

'802.3da D1.0 10 Mbps Single Pair Ethernet Multidrop Segment Enhancements 1st Task Force review cor

CI 168 SC 168 P45 L46 # 1
Schreiner, Stephan Rosenberger Hochfrequenztechnik GmbH & Co. KG
Comment Type T Comment Status A 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

Response Response Status C

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)," and break up into two sentences replacing the last sentence on P45 L45-49 with:

"The medium supporting the operation of the 10BASE-T1M PHY is defined in terms of performance requirements . This allows implementers to specify their own media to operate the 10BASE-T1M PHY as long as the normative requirements included in this clause are met."

CI 168 SC 168-10 P63 L20 # 2
Schreiner, Stephan Rosenberger Hochfrequenztechnik GmbH & Co. KG
Comment Type T Comment Status R 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

Response Response Status C

REJECT.

Figure 168-10 is a functional block diagram of the PMA. It does not show figures in the TCI, but is consistent with the fact that the PMA interfaces to the TCI with 2 wires.

CI 168 SC 168.4.2 b) P64 L29 # 3
Schreiner, Stephan Rosenberger Hochfrequenztechnik GmbH & Co. KG
Comment Type T Comment Status A 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 impedance 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"

Response Response Status C

ACCEPT IN PRINCIPLE.

(the impedance is presented across the pairs of the interface, in differential mode)

This is related to writing out TC3. The important thing is that when in receive mode the TCI meets the return loss requirements.

Suggest rewrite as:

Change "Present the minimum impedance described in 168.8.1 at the TCI" to "Meet the insertion loss specified from TC1 to TC2 in 168.8.1.1 and the return loss specified in 168.8.1.2 at TC1 and TC2."

CI 168 SC 168.5.2 P66 L30 # 4
Schreiner, Stephan Rosenberger Hochfrequenztechnik GmbH & Co. KG
Comment Type T Comment Status A 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.

Response Response Status C

ACCEPT IN PRINCIPLE.

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

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CI 168 SC 168.5.3 P67 L1 # 5

Schreiner, Stephan Rosenberger Hochfrequenztechnik GmbH & Co. KG

Comment Type T Comment Status A 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.

Response Response Status C

ACCEPT IN PRINCIPLE.

Redraw figures to show TCI with measurement taken at either TC 1 or TC2 and TC 2 or TC 1 terminated in 100 ohms.

CI 168 SC 168.5.4.2 P68 L10 # 6

Schreiner, Stephan Rosenberger Hochfrequenztechnik GmbH & Co. KG

Comment Type E Comment Status A EZ

"When tested using the test fixture"

SuggestedRemedy

"When tested using the test fixture"

Response Response Status C

ACCEPT.

CI 168 SC 168-16 P70 L19 # 7

Schreiner, Stephan Rosenberger Hochfrequenztechnik GmbH & Co. KG

Comment Type T Comment Status A 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.

Response Response Status C

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."

CI 168 SC 168.7.1 P72 L2 # 8

Schreiner, Stephan Rosenberger Hochfrequenztechnik GmbH & Co. KG

Comment Type T Comment Status A 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 determined using Equation (168-3) between the edge termination attachment points"

Response Response Status C

ACCEPT IN PRINCIPLE.

Replace "without any DTEs attached" in first sentence of 2nd para of 168.7.1 (P72L6) with "with DTEs or representative dummy loads attached"

CI 168 SC 168.7.2 P72 L21 # 9

Schreiner, Stephan Rosenberger Hochfrequenztechnik GmbH & Co. KG

Comment Type T Comment Status A 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..."

Response Response Status C

ACCEPT IN PRINCIPLE.

Delete first paragraph of 168.7.2, including equation 168-4 (P72 L21-27).

Change first sentence of 2nd para (L28) to read, "The mixing segment with DTEs attached shall meet the return loss values determined using Equation (168-5) at the edge terminations."

