemedy

change "TC3" to "the TCI"

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **169**　　　*SC* **169.5.5.1**　　　　*P* **101**　　　*L* **45**　　　# 108

Paul, Michael　　　　　　　　　　Analog Devices

Comment Type **E**　　*Comment Status* **D**　　　　　*Power - TCI*

Try to remove references to TC3

SuggestedRemedy

change "TC3" to "TCI"

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **168**　　　*SC* **168.7**　　　　　*P* **71**　　　*L* **26**　　　# 109

Fischer, Peter　　　　　　　　　　BKS Kabel-Service AG

Comment Type **T**　　*Comment Status* **D**　　　　　*Mixing Segment*

Length should be specified according to the goal.

SuggestedRemedy

Change TBD to 50

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
TFTD.
Suggest leave this as TBD until the mixing segment is done and validated.

Cl **168**　　　*SC* **168.7**　　　　　*P* **71**　　　*L* **27**　　　# 110

Fischer, Peter　　　　　　　　　　BKS Kabel-Service AG

Comment Type **E**　　*Comment Status* **D**　　　　　*Mixing Segment*

The maximum length for the cable to the DTE has to be specified in terms of losses (IL, R) and delay.

SuggestedRemedy

Add after 'may attach':
The example stub comprises a maximum of TBD m of 1.02 mm (18 AWG) 100 Ω cabling, with a DTE attached.

Proposed Response　　　*Response Status* **W**

PROPOSED REJECT.
An example cannot have a maximum. The mixing segment is specified according to performance parameters. The addition of physical dimensions has often been confused with those dimensions being requirements.

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 Z/withdrawn
SORT ORDER: Comment ID

Comment ID **110**　　　Page 20 of 21
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CI **169** *SC* **169.1.2** *P* **86** *L* **46** # 111

Fischer, Peter   BKS Kabel-Service AG

Comment Type **T** *Comment Status* **D** *Power levels*

Add missing values to the table 169-1
(There might be a presentation during the interim)

SuggestedRemedy

Ipi@24V MPSE= 889 mA
Ipi@50V MPSE= 941 mA
Ptype@24V MPSE = 23 W
Ptype@50V MPSE = 42 W

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
TFTD - need presentation and discussion.

CI **00** *SC* *P* *L* # 112

NoName

Comment Type **E** *Comment Status* **X**

SuggestedRemedy

Proposed Response *Response Status* **O**

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Comment ID* **112**   Page 21 of 21
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn   1/18/2024 12:03:40 PM
SORT ORDER: Comment ID