Cl **00**   *SC* **FM**   *P* **1**   *L* **1**   # 300
Yseboodt, Lennart   Signify

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

Draft 2.1 does not contain change bars. Change bars are a good way to indicate where changes have happened and which parts of the draft are in scope.

SuggestedRemedy

Include change bars for D2.2 and drafts going forward.

Proposed Response   *Response Status* **W**

PROPOSED REJECT.

Change bars are shown in the CMP (compare) file and are not required in the clean draft. With multiple editors, the only way to be sure that revisions are marked correctly is to use the FrameMaker compare tool and the generated CMP .pdf file.

Cl **01**   *SC* **1.1.3**   *P* **25**   *L* **24**   # 397
Asmussen, Jes   Rockwell Automation

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

Is >= 100 Mb/s correct since it also references 10BASE-T1L & 10BASE-T1S?

SuggestedRemedy

Change to >=10 Mb/s

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Replace, ">= 100 Mb/s, 10ABSE-T1L, 10BASE-T1S"

with, "10BASE-T1L, 10BASE-T1S, and >= 100 Mb/s"

Cl **01**   *SC* **1.1.3**   *P* **25**   *L* **30**   # 443
Brandt, David   Rockwell Automation

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

Note specifies xMII in diagram is only for 100 Mb/s and above.

SuggestedRemedy

Add 10BASE-T1L and 10BASE-T1S.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Master comment 443. Resolve with 85.

Replace, "Interfaces for implementations of 100 Mb/s and above."

with, "Interfaces for implementations of 10BASE-T1L and 10BASE-T1S and 100 Mb/s and above."

Cl **01**   *SC* **1.1.3**   *P* **25**   *L* **31**   # 85
Anslow, Pete   Ciena

Comment Type **T**   *Comment Status* **X**   *Editorial*

The note at the foot of Figure 1-1 says "the xMII is used as a generic term for the Media Independent Interfaces for implementations of 100 Mb/s and above." but this term is now being used for 10BASE-T1L and 10BASE-T1S

SuggestedRemedy

Change the note to be consistent with the modified figure.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Master comment 443. Resolve with 443.

Replace, "Interfaces for implementations of 100 Mb/s and above."

with, "Interfaces for implementations of 10BASE-T1L and 10BASE-T1S and 100 Mb/s and above."

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Cl* **01**   Page 1 of 17
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   *SC* **1.1.3**   11/4/2018 6:35:38 PM
SORT ORDER: Clause, Subclause, page, line

Cl **01**	*SC* **1.4.389a**	*P* **27**	*L* **10**	# 331

Thompson, Geoff   GraCaSI S.A.

Comment Type **ER**   *Comment Status* **D**   *Editorial*

Market BS does not belong in the definition

SuggestedRemedy

Remove the words: "and improve performance"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **22**	*SC* **22.2.2.4**	*P* **29**	*L* **20**	# 71

Slavick, Jeff   Broadcom

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

Clause 148 defines the behavior of BEACON and COMMIT

SuggestedRemedy

Change "as explained in 148.4.5.1" to "as defined in 148.4.5.1".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**	*SC* **45.2**	*P* **39**	*L* **20**	# 70

Slavick, Jeff   Broadcom

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

There is no reason to include the ", namely 10BASE-T1S," text unless this is going to be the only PHY to ever use PLCA.

SuggestedRemedy

Delete ", namely 10BASE-T1S,"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Master comment 70. Resolve with 335.

Cl **45**	*SC* **45.2**	*P* **39**	*L* **20**	# 335

Thompson, Geoff   GraCaSI S.A.

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

"Namely" is not standards style grammar.

SuggestedRemedy

Replace "namely 10BASE-T1S" with "(that is 10BASE-T1S)"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Master comment 70. Resolve with 70.

Delete ", namely 10BASE-T1S,"

Cl **45**	*SC* **45.2.1.186c.1**	*P* **42**	*L* **17**	# 378

Beruto, Piergiorgio   Canova Tech Srl

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

Add "NOTE-" to the warning at line 17 to make it look uniform with 45.2.1.1.186c.4 line 48.