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CI 168 SC 168.8.1.1 P74 L20 # 10
Schreiner, Stephan Rosenberger Hochfrequenztechnik GmbH & Co. KG
Comment Type T Comment Status A 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
Response Response Status C
ACCEPT IN PRINCIPLE.
Remove the first paragraph of 168.8.1.1 AND, editor to scrub document and change references to four-wire connection to the PMA to two-wire connection to the PMA, including figures. (168.7, 168.8, fig 168-17, 168-18, suggest search for "four" or "4 wires" also look for "two two-wire")

CI 168 SC 168.8.1.2 P74 L27 # 11
Schreiner, Stephan Rosenberger Hochfrequenztechnik GmbH & Co. KG
Comment Type T Comment Status A 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
Response Response Status C
ACCEPT IN PRINCIPLE.
Remove lines 27 to 35, including equation 168-6.

CI 00 SC 0 P0 L19 # 12
Maguire, Valerie Copperopolis
Comment Type E Comment Status A 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
Response Response Status C
ACCEPT.

CI 00 SC 0 P3 L8 # 13
Maguire, Valerie Copperopolis
Comment Type E Comment Status A Editorial
Missing some keywords
SuggestedRemedy
Add the following words (in alphabetical order) to the Keyword list: MPD, MPSE, MPoE, Multidrop Power, TCI
Response Response Status C
ACCEPT.

CI 169 SC 169 P85 L1 # 14
Maguire, Valerie Copperopolis
Comment Type E Comment Status A EZ
Clause 169 introduces "multi-drop" with a hyphen. For consistency, it should be "multidrop".
SuggestedRemedy
Replace all occurrences of "multi-drop" with "multidrop"
Response Response Status C
ACCEPT.

CI 169 SC 169.4 P87 L14 # 15
Maguire, Valerie Copperopolis
Comment Type E Comment Status A EZ
The lettered list is not incrementing from a) to b), etc.
SuggestedRemedy
Fix lettered list formatting so that letters increment
Response Response Status C
ACCEPT.

CI 168 SC 168.7.1 P72 L11 # 16
Maguire, Valerie Copperopolis
Comment Type E Comment Status A 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)
Response Response Status C
ACCEPT.

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CI 148 SC 148.4.7.2 P38 L45 # 17

Maguire, Valerie Copperopolis

Comment Type E Comment Status A 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.

Response Response Status C

ACCEPT.

CI FM SC FM P8 L12 # 18

Jones, Chad Cisco Systems

Comment Type E Comment Status A 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.

Response Response Status C

ACCEPT.

CI 148 SC 148.4.4.2 P30 L43 # 19

Jones, Chad Cisco Systems

Comment Type E Comment Status A 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

Response Response Status C

ACCEPT IN PRINCIPLE.

Use commenter's proposed remedy, additionally adding reference to 148.4.7.2 definitions under txop_claim_table and information about NONE.

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, the transmit opportunity is available to be claimed.

Values: NONE, SOFT, or HARD

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CI 168 SC 168.1 P46 L9 # 20

Jones, Chad Cisco Systems

Comment Type T Comment Status A 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?

Response Response Status C

ACCEPT IN PRINCIPLE.
Accommodated by comment 62.

CI 168 SC 168.2.3 P49 L13 # 21

Jones, Chad Cisco Systems

Comment Type E Comment Status A 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)

Response Response Status C

ACCEPT.

CI 168 SC 168.3.2.1 P51 L2 # 22

Jones, Chad Cisco Systems

Comment Type E Comment Status R 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.

Response Response Status C

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)

CI 168 SC 168.3.7 P63 L12 # 23

Jones, Chad Cisco Systems

Comment Type E Comment Status A EZ

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

SuggestedRemedy

delete the note

Response Response Status C

ACCEPT.

CI 168 SC 168.4.2 P64 L30 # 24

Jones, Chad Cisco Systems

Comment Type E Comment Status A EZ

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

SuggestedRemedy

delete the extra period.

Response Response Status C

ACCEPT.

CI 168 SC 168.5.2 P66 L29 # 25

Jones, Chad Cisco Systems

Comment Type E Comment Status A 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."

Response Response Status C

ACCEPT.

'802.3da D1.0 10 Mbps Single Pair Ethernet Multidrop Segment Enhancements 1st Task Force review cor

Cl 168 SC 168.5.3 P67 L36 # 26

Jones, Chad Cisco Systems

Comment Type T Comment Status A 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."

Response Response Status C

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

Cl 168 SC 168.5.4.2 P68 L12 # 27

Jones, Chad Cisco Systems

Comment Type E Comment Status A 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..."

Response Response Status C

ACCEPT.

