Cl **169**   *SC* **169.4.6**   *P* **107**   *L* **30**   # 4

Jones, Chad   Cisco Systems, Inc.

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

there is a subscript 'i' in front of the word in.

SuggestedRemedy

delete the typo.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **169**   *SC* **169.5.2**   *P* **111**   *L* **20**   # 6

Jones, Chad   Cisco Systems, Inc.

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

Figure 169-5, V(A,B) has a greater sign after it. Not sure if it is a typo or if it suppose to indicate V(A,B) > V(C,D). In either case, something needs done to the drawing. Either we delete the > symbol, or we move V(C,D) closer to make it obvious what we are trying to say. I'd lean towards it being a typo as we don't discuss that V(A,B) has to be greater than V(C,D) [even though logically it should be].

SuggestedRemedy

delete the ">" from the drawing.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **169**   *SC* **169.4.4.2**   *P* **102**   *L* **17**   # 16

Jones, Peter   Cisco

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

Excess text in definition for overload_detected

SuggestedRemedy

Remove "This variable is set per this description."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **169**   *SC* **169.4.4.4**   *P* **103**   *L* **18**   # 21

Jones, Peter   Cisco

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

Extra blank line before "do_discovery_high" and "do_discovery_low".

SuggestedRemedy

remove extra blank lines.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **169**   *SC* **169.4.4.4**   *P* **103**   *L* **28**   # 22

Jones, Peter   Cisco

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

Indent is wrong for one or more "Value "s of do_discovery_high, check_discovery_all, do_discovery_eval

SuggestedRemedy

Fix indents

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **169**   *SC* **169.4.4.4**   *P* **103**   *L* **47**   # 23

Jones, Peter   Cisco

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

Missing TAB in "mpd_discovered: This:"

SuggestedRemedy

Insert tab between "mpd_discovered: " and "This"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **169**   *SC* **169.5.1**   *P* **110**   *L* **39**   # 30

Jones, Peter   Cisco

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

Typo, "PDs" should be "MPDs".

SuggestedRemedy

Change "PDs can be characterized" to "MPDs can be characterized"

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 **30**

Page 1 of 7
8/27/2024 1:46:39 PM

Cl **169**　　*SC* **169.5.2**　　　　　*P* **110**　　*L* **50**　　　# 31

Jones, Peter　　　　　　　　　　　Cisco

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

"MPDs are current sinks. See Figure 169–5." is a very short paragraph.

SuggestedRemedy

Combine with previous para.

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Combine with subsequent paragraph (which is about the flow of current, and therefore makes more sense).

Cl **79**　　*SC* **79.3.9.3**　　　　　*P* **37**　　*L* **8**　　　# 42

Jones, Peter　　　　　　　　　　　Cisco

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

Values for Bit 1 – PLCA status are incorrect.

SuggestedRemedy

Change to" 1 = true, 0 = false" .

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change to" 1 = TRUE, 0 = FALSE" .

Cl **169**　　*SC* **169.4.3**　　　　　*P* **100**　　*L* **31**　　　# 48

Jones, Peter　　　　　　　　　　　Cisco

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

Redundant text in the following:
"compliance to voltage specifications is met at MP1 and MP2, and both MPs shall meet the specification."

SuggestedRemedy

remove ", and both MPs shall meet the specification"

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **169**　　*SC* **169.4.3**　　　　　*P* **100**　　*L* **33**　　　# 49

Jones, Peter　　　　　　　　　　　Cisco

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

Language:
"That is, if the specification calls for the voltage to exceed a value, then the minimum of the voltages at MP1 and MP2 exceeds the threshold, whereas if the specification calls for the voltage to be below a value, then the maximum of the two MP voltages is below the value"

SuggestedRemedy

Change to:
"If the specification calls for the voltage to be above a value, or below a value, both MP1 and MP2 must meet the criteria."