SuggestedRemedy

Replace "This operation may interrupt data communication" with "NOTE -- This operation may interrupt data communication."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**	*SC* **45.2.1.186f.1**	*P* **46**	*L* **39**	# 18

Regev, Alon   Keysight Technologies

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

Change "This operation may interrupts communication." to "This operation may interrupt communication."

SuggestedRemedy

Change "This operation may interrupts communication."
to "This operation may interrupt communication."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Master comment #379. resolve with 379 and 107.

Replace "This operation may interrupts data communication" with "NOTE -- This operation may interrupt data communication.".

Note that this fixes a typo as well (interruptS).

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

Cl **45**
SC **45.2.1.186f.1**

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Cl **45**   *SC* **45.2.1.186f.1**   *P* **46**   *L* **39**   # 379

Beruto, Piergiorgio   Canova Tech Srl

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

Add "NOTE-" to the warning at line 39 to make it look uniform with 45.2.1.1.186c.4 line 48.

SuggestedRemedy

Replace "This operation may interrupts data communication" with "NOTE -- This operation may interrupt data communication.". Please note that this fixes a typo as well (interruptS).

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Master comment #379. resolve with 18 and 107.

Cl **45**   *SC* **45.2.1.186f.1**   *P* **46**   *L* **39**   # 107

Anslow, Pete   Ciena

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

"This operation may interrupts communication." should be "This operation may interrupt communication."

SuggestedRemedy

Change "interrupts" to interrupt"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Master comment #379. resolve with 18 and 379.

Replace "This operation may interrupts data communication" with "NOTE -- This operation may interrupt data communication.".

Note that this fixes a typo as well (interruptS).

Cl **45**   *SC* **45.5.3.3**   *P* **62**   *L* **13**   # 224

Graber, Steffen   Pepperl+Fuchs GmbH

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

There are several sentences with and without a dot at the end.

SuggestedRemedy

Please unify the usage of a dot at the end of a sentence within the PICS tables.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Perform a global review of all PICS and implement the following changes:

1) Remove the "." at the end of single sentence PICS statements

2) Add a "." to the end of each sentence in multi-sentence PICS statements

---

Cl **98**   *SC* **98.2.1.1.2**   *P* **72**   *L* **13**   # 33

Zimmerman, George   CME Consulting et al

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

"There exist two different Auto-Negotiation speeds, from which at least one Auto-Negotiation speed shall be
supported. Two different Auto-Negotiation speeds are defined in this subclause. A PHY shall support at
least one of these Auto-Negotiation speeds." - the first sentence is redundant and a duplicate shall with the (new) 2nd and 3rd).

SuggestedRemedy

Delete "There exist two different Auto-Negotiation speeds, from which at least one Auto-Negotiation speed shall be
supported. "

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Master comment #33. Consider with 235 and 340.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Cl* **98**   Page 3 of 17
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   *SC* **98.2.1.1.2**   11/4/2018 6:35:38 PM
SORT ORDER: Clause, Subclause, page, line

Cl **98**　　　*SC* **98.2.1.1.2**　　　*P* **72**　　　*L* **14**　　　# 235

Graber, Steffen　　　　　　　　Pepperl+Fuchs GmbH

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

Information in the first three sentences of the mentioned paragraph is redundant.

SuggestedRemedy

Remove first sentence ("There exist . shall be supported.")

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Master comment #33. Consider with 33 and 340.

Cl **98**　　　*SC* **98.2.1.1.2**　　　*P* **72**　　　*L* **14**　　　# 340

Thompson, Geoff　　　　　　　　GraCaSI S.A.

Comment Type **ER**　　　*Comment Status* **D**　　　　　　*Editorial*

Text does not make clear whether there are two network speeds or 2 auto-neg speeds.

SuggestedRemedy

Change first phrase to read: "There exists two speeds at which Auto-Negotiation operates,"

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Master comment #33. Consider with 33 and 235.

Delete "There exist two different Auto-Negotiation speeds, from which at least one Auto-Negotiation speed shall be
supported. "

Cl **98**　　　*SC* **98.5.5**　　　*P* **77**　　　*L* **5**　　　# 136

Anslow, Pete　　　　　　　　Ciena

Comment Type **ER**　　　*Comment Status* **D**　　　　　　*Editorial*

While it may be helpful to the current reviewers to show the places where the state diagrams have changed with red boxes, these cannot remain as this would result in the final state diagrams containing red boxes.