Cl 168 SC 168.5.4.4 P68 L40 # 28

Jones, Chad Cisco Systems

Comment Type E Comment Status A 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).

Response Response Status C

ACCEPT.

Cl 168 SC 168.5.4.5 P69 L44 # 29

Jones, Chad Cisco Systems

Comment Type E Comment Status A 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)"

Response Response Status C

ACCEPT.

Cl 168 SC 168.5.6 P70 L40 # 30

Jones, Chad Cisco Systems

Comment Type E Comment Status A 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."

Response Response Status C

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 and may be used to detect collisions."

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CI 168 SC 168.7 P71 L5 # 31
Jones, Chad Cisco Systems
Comment Type E Comment Status R Editorial
Flow problem. TCI is used before being introduced.
SuggestedRemedy
replace "TCI" with "Trunk Connection Interface (TCI, see 168.8)"
Response Response Status C
REJECT.
TCI is introduced and defined in the first paragraph of clause 168. (page 45 line 40)

CI 168 SC 168.7 P71 L16 # 32
Jones, Chad Cisco Systems
Comment Type E Comment Status A 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.
Response Response Status C
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)

CI 168 SC 168.7.1 P72 L13 # 33
Jones, Chad Cisco Systems
Comment Type E Comment Status A EZ
two extraneous periods floating in the doc.
SuggestedRemedy
delete the two decimal points.
Response Response Status C
ACCEPT.

CI 168 SC 168.8 P73 L22 # 34
Jones, Chad Cisco Systems
Comment Type E Comment Status A TCI
Need a TCI definition in 1.4.
SuggestedRemedy
TCI (Trunk Connection Interface): an MDI for shared transmission medium for single pair Ethernet.
Response Response Status C
ACCEPT IN PRINCIPLE.
Add to 1.4 (editor to determine section number)
Trunk Connection Interface (TCI): an MDI for shared transmission medium for single pair Ethernet.

CI 169 SC 169.1.1 P85 L26 # 35
Jones, Chad Cisco Systems
Comment Type E Comment Status A 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..."
Response Response Status C
ACCEPT.

'802.3da D1.0 10 Mbps Single Pair Ethernet Multidrop Segment Enhancements 1st Task Force review cor

CI 169 SC 169.2 P86 L27 # 36
Jones, Chad Cisco Systems
Comment Type T Comment Status A Power - TC1
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.
Response Response Status C
ACCEPT IN PRINCIPLE.

The stub is considered part of the DTE. The power entity interfaces at TC1 or TC2, beyond the stub. The current proposals in Paul_01_20240313_v0.pdf address the resistance in the MPD and the MPSE.

Adopt text in Paul_01_20240313_v0.pdf slides 3 & 4 with editorial license, and editors notes as needed.

CI 169 SC 169.3 P86 L37 # 37
Jones, Chad Cisco Systems
Comment Type E Comment Status A 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.
Response Response Status C
ACCEPT IN PRINCIPLE.
Subject to editorial license on formatting

CI 169 SC 169.3 P87 L7 # 38
Jones, Chad Cisco Systems
Comment Type T Comment Status A 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).
Response Response Status C
ACCEPT IN PRINCIPLE.
Accommodated by comment 97. See paul_02_250313_v1.pdf slide 3.
----- WAS ---
See comment 87:
DEFER
Need to replace Pmpd(max) spec for both type 0 and 1 with something that reflects the unit load concept.

CI 169 SC 169.4.3.4 P90 L6 # 39
Jones, Chad Cisco Systems
Comment Type E Comment Status A EZ
missing space after colon for mpd_type_discovered
SuggestedRemedy
add space after the colon.
Response Response Status C
ACCEPT.

CI 169 SC 169.4.6 P94 L27 # 40
Jones, Chad Cisco Systems
Comment Type T Comment Status A 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.
Response Response Status C
ACCEPT IN PRINCIPLE.
Change Units in item 9 (line 27) from "A" to "mA".

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CI 169 SC 169.4.8 P94 L44 # 41

Jones, Chad Cisco Systems

Comment Type T Comment Status A 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"

Response Response Status C

ACCEPT.

CI 22 SC 22.1 P20 L5 # 42

Jones, Peter Cisco Systems

Comment Type E Comment Status A EZ

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

SuggestedRemedy

Convert to Editors note

Response Response Status C

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"

CI 30 SC 30.16.1.1.12 P22 L41 # 43

Jones, Peter Cisco Systems

Comment Type T Comment Status A 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. "

Response Response Status C

ACCEPT IN PRINCIPLE.