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **169**　　*SC* **169.4.4.2**　　　　*P* **101**　　*L* **46**　　　# 51

Jones, Peter　　　　　　　　　　　Cisco

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

Typo in definition for mpd_mixed_discovered

SuggestedRemedy

Change "one valid MPD supporting both Type 0 or Type 1"
to "one valid MPD supporting both Type 0 and Type 1"

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **169**　　*SC* **169.5.3.6**　　　　*P* **117**　　*L* **44**　　　# 53

Zimmerman, George　　　　　　CME Consulting/ADI,APLGp,CSCO,MRVL,ONSmi,So

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

delete editor's note - it was supposed to go after draft 1.3

SuggestedRemedy

delete editor's note immediately following Figure 169-8.

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 2 of 7
8/27/2024 1:46:39 PM

Cl **168**　　*SC* **168.8**　　　　　*P* **83**　　*L* **21**　　　# 56

Zimmerman, George　　　　　CME Consulting/ADI,APLGp,CSCO,MRVL,ONSmi,So

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

The editor's note references the mixing segment RL, but I believe that was filled in the last draft turn. We just forgot to delete the note.

SuggestedRemedy

Delete editor's note at P83 L21 immediately before 168.8.1

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **148**　　*SC* **148.4.4.2**　　　　*P* **41**　　*L* **24**　　　# 70

Maguire, Valerie　　　　　Copperopolis; aff'l w/ CME Consulting and Cisco

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

Functions, timers, and variables generally appear in alphabetical order in 802.3-2022 (clause 148.4.4.2 is an exception). If this comment is accepted, I will submit a maintenance request to put the variables in clause 148.4.4.2 in alphabetical order.

SuggestedRemedy

Arrange the PLCA Control variables in alphabetical order and change the Editing Instruction to, "Insert new variables COL, dplca_en, dplca_txop_claim, dplca_txop_end, dplca_txop_id, and dplca_txop_node_count into the list, in alphabetical order:"

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **148**　　*SC* **148.4.4.4**　　　　*P* **42**　　*L* **7**　　　# 71

Maguire, Valerie　　　　　Copperopolis; aff'l w/ CME Consulting and Cisco

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

Functions, timers, and variables generally appear in alphabetical order in 802.3-2022 (clause 148.4.4.4 is an exception). If this comment is accepted, I will submit a maintenance request to put the Timers in clause 148.4.4.4 in alphabetical order.

SuggestedRemedy

Change the Editing Instruction to, "Insert new timer append_commit_timer into the list, in alphabetical order:"

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **148**　　*SC* **148.4.7.2**　　　　*P* **48**　　*L* **32**　　　# 72

Maguire, Valerie　　　　　Copperopolis; aff'l w/ CME Consulting and Cisco

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

Functions, timers, and variables generally appear in alphabetical order in 802.3-2022.

SuggestedRemedy

Arrange the Variables in alphabetical order

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **148**　　*SC* **148.4.7.2**　　　　*P* **48**　　*L* **30**　　　# 73

Maguire, Valerie　　　　　Copperopolis; aff'l w/ CME Consulting and Cisco

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

Align with "148.4.4.2 PLCA Control variables" subclause header

SuggestedRemedy

Replace, "Variables" with "D-PLCA variables"

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **148**　　*SC* **148.4.7.3**　　　　*P* **50**　　*L* **11**　　　# 74

Maguire, Valerie　　　　　Copperopolis; aff'l w/ CME Consulting and Cisco

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

Functions, timers, and variables generally appear in alphabetical order in 802.3-2022.

SuggestedRemedy

Arrange the Functions in alphabetical order

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **168**　　*SC* **168.4.2.2**　　　　*P* **62**　　*L* **1**　　　# 75

Maguire, Valerie　　　　　Copperopolis; aff'l w/ CME Consulting and Cisco

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

Functions, timers, and variables generally appear in alphabetical order in 802.3-2022.

SuggestedRemedy

Arrange the Variables in alphabetical order

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 **75**　　　Page 3 of 7
8/27/2024 1:46:39 PM

Cl **168**   *SC* **168.4.2.3**   *P* **63**   *L* **1**   # 76

Maguire, Valerie   Copperopolis; aff'l w/ CME Consulting and Cisco

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

I would assume Constants should be in aphabetical order? There is no precedent in 802.3-2022.

SuggestedRemedy

Arrange the Constants in alphabetical order

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **168**   *SC* **168.4.3.2**   *P* **68**   *L* **50**   # 77

Maguire, Valerie   Copperopolis; aff'l w/ CME Consulting and Cisco

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

Functions, timers, and variables generally appear in alphabetical order in 802.3-2022.