SuggestedRemedy

Remove the red boxes from the state diagrams.

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Master comment #136. Resolve with 458.

Remove the red boxes from the state diagrams in Figure 98-7, Figure 98-8, Figure 98-9, and 98-10.

Chief Editor to create a clause 98 state diagram-only file with yellow highlighting showing changes/additions from 802.3-2018. A .pdf of the file will be posted at the same time as the CMP file so that both can be available for information during ballot review.

Cl **98**　　　*SC* **98.5.5**　　　*P* **77**　　　*L* **6**　　　# 458

McClellan, Brett　　　　　　　　Marvell

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

red boxes in figure 98-7 should be in the compare document but not in the clean draft.

SuggestedRemedy

remove the red boxes in Clause 98 figures

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Master comment #136. Resolve with 136.

Remove the red boxes from the state diagrams in Figure 98-7, Figure 98-8, Figure 98-9, and 98-10.

Chief Editor to create a clause 98 state diagram-only file with yellow highlighting showing changes/additions from 802.3-2018. A .pdf of the file will be posted at the same time as the CMP file so that both can be available for information during ballot review.

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

Cl **98**
SC **98.5.5**

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11/4/2018 6:35:38 PM

Cl **98**   *SC* **98.5.5**   *P* **77**   *L* **26**   # **181**
Wienckowski, Natalie   General Motors

Comment Type **T**   *Comment Status* **X**   *Editorial*

There is a change in the "AN GOOD CHECK" box that is not indicated by a red box. Published Figure 98-7 first line in box: link_control_[notHCD] <= DISABLE, first line in cg: mr_autoneg_enable = true. Note, this was changed since D2p0.

SuggestedRemedy

If this change was intentional, put a red box around the new text. If this change was not intentional change it to match 802.3:2018. FYI - I don't find a comment to change this from D2p0, just a comment to make the changes obvious.

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

Master comment #238. Resolve with 238.

No change to the draft required. Chief Editor to add a yellow highlight around [EASY] _[ANSP]_ in the reference clause 98 state diagram change file (see comment #136).

Cl **98**   *SC* **98.5.5**   *P* **79**   *L* **6**   # **238**
Graber, Steffen   Pepperl+Fuchs GmbH

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

[EASY] _[ANSP]_ is missing the red change box

SuggestedRemedy

Add red change box.

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

Master comment #238. Resolve with 181.

No change to the draft required. Chief Editor to add a yellow highlight around [EASY] _[ANSP]_ in the reference clause 98 state diagram change file (see comment #136).

Cl **98**   *SC* **98.5.6.1**   *P* **81**   *L* **46**   # **243**
Graber, Steffen   Pepperl+Fuchs GmbH

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

Descriptions for TRUE and FALSE are reversed.

SuggestedRemedy

Reverse descriptive text for TRUE and FALSE (the state diagrams are restarted, if multispeed_autoneg_reset is TRUE).

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

Replace values on line 47 with:

TRUE: Auto-Negotiation state diagrams are restarted
FALSE: Auto-Negotiation state diagrams are in normal operation

---

Cl **98**   *SC* **98B.4**   *P* **226**   *L* **3**   # **464**
McClellan, Brett   Marvell

Comment Type **TR**   *Comment Status* **D**   *Editorial*

missing the prioritization for 10BASE-T1S full duplex vs half duplex

SuggestedRemedy

change "10BASE-T1S"
to "- 10BASE-T1S full duplex
 - 10BASE-T1S half duplex"

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 U/unsatisfied Z/withdrawn
SORT ORDER: Clause, Subclause, page, line

Cl **98**
SC **98B.4**

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Cl **104**   *SC* **104**   *P* **86**   *L* **1**   # 141

Anslow, Pete   Ciena

Comment Type **TR**   *Comment Status* **D**   *Editorial*

Comment #69 against D2.0 pointed out that the title of Clause 104 is: "Power over Data Lines (PoDL) of Single Balanced Twisted-Pair Ethernet".
The response to this comment was:
REJECT.
"Single-Pair Ethernet" is aligned with the text in bullets 7, 8, and 16 in the project objectives.
This response is completely inadequate. The title of an in-force Clause cannot be changed by simply showing it as different text in an Amendment.