"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 bit times (BT). The default value is 40 BT. "

Replace content of editor's note with: "Commenters are encouraged to consider whether the default is correct."

CI 30 SC 30.16.1.1.12 P22 L41 # 44

Jones, Peter Cisco Systems

Comment Type T Comment Status A 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.

Response Response Status C

ACCEPT.

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Cl 45 SC 45 P24 L1 # 45

Jones, Peter Cisco Systems

Comment Type E Comment Status A EZ

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

SuggestedRemedy

Remove or convert to editor's note

Response Response Status C

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 P26 L6 # 46

Jones, Peter Cisco Systems

Comment Type E Comment Status A EZ

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

SuggestedRemedy

Convert to Editors note

Response Response Status C

ACCEPT.
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 P27 L6 # 47

Jones, Peter Cisco Systems

Comment Type E Comment Status A EZ

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

SuggestedRemedy

Convert to Editors note

Response Response Status C

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"

Cl 147 SC 147.1 P29 L6 # 48

Jones, Peter Cisco Systems

Comment Type E Comment Status A EZ

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

SuggestedRemedy

Convert to Editors note

Response Response Status C

ACCEPT.
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 P32 L1 # 49

Jones, Peter Cisco Systems

Comment Type E Comment Status R Editorial

Page is blank.

SuggestedRemedy

remove black page.

Response Response Status C

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 P33 L24 # 50

Jones, Peter Cisco Systems

Comment Type TR Comment Status A EZ

In the RESYNC state, the variable plca_txop_end should be dplca_txop_end.

SuggestedRemedy

Change plca_txop_end to dplca_txop_end

Response Response Status C

ACCEPT.

'802.3da D1.0 10 Mbps Single Pair Ethernet Multidrop Segment Enhancements 1st Task Force review cor

CI 148 SC 148.4.7.1 P38 L11 # 51

Jones, Peter Cisco Systems

Comment Type E Comment Status A EZ

"over statically configured PLCA" does not read well.

SuggestedRemedy

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

Response Response Status C

ACCEPT.

CI 148 SC 148.4.7.1 P38 L15 # 52

Jones, Peter Cisco Systems

Comment Type E Comment Status A 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 .

Response Response Status C

ACCEPT.

CI 148 SC 148.4.7.1 P38 L19 # 53

Jones, Peter Cisco Systems

Comment Type E Comment Status A 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

Response Response Status C

ACCEPT.

CI 148 SC 148.4.7.1 P38 L21 # 54

Jones, Peter Cisco Systems

Comment Type E Comment Status A EZ

Remove unneeded text.

SuggestedRemedy

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

Response Response Status C

ACCEPT.

CI 148 SC 148.4.7.1 P38 L22 # 55

Jones, Peter Cisco Systems

Comment Type E Comment Status A 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.

Response Response Status C

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 can occur until every node selects a unique ID.

'802.3da D1.0 10 Mbps Single Pair Ethernet Multidrop Segment Enhancements 1st Task Force review cor

CI 148 SC 148.4.7.1 P38 L29 # 56

Jones, Peter Cisco Systems

Comment Type T Comment Status A 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.

Response Response Status C

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."
Insert "Editor's Note (to be removed prior to Working Group Ballot): Commenters are encouraged to consider comments to more specifically state the relationship between HARD_AGING_CYCLES and SOFT_AGING_CYCLES"

CI 148 SC 148.4.7.1 P38 L30 # 57

Jones, Peter Cisco Systems

Comment Type E Comment Status R 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

Response Response Status Z

REJECT.

This comment was WITHDRAWN by the commenter.

CI 148 SC 148.4.7.2 P39 L51 # 58

Jones, Peter Cisco Systems

Comment Type E Comment Status A 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.

Response Response Status C

ACCEPT.

CI 148 SC 148.4.7.2 P40 L3 # 59

Jones, Peter Cisco Systems

Comment Type E Comment Status A 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.

Response Response Status C

ACCEPT.

CI 148 SC 148.5.3.7 P44 L20 # 60

Jones, Peter Cisco Systems

Comment Type TR Comment Status A EZ

Both DP1 and DP2 are mandatory if DPLCA is supported.