SuggestedRemedy

Arrange the Variables in alphabetical order

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **168**   *SC* **168.4.3.3**   *P* **69**   *L* **28**   # 78

Maguire, Valerie   Copperopolis; aff'l w/ CME Consulting and Cisco

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

I would assume Constants should be in aphabetical order? There is no precedent in 802.3-2022.

SuggestedRemedy

Arrange the Constants in alphabetical order

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **169**   *SC* **169.4.4.4**   *P* **103**   *L* **14**   # 82

Maguire, Valerie   Copperopolis; aff'l w/ CME Consulting and Cisco

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

Functions, timers, and variables generally appear in alphabetical order in 802.3-2022.

SuggestedRemedy

Arrange the Functions in alphabetical order

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **169**   *SC* **169.5.3.3**   *P* **112**   *L* **27**   # 84

Maguire, Valerie   Copperopolis; aff'l w/ CME Consulting and Cisco

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

Functions, timers, and variables generally appear in alphabetical order in 802.3-2022.

SuggestedRemedy

Arrange the Variables in alphabetical order

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 4 of 7
8/27/2024 1:46:39 PM

Cl **169** *SC* **169.5.3.6** *P* **116** *L* **7** # 85

Law, David HPE

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

Subclause 169.5.3.1 'Conventions' says that 'The notation used in the state diagram follows the conventions of state diagrams as described in 145.2.5.2.'. The second paragraph of subclause 145.2.5.2 of IEEE Std 802.3-2022 says that 'Some states in the state diagrams use an IF-THEN-ELSE-END construct to condition which actions are taken within the state.' and that 'If the logical expression associated with the IF evaluates TRUE all the actions listed between THEN and ELSE will be executed. In the case where ELSE is omitted, the actions listed between THEN and END will be executed.'.

Based on the above, the IF-THEN-ELSE-END construct in the DISCOVERY_LOW_TYPE_0, DISCOVERY_LOW_TYPE_1 and DISCOVERY_LOW_TYPE_MIXED states in Figure 169–7 'Top level MPD state diagram continued, part b' are missing the THEN after the IF condition.

SuggestedRemedy

Suggest that:

[1] 'IF (mpd_type = 0)' in the DISCOVERY_LOW_TYPE_0 state should read 'IF (mpd_type = 0) THEN'.
[2] 'IF (mpd_type = 1)' in the DISCOVERY_LOW_TYPE_1 state should read 'IF (mpd_type = 1) THEN'.
[3] 'IF (mpd_type = mixed)' in the DISCOVERY_LOW_TYPE_MIXED state should read ' IF (mpd_type = mixed) THEN'.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **169** *SC* **169.5.3.6** *P* **115** *L* **12** # 86

Law, David HPE

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

Subclause 169.5.3.1 'Conventions' says that 'The notation used in the state diagram follows the conventions of state diagrams as described in 145.2.5.2.'. The first row of Table 145–5 'State diagram operators in order of precedence (highest to lowest)' in subclause 145.2.5.2 of IEEE Std 802.3-2022 lists the '( )' operator as indicating precedence.

The open arrow entry condition into the IDLE state, however, uses '[]' rather than '()'.

SuggestedRemedy

Suggest that the open arrow entry condition into the IDLE state '[VMPD < VReset_MPD_max] * !mpd_reset * dte_power_required' should read '(VMPD < VReset_MPD_max) * !mpd_reset * dte_power_required' or just 'VMPD < VReset_MPD_max * !mpd_reset * dte_power_required' since the '<' has a higher precedence than '*' according to Table 145–5.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **169** *SC* **169.4.4.5** *P* **105** *L* **5** # 88

Law, David HPE

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

The first action in the DISABLED state of Figure 169–3 'Top level MPSE state diagram, part a' sets the variable 'powered' to FALSE. The variable 'powered' is, however, not defined in subclause 169.4.4.2 'Variables'. It appears that the 'mpi_powered' variable should be set to FALSE in the DISABLED state instead.