SuggestedRemedy

Place an editing instruction above the title of Clause 104:
"Change the title of Clause 104 as follows:"
Replace the current title with:
"Power over Data Lines (PoDL) of Single<s> Balanced Twisted</s>-Pair Ethernet".
Where <s> and </s> are the start and end of strikethrough font.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **104**   *SC* **104.2**   *P* **86**   *L* **21**   # 41

Zimmerman, George   CME Consulting et al

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

Unnecessary parentheses around class numbers e.g., "(Classes 0 and 1)".

SuggestedRemedy

Change "(Classes 0 and 1)" to "Classes 0 and 1", change "(Classes 2 through 9)" to "Classes 2 through 9"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Master comment #41. Resolve with 244.

Cl **104**   *SC* **104.2**   *P* **86**   *L* **21**   # 244

Graber, Steffen   Pepperl+Fuchs GmbH

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

[EASY] (Classes 0 and 1) (line 21) and (Classes 2 through 9) (line 23)

SuggestedRemedy

Remove brackets around "Classes 0 and 1" and "Classes 2 through 9".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Master comment #41. Resolve with 41.

Cl **104**   *SC* **104.4.6.3**   *P* **89**   *L* **41**   # 248

Graber, Steffen   Pepperl+Fuchs GmbH

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

Formula 104-1

SuggestedRemedy

Within D2.1 formula 104-1 has been modified in a way, that the omega symbol was moved to the end of the formula. At other positions in IEEE802.3 it is written in a form 100 ohm +/- 1%, thus my expectation would be to have the omega symbol after the 100 and not at the end. Nevertheless, if the writing in D2.1 is the correct version, then please remove the additional space after the 100.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Remove the additional space after 100 in eqaution 104-1.

Cl **104**   *SC* **104.4.6.3**   *P* **89**   *L* **27 and**   # 82

Fritsche, Matthias   HARTING Technology

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

We have here a reference to Figure 104-7 from 802.3bu, but we don't show this figure.

SuggestedRemedy

For better understanding Figure 104-7 from 802.3bu should be added

Proposed Response   *Response Status* **W**

PROPOSED REJECT.

The purpose of an amendment is to show changes to the parent document. If there is no change to a figure, then it would not provided "for reference".

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

Cl **104**
SC **104.4.6.3**

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Cl **104**   *SC* **104.4.6.4**   *P* **92**   *L* **28 and**   # 83
Fritsche, Matthias   HARTING Technology

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

We have here a reference to Figure 104-9 from 802.3bu, but we don't show this figure.

SuggestedRemedy

For better understanding Figure 104-9 from 802.3bu should be added

Proposed Response   *Response Status* **W**

PROPOSED REJECT.

The purpose of an amendment is to show changes to the parent document. If there is no change to a figure, then it would not provided "for reference".

Cl **104**   *SC* **104.7.2.7**   *P* **100**   *L* **8**   # 150
Anslow, Pete   Ciena

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

Bits b[5:0] are shown as "Write only" (with WO in the R/W column and W/O in the footnote). There are no write only bits in the whole of 802.3 as this would mean that it would not be possible to check what the bits are set to.

SuggestedRemedy

Change the entry in the R/W column to "R/W"
Change footnote a to "RO = Read only, R/W = Read/Write"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **146**   *SC* **146.1**   *P* **103**   *L* **10**   # 187
Wienckowski, Natalie   General Motors

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

Missing Oxford commas throughout document, especially Clauses 146, 147, and 148.

SuggestedRemedy

Change "PCS, PMA and MDI." to "PCS, PMA, and MDI."
Search document and add all other missing Oxford commas.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Editor to search document for " and " and check for missing oxford commas.
Effects all clauses.

Cl **146**   *SC* **146.1.3.1**   *P* **106**   *L* **6**   # 473
Law, David   HPE

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

Subclause 146.1.3.1 'State Diagram Notation' states that 'The notation used in the state diagrams follows the conventions of 21.5.'. Further Subclause 21.5 'State diagrams' of IEEE Std 802.3-2018 states 'The conventions of 1.2 are adopted, with the following extensions.'.