SuggestedRemedy

For both DP1 and DP2.

Change:

O:DP

To :

DP:M

Response Response Status C

ACCEPT.

'802.3da D1.0 10 Mbps Single Pair Ethernet Multidrop Segment Enhancements 1st Task Force review cor

Cl 168 SC 168 P45 L52 # 61

Jones, Peter Cisco Systems

Comment Type TR Comment Status A 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.

Response Response Status C

ACCEPT IN PRINCIPLE.
Change "is compliant with 147.8" to "is compliant with both 147.8 and 168.7."

Cl 168 SC 168.1 P46 L28 # 62

Jones, Peter Cisco Systems

Comment Type T Comment Status A AutoNeg

AN is not supported for 10BASE-T1M

SuggestedRemedy

Remove AN from Figure 168–1 figure and delete "NOTE 2—Auto-Negotiation is optional"

Response Response Status C

ACCEPT.

Cl 168 SC 168.1.1 P46 L43 # 63

Jones, Peter Cisco Systems

Comment Type T Comment Status A 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.

Response Response Status C

ACCEPT IN PRINCIPLE.
Insert header 168.1 Overview at P45 L35
Change 168.1 Relationship... at P46 L5 to 168.1.1 Relationship...
Insert Header 168.2 Operation of 10BASE-T1M
and editors note:
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."

Cl 168 SC 168.2.1.3 P48 L32 # 64

Jones, Peter Cisco Systems

Comment Type T Comment Status A 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."

Response Response Status C

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 P50 L22 # 65

Jones, Peter Cisco Systems

Comment Type E Comment Status A EZ

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

SuggestedRemedy

Remove the dot.

Response Response Status C

ACCEPT.

'802.3da D1.0 10 Mbps Single Pair Ethernet Multidrop Segment Enhancements 1st Task Force review cor

Cl 168 SC 168.3.2.9 P57 L34 # 66

Jones, Peter Cisco Systems

Comment Type E Comment Status A 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.

Response Response Status C

ACCEPT IN PRINCIPLE.

Change: "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." to

"During the descrambler locking time, the preamble nibble value (1010b) is conveyed to the MII via the RXD variable in order to rebuild the original preamble transmitted by the MAC (see 22.2.3.2.2 for treatment of preamble nibbles)."

Editorial license to conform to 802.3 style to indicate binary

Cl 168 SC 168.3.3.3 P58 L24 # 67

Jones, Peter Cisco Systems

Comment Type E Comment Status A EZ

Aren't constants supported to be upper case?

SuggestedRemedy

Change:

fc_supported

To :

FC_SUPPORTED

Response Response Status C

ACCEPT.

Cl 168 SC 168.3.4 P62 L34 # 68

Jones, Peter Cisco Systems

Comment Type TR Comment Status A Management

45.2.3.1.2 Loopback (3.0.14) doesn't include behavior definitions for 10BASE-T1L/T1S/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.

Response Response Status C

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 P63 L22 # 69

Jones, Peter Cisco Systems

Comment Type E Comment Status A 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.

Response Response Status C

ACCEPT.

'802.3da D1.0 10 Mbps Single Pair Ethernet Multidrop Segment Enhancements 1st Task Force review cor

CI 168 SC 168.5.2 P66 L48 # 70

Jones, Peter Cisco Systems

Comment Type T Comment Status A 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.

Response Response Status C

ACCEPT IN PRINCIPLE.

(related to comment 3, but also removes a duplicate shall)

Change "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."

to

"When test mode 4 is enabled, the transmitter shall output the 'I' symbol. This permits the the requirements of 168.4.2 to be tested."

CI 168 SC 168.8.1.2 P74 L39 # 71

Jones, Peter Cisco Systems

Comment Type T Comment Status A 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.

Response Response Status C

ACCEPT.

CI 168 SC 168.11.3 P78 L8 # 72

Jones, Peter Cisco Systems

Comment Type TR Comment Status A PICS

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

SuggestedRemedy

Remove INS-P2P.

Response Response Status C

ACCEPT.

CI 168 SC 168.11.4.1 P78 L40 # 73

Jones, Peter Cisco Systems

Comment Type T Comment Status A Editorial

Consistency/readability

SuggestedRemedy

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

Response Response Status C

ACCEPT.