SuggestedRemedy

Change the first action in the DISABLED state from 'powered <= FALSE' to read 'mpi_powered <= FALSE'.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **169** *SC* **169.4.4.2** *P* **101** *L* **25** # 90

Law, David HPE

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

Typo.

SuggestedRemedy

Delete the spaces and the second full stop after the first in '... to the mixing segment. .'.

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* **90** Page 5 of 7
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn 8/27/2024 1:46:39 PM
SORT ORDER: Comment ID

Cl **169**　　*SC* **169.4.4.5**　　　　*P***105**　　　*L* **37**　　　# 91

Law, David　　　　　　　　　　　HPE

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

The transition condition from the DISCOVERY_LOW state to the DISCOVERY_LOW_ALL
state in Figure 169–3 'Top level MPSE state diagram, part a' reads
'discover_low_timer_done * (mark_number =' with the end of the transition condition
missing.

SuggestedRemedy

Suggest that '(mark_number =' shoudl read '(mark_number = 1)

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **169**　　*SC* **169.4.4.5**　　　　*P***105**　　　*L* **37**　　　# 92

Law, David　　　　　　　　　　　HPE

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

Suggest that the transition condition text box for DISCOVERY_LOW to
DISCOVERY_LOW_ALL in Figure 169–3 should be enlarged to prevent the variable
'discover_low_timer_done' from being hyphenated over two lines.

SuggestedRemedy

See comment.

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **169**　　*SC* **169.4.4.5**　　　　*P***105**　　　*L* **34**　　　# 93

Law, David　　　　　　　　　　　HPE

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

Suggest that the transition condition text box for DISCOVERY_HIGH_MARK to BACKOFF
in Figure 169–3 should be enlarged to prevent the variable 'discover_high_timer_done'
from being hyphenated over two lines.

SuggestedRemedy

See comment.

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **169**　　*SC* **169.4.4.5**　　　　*P***106**　　　*L* **8**　　　# 95

Law, David　　　　　　　　　　　HPE

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

Subclause 169.4.4.1 'Conventions' says that 'The notation used in the state diagram
follows the conventions of state diagrams as described in 145.2.5.2.'. The second
paragraph of subclause 145.2.5.2 says 'Some states in the state diagrams use an IF-THEN-
ELSE-END construct to condition which actions are taken within the state. If the logical
expression associated with the IF evaluates TRUE all the actions listed between THEN and
ELSE will be executed. In the case where ELSE is omitted, the actions listed between
THEN and END will be executed. If the logical expression associated with the IF evaluates
FALSE the actions listed between ELSE and END will be executed.'. In addition, subclause
1.2.1 'State diagram conventions', item b) says 'The character "<=" (left arrow) denotes
assignment of the value following the arrow to the term preceding the arrow.'.

SuggestedRemedy

Based on the referenced conventions suggest that in the DISCOVERY_LOW_TYPE state:

[1] Three 'END's, each on a new line, should be added after the final assignment,
'mpd_mixed_discovered = mpd_type_discovered'.
[2] Replace the '=' with the '<=' (left arrow) symbol in the three assignments.
[3] The first instance of 'If' should be changed to read 'IF'.
[4] Consider indenting (see Figure 145–13 for an existing example).

Based on the above the actions in the DISCOVERY_LOW_TYPE state would read:

check_discovery_type
IF (mark_number = 3) THEN
    mpd_type0_discovered <= mpd_type_discovered
ELSE IF (mark_number = 4) THEN
    mpd_type1_discovered <= mpd_type_discovered
ELSE IF (mark_number = 5) THEN
    mpd_mixed_discovered <= mpd_type_discovered
END

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 **95**　　　Page 6 of 7
8/27/2024 1:46:39 PM

Cl **168**   *SC* **168.8.3**   *P* **84**   *L* **22**   # 102

Schreiner, Stephan   Rosenberger Hochfrequenztechnik GmbH & Co. KG

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

"The mode conversion loss of EACH 10BASE-T1M mixing segment". Based on my
understanding, there are not multiple mixing segments - there is only one mixing segment

SuggestedRemedy

Remove "Each"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Replace "each" with "the" (loss of the 10BASE-T1M…)

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Comment ID* **102**   Page 7 of 7
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn   8/27/2024 1:46:39 PM
SORT ORDER: Comment ID