While the use of conditions such as 'IF' is defined in subclause 1.2, and the addition of ELSE to the construct is defined in IEEE Std 802.3-2015 Table 21-1, although I think that was more as a valid transition qualifier rather than part of an IF statement (see IEEE Std 802.3-2015 subclause 21.5.3, item e), the addition of END to the construct isn't defined. Suggest that the IF-THEN-ELSE-END construct be locally defined in subclause 33.2.5.2.

Also, I note that in some cases an IF-ELSE construct is used, see Figure 148-5, while in others an IF-THEN-ELSE construct is used. Finally, I believe the IF, THEN, ELSE and END use in IF-THEN-ELSE constructs in the past are uppercase, see Figure 28-16 'Transmit state diagram' for example.

SuggestedRemedy

Suggest that:

[1] The following definition is added to subclause 146.1.3.1:

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. After executing the actions listed between THEN and ELSE, between THEN and END, or between ELSE and END, the actions following the END, if any, will be executed.

[2] The IF-THEN-ELSE-END construct is used consistently in the IEEE P802.3cg draft.

[3] The 'IF', 'THEN', 'ELSE' and 'END' used in IF-THEN-ELSE-END constructs are uppercase.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Impacts Clauses 146, 147 and 148.
Other comments may copy 146.1.3.1 into 147 and 148 - also add this text to those clauses.
Clauses 146, 147 and 148 to implement IF-THEN-ELSE-END construct as described.

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

Cl **146**
SC **146.1.3.1**

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Cl **146**	*SC* **146.3.4.1**	*P* **124**	*L* **16**	#	412

Jones, Peter   Cisco

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

editorial cleanup

SuggestedRemedy

Change
"When rcv_max_timer expires, the PCS Receive state diagram is reset and transition to IDLE state is forced."
to
"When rcv_max_timer expires, the PCS Receive state diagram is reset and transitions to IDLE."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **146**	*SC* **146.3.4.1.1**	*P* **125**	*L* **42**	#	261

Graber, Steffen   Pepperl+Fuchs GmbH

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

rcv_jab_detected

SuggestedRemedy

rcv_overrun_detected (see presentation for Receive watchdog state diagram).

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Replace variable name rcv_jab_detected with rcv_overrun_detected on P125 L42, P127 L4, P127 L5, P129 L7, and P129 L17.

Cl **146**	*SC* **146.3.4.1.1**	*P* **125**	*L* **43**	#	262

Graber, Steffen   Pepperl+Fuchs GmbH

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

JAB state

SuggestedRemedy

RECEIVE OVERRUN state (see presentation for Receive watchdog state diagram).

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change "JAB state" to "RECEIVE OVERRUN state" on P125 L43 and change "JAB" to "RECEIVE OVERRUN" (in state header) on P129 L17.

Cl **146**	*SC* **146.3.4.1.3**	*P* **129**	*L* **1**	#	267

Graber, Steffen   Pepperl+Fuchs GmbH

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

The Receive watchdog state machine does have misleading state and variable names.

SuggestedRemedy

Modify Receive watchdog state diagram as described in presentation "Receive Watchdog State Diagram".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Implement changes for Figure 146-10 shown on page 2 of Graber_3cg_01_1118.pdf (other changes implemented by comments 261 & 262)

Cl **146**	*SC* **146.4.4.2**	*P* **135**	*L* **39**	#	345

Thompson, Geoff   GraCaSI S.A.

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

Grammar in the note needs some work.

SuggestedRemedy

Change "will not" to "should not". Add comma after "therefor". Swap "some time" and "SEND_IDLE" in the last sentence.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change "NOTE- After a disturbance on the link segment, e.g., when the current consumption on a powered link segment is
quickly changed, the PHYs will not immediately drop the link, but need to try to recover the link for some time, before
doing a complete restart. Therefore the maxwait_timer allows the PHYs to stay for some time in the SEND IDLE state
before going to the DISABLE TRANSMITTER state."
to read as follows:
"NOTE- After a disturbance on the link segment, e.g., when the current consumption on a powered link segment is
quickly changed. The maxwait_timer allow the PHYs to stay in the SEND IDLE state for some time before going to the DISABLE TRANSMITTER state. This allows the PHYs to attempt to recover the link before
a full retrain."