CI 169 SC 169.1 P85 L8 # 74

Jones, Peter Cisco Systems

Comment Type E Comment Status A 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.

Response Response Status C

ACCEPT.

CI 169 SC 169.1 P85 L13 # 75

Jones, Peter Cisco Systems

Comment Type E Comment Status A 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.

Response Response Status C

ACCEPT.

'802.3da D1.0 10 Mbps Single Pair Ethernet Multidrop Segment Enhancements 1st Task Force review cor

Cl 169 SC 169.1 P85 L16 # 76
 Jones, Peter Cisco Systems
 Comment Type TR Comment Status A Editorial
 Text says "an MPD" where it should be "one or more MPDs"
 SuggestedRemedy
 Change:
 an MPD
 To :
 one or more MPDs
 Response Response Status C
 ACCEPT.

Cl 169 SC 169.1.2 P85 L34 # 77
 Jones, Peter Cisco Systems
 Comment Type T Comment Status A 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
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 Insert Editors note (to be removed prior to Working Group Ballot): Needs discussion of how the power relates to the data path and OSI layering. See 104.1.2 and 145.1.2 for examples.

Cl 169 SC 169.3 P86 L40 # 78
 Jones, Peter Cisco Systems
 Comment Type E Comment Status R 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.
 Response Response Status C
 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.

Cl 169 SC 169.3 P86 L44 # 79
 Jones, Peter Cisco Systems
 Comment Type T Comment Status A 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.
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 Resolved by comment 97. Comment 97 replaced the text from P86 L35 to P87 L8

Cl 169 SC 169.4 P87 L20 # 80
 Jones, Peter Cisco Systems
 Comment Type E Comment Status A 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."
 Response Response Status C
 ACCEPT.

Cl 169 SC 169.4.3.4 P89 L42 # 81
 Jones, Peter Cisco Systems
 Comment Type E Comment Status A 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
 Response Response Status C
 ACCEPT.

'802.3da D1.0 10 Mbps Single Pair Ethernet Multidrop Segment Enhancements 1st Task Force review cor

CI 169 SC 169.4.3.4 P89 L53 # 82
Jones, Peter Cisco Systems
Comment Type E Comment Status A EZ
Formatting error "Discovery" should be a subscript.
Fix formatting
SuggestedRemedy
Formatting error "Discovery" should be a subscript.
Fix formatting
Response Response Status C
ACCEPT.

CI 169 SC 169.4.4 P92 L38 # 83
Jones, Peter Cisco Systems
Comment Type T Comment Status A 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."
Response Response Status C
ACCEPT.

CI 169 SC 169.4.5 P92 L53 # 84
Jones, Peter Cisco Systems
Comment Type E Comment Status A 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.
Response Response Status C
ACCEPT.

CI 169 SC 169.4.10 P95 L4 # 85
Jones, Peter Cisco Systems
Comment Type E Comment Status A EZ
Typo, PD should be MPD.
SuggestedRemedy
Change:
in the absence of the PD MPS,
To :
in the absence of the MPD MPS,
Response Response Status C
ACCEPT.

CI 169 SC 169 P86 L51 # 86
Chauve, Vincent Schneider Electric
Comment Type TR Comment Status A Power levels
1W to low for or application See V.CHAUVE Presentation
SuggestedRemedy
change Pmdp(max) from 1W to 16W for type 0
Response Response Status C
ACCEPT IN PRINCIPLE.
OBE by comment 97

CI 169 SC 169 P86 L51 # 87
Chauve, Vincent Schneider Electric
Comment Type TR Comment Status A Power levels
1W to low for or application See V.CHAUVE Presentation
SuggestedRemedy
change Pmdp(max) from 2W to 32W for type 1
Response Response Status C
ACCEPT IN PRINCIPLE.
OBE - resolved by comment 97.

802.3da D1.0 10 Mbps Single Pair Ethernet Multidrop Segment Enhancements 1st Task Force review cor

Cl 169 SC 169 P101 L16 # 88

Chauve, Vincent Schneider Electric

Comment Type TR Comment Status A Power levels

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

SuggestedRemedy

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

Response Response Status C

ACCEPT IN PRINCIPLE.

Add new section 169.5.5.2 MPD Power after 169.5.5.1, MPD Inrush, as detailed in paul_02_240313_v1.pdf slide 4, with editorial license and the following changes:

- change "The MPD system type and unit load level shall be clearly marked so users can track loading on a mixing segment." to "The MPD system type and unit load level should be clearly indicatedso users can track loading on a mixing segment."
- change "marked at the MPD TCI" to "indicated" (last line)

Cl 169 SC 169 P101 L17 # 89

Chauve, Vincent Schneider Electric

Comment Type TR Comment Status A Power levels

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

SuggestedRemedy

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

Response Response Status C

ACCEPT IN PRINCIPLE.

OBE by comment 88 -

Add new section 169.5.5.2 MPD Power after 169.5.5.1, MPD Inrush, as detailed in paul_02_240313_v1.pdf slide 4.

Cl 169 SC 169.1 P85 L5 # 90

Paul, Michael Analog Devices

Comment Type E Comment Status A 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.

Response Response Status C

ACCEPT.

Cl 169 SC 169.1.1 P85 L27 # 91

Paul, Michael Analog Devices

Comment Type E Comment Status A EZ

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

SuggestedRemedy

Fix typo

Response Response Status C

ACCEPT. (see comment 35)

Cl 169 SC 169.1.1 P85 L29 # 92

Paul, Michael Analog Devices

Comment Type E Comment Status A EZ

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

SuggestedRemedy

Fix typo

Response Response Status C

ACCEPT. (see comment 35)

Cl 169 SC 169.1.2 P85 L38 # 93

Paul, Michael Analog Devices

Comment Type E Comment Status A Power - TCI

TC3 is probably not the right place to specify compliance and may not even be accessible 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)."

Response Response Status C

ACCEPT IN PRINCIPLE.

"Compliance is specified on each pairset at the TC3 interface" to: "Compliance is specified at the TCI (see Figure 169-1)."

'802.3da D1.0 10 Mbps Single Pair Ethernet Multidrop Segment Enhancements 1st Task Force review cor

Cl 169 SC 169.1.2 P86 L1 # 94

Paul, Michael Analog Devices

Comment Type E Comment Status A 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)."

Response Response Status C

ACCEPT.

Cl 169 SC 169.1.2 P86 L3 # 95

Paul, Michael Analog Devices

Comment Type T Comment Status A 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.

Response Response Status C

ACCEPT IN PRINCIPLE.
Change editor's note following Figure 169-1 - Commenters are requested to suggest a new figure rather than repeat the figure from Clause 168. New figure should show connections and relevant interface points for power. This may be part of showing the relationship between data/power and the OSI model...

Cl 169 SC 169.3 P86 L39 # 96

Paul, Michael Analog Devices

Comment Type E Comment Status A 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"

Response Response Status C

ACCEPT IN PRINCIPLE.
OBE by comment 97.
Insert editor's note before Table 169-1 (to be removed prior to Working Group Ballot), to read "Commenters are to consider implications that many intended applications use 24V which is below the minimum PSE voltage."

Cl 169 SC 169.3 P87 L2 # 97

Paul, Michael Analog Devices

Comment Type E Comment Status A Power - TCI

Try to remove references to TC3

SuggestedRemedy

Change "TC3 Interface" to "TCI"

Response Response Status C

ACCEPT IN PRINCIPLE.
Replace P86 L35 through P87 L9 (Table 169-1 and footnotes) with text and table from paul_02_240313_v1.pdf page 3 with editorial license, and change:
"shall be clearly marked at the
TCI mating interfaces" to "should be clearly indicated"

Cl 169 SC 169.3 P87 L6 # 98

Paul, Michael Analog Devices

Comment Type E Comment Status A Power - TCI

Try to remove references to TC3

SuggestedRemedy

Change "TC3" to "TCI"

Response Response Status C

ACCEPT.

'802.3da D1.0 10 Mbps Single Pair Ethernet Multidrop Segment Enhancements 1st Task Force review cor

CI 169 SC 169.3 P87 L8 # 99
 Paul, Michael Analog Devices
 Comment Type E Comment Status A Power - TCI
 Try to remove references to TC3
 SuggestedRemedy
 Change "TC3" to "TCI"
 Response Response Status C
 ACCEPT.