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

Cl **146**
SC **146.4.4.2**

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Cl **146** *SC* **146.5.4.1** *P* **141** *L* **6** # 272
Graber, Steffen Pepperl+Fuchs GmbH

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

The transmitter output voltage can be selected by setting bit 1.2294.12 (10BASE-T1L PMA control register) of the PHY Management register set as described in 45.2.1.186c.3.

SuggestedRemedy

Replace by: The transmitter output voltage can be selected by setting bit 1.2294.12 (10BASE-T1L PMA control register) of the PHY Management register set as described in 45.2.1.186c.3, if Auto-Negotiation is disabled or not present. (The MDIO register 1.2294.12 is only used, if the transmit amplitude is not derived from Auto-Negotiation, so this needs to be reflected in the text.)

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **146** *SC* **146.5.4.4** *P* **142** *L* **9** # 448
Brandt, David Rockwell Automation

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

Limit lines in Figure 146-19 are not clear, especially the -70 limit.

SuggestedRemedy

Thicken the limit lines (including in key) relative to the grid lines.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Editorial license to enhance visibility of limit lines either as described or by changing gridlines.

Cl **146** *SC* **146.5.4.4** *P* **143** *L* **3** # 450
Brandt, David Rockwell Automation

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

Limit lines in Figure 146-20 are not clear.

SuggestedRemedy

Thicken the limit lines (including in key) relative to the grid lines.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Editorial license to enhance visibility of limit lines either as described or by changing gridlines.

Cl **146** *SC* **146.5.5.1** *P* **143** *L* **38** # 50
Zimmerman, George CME Consulting et al

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

"Differential signals received at the MDI, that were transmitted from a remote transmitter within the specifications of Transmitter Electrical Specifications" is redundant and doesn't refer to 146.5.4 correctly.

SuggestedRemedy

Change "Transmitter Electrical Specifications" to a cross reference to 146.5.4.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **146** *SC* **146.5.5.3.1** *P* **144** *L* **20** # 51
Zimmerman, George CME Consulting et al

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

This was 146.5.6, and somehow became 146.5.5.3.1. Additionally, the editor's note below was indicating that this section was to be deleted but the header kept to keep the subsequent numbering the same. At this point, might as well just delete it and the note - the numbering has now changed...

SuggestedRemedy

Delete 146.5.5.3.1 header and editors note on page 144 lines 20-26.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Implemented by comment 346

Cl **146** *SC* **146.5.5.3.1** *P* **144** *L* **22** # 346
Thompson, Geoff GraCaSI S.A.

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

Editor's note is mislabled as to clause and is unnecessary as deletion of 146.5.5.3.1 will not cause any clause renumbering

SuggestedRemedy

Remove sub-clause heading and note.

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 U/unsatisfied Z/withdrawn
SORT ORDER: Clause, Subclause, page, line

Cl **146**
SC **146.5.5.3.1**

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Cl **146**	*SC* **146.8.1**	*P* **152**	*L* **13**	# 159

Anslow, Pete   Ciena

Comment Type **TR**   *Comment Status* **D**   *Editorial*

With only placeholders for Figures 146-XXX, YYY and ZZZ, this draft is not ready to move to Sponsor ballot, hence this is a required comment.

SuggestedRemedy

Populate Figures 146-XXX, YYY and ZZZ

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **146**	*SC* **146.8.1**	*P* **152**	*L* **13**	# 350

Thompson, Geoff   GraCaSI S.A.

Comment Type **TR**   *Comment Status* **D**   *Editorial*

Doesn't specify that the equipment side of the MDI is the socket side of the mated pair.

SuggestedRemedy

Change the text: "MDI connector on the PHY." to "MDI socket connector on the PHY."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **146**	*SC* **146.9.2.1**	*P* **154**	*L* **7**	# 306

Yseboodt, Lennart   Signify

Comment Type **TR**   *Comment Status* **D**   *Editorial*

Comment #352 against D2.0 was AIP, but the comment resolution was not implemented.