CI 169 SC 169.4 P87 L14-20 # 100
 Paul, Michael Analog Devices
 Comment Type E Comment Status A EZ
 The list labes are all "a)"
 SuggestedRemedy
 Enumerate the list properly
 Response Response Status C
 ACCEPT.

CI 169 SC 169.4 P87 L15 # 101
 Paul, Michael Analog Devices
 Comment Type E Comment Status A Power levels
 This text was copied 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."
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 Change "To supply power to one or more MPDs connected to the mixing segment."

CI 169 SC 169.4 P87 L22 # 102
 Paul, Michael Analog Devices
 Comment Type E Comment Status A 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)"
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 Change from "...as seen at the TC3 Interface" to "...as seen at the MPSE TCI"

CI 169 SC 169.4.3.2 P88 L27 # 103
 Paul, Michael Analog Devices
 Comment Type E Comment Status A EZ
 "equal to or greater" should be "less than"
 SuggestedRemedy
 change from: "equal to or greater" to "less than"
 Response Response Status C
 ACCEPT.

CI 169 SC 169.5 P95 L28 # 104
 Paul, Michael Analog Devices
 Comment Type E Comment Status A Power - TCI
 Try to remove references to TC3
 SuggestedRemedy
 change from: "specified at the TC3 interface." to: "specified at the MPD Trunk Connection Interfaces."
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 change from: "specified at the TC3 interface." to: "specified at the MPD TCI."

'802.3da D1.0 10 Mbps Single Pair Ethernet Multidrop Segment Enhancements 1st Task Force review cor

Cl 169 SC 169.5.3.2 P96 L17 # 105
 Paul, Michael Analog Devices
 Comment Type E Comment Status A EZ
 Subscripts are missing from all constants in this subclause
 SuggestedRemedy
 Subscript all text in the constant names after the first character.
 Response Response Status C
 ACCEPT.

Cl 169 SC 169.5.5 P101 L5 # 106
 Paul, Michael Analog Devices
 Comment Type E Comment Status A Power - TCI
 Try to remove references to TC3
 SuggestedRemedy
 change "TC3" to from the "MPD Trunk Connection Interface."
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 Change "TC3" to "the mixing segment"

Cl 169 SC 169.5.5.1 P101 L42 # 107
 Paul, Michael Analog Devices
 Comment Type E Comment Status A Power - TCI
 Try to remove references to TC3
 SuggestedRemedy
 change "TC3" to "the TCI"
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 Replace "TC3" with "the mixing segment"

Cl 169 SC 169.5.5.1 P101 L45 # 108
 Paul, Michael Analog Devices
 Comment Type E Comment Status A Power - TCI
 Try to remove references to TC3
 SuggestedRemedy
 change "TC3" to "TCI"
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 Change "if the TC3 voltage" to "if the minimum of the voltages at TC1 and TC2"

Cl 168 SC 168.7 P71 L26 # 109
 Fischer, Peter BKS Kabel-Service AG
 Comment Type T Comment Status A Mixing Segment
 Length should be specified according to the goal.
 SuggestedRemedy
 Change TBD to 50
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 Suggest leave this as TBD until the mixing segment is done and validated.
 See resolution to comment 110

'802.3da D1.0 10 Mbps Single Pair Ethernet Multidrop Segment Enhancements 1st Task Force review cor

CI 168 SC 168.7 P71 L27 # 110
 Fischer, Peter BKS Kabel-Service AG
 Comment Type E Comment Status A 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.
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 Insert editor's note prior to paragraph at P71 L20
 "Editor's Note (to be removed prior to WG Ballot): The descriptive paragraph below and Figure 168-17 need to be reviewed and possibly rewritten when the mixing segment specifications are technically complete."
 Note - An example cannot have a maximum. The stub is labeled as specific to the device, and on the DTE side of the TC3 interface. The mixing segment is specified according to performance parameters. The addition of physical dimensions has often been confused with those dimensions being requirements.

CI 169 SC 169.1.2 P86 L46 # 111
 Fischer, Peter BKS Kabel-Service AG
 Comment Type T Comment Status A 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
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 Change Type 0 IPI(max) to 58.8, and Ptype(min) to 42.6
 Change Type 1 IPI(max) to 55.5, and Ptype(min) to 25.5

CI 00 SC P L # 112
 NoName
 Comment Type E Comment Status X
 SuggestedRemedy
 Proposed Response Response Status O