SuggestedRemedy

Implement #352:
Replace "shall conform to" with "is expected to conform to" on P 154 line 7.
Clause 147.10.2.1 is already aligned with this change.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **146**	*SC* **146A.1**	*P* **226**	*L* **22**	# 438

Jones, Peter   Cisco

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

This standard does not define an IC or how functions are packages into physiocal components. Fix that and also some other editorials.

SuggestedRemedy

Change "In addition, the realization of the PHY IC has a strong impact on the possible intrinsic safety concepts," to In addition, the PHY implementation has a strong impact on intrinsic safety,"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **146**	*SC* **Fig 146-11**	*P* **131**	*L* **40**	# 342

Thompson, Geoff   GraCaSI S.A.

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

Improve clarity of 1st note, remove undefined term.

SuggestedRemedy

Change text to read: The "recovered_clock" shown indicates the delivery of the recovered clock back to PMA TRANSMIT in SLAVE mode for loop timing.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **147**	*SC* **147.1.1**	*P* **164**	*L* **29**	# 417

Jones, Peter   Cisco

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

Editorial cleanup

SuggestedRemedy

Change "Auto-Negotiation
for 10BASE-T1S is defined in Clause 98 and available only while not in multidrop mode." to
"Auto-Negotiation
for 10BASE-T1S is defined in Clause 98 and is not available in multidrop mode."

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 U/unsatisfied Z/withdrawn
SORT ORDER: Clause, Subclause, page, line

Cl **147**
SC **147.1.1**

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Cl **147**   *SC* **147.1.2**   *P* **164**   *L* **46**   # 361
Baggett, Tim   Microchip

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

The term "DME" is not defined at its first use in Clasue 147 and later uses either full "Differential Manchester Encoding" or redefine "Differential Manchester Encoding (DME)".

SuggestedRemedy

On Page 146 Line 64 (first use of DME), change "DME" to "differential Manchester encoding (DME)", and replace all subsequent references of "Differential Manchester Encoding" or "differential Manchester encoding (DME)" in Clause 147 to simply "DME". See P181 L1, P181 L15, and P183 L29.

Editorial license to mode the 'first use' definition of "differential Manchester encoding (DME)" if its location changes during comment resolution.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
TODO:
- 164/46: change "two level DME" to "two level Differential Manchester Encoding (DME)"
- 181/1: change "employing Differential Manchester Encoding" to "employing DME"
- 181/15: change "using Differential Manchester Encoding (DME)" to "using DME"
- 183/29: change "encoded using Differential Manchester Encoding (DME)" to "DME"

Cl **147**   *SC* **147.2**   *P* **165**   *L* **31**   # 474
Law, David   HPE

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

While Clause 146 'Physical Coding Sublayer (PCS), Physical Medium Attachment (PMA) sublayer and baseband medium, type 10BASE-T1L' contains subclause 146.1.3 'Conventions in this clause' which defines, for example, the state diagram conventions, I don't see similar subclauses in clauses 147 and 148 which also contain state diagrams.

SuggestedRemedy

Add subclauses to the Clauses 147 and 148 to define the conventions used in these clauses too. This could potentially be achieved by cross-referencing subclause 146.1.3.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Copy 146.1.3 (and 146.1.3.1-146.1.3.3) to the new sub-clause 147.1.3 (and 147.1.3.1-147.1.3.3)

Cl **147**   *SC* **147.3.2.2**   *P* **170**   *L* **3**   # 461
McClellan, Brett   Marvell

Comment Type **ER**   *Comment Status* **D**   *Editorial*

txcnt is a counter and should be moved into a counters subclause

SuggestedRemedy

insert subclause 147.3.2.4 Counters prior to 147.3.2.4 Abbreviations and renumber accordingly. Move txcnt definition to the new subclause.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **147**   *SC* **147.3.5**   *P* **179**   *L* **15**   # 315
Xu, Dayin   Rockwell Automation

Comment Type **ER**   *Comment Status* **D**   *Editorial*

"CRS is generated by . is CARRIER_OFF" does not belong this subclause

SuggestedRemedy

Move this paragragh (line 15-17) after line 23 on page 179

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Already dealt with by #381

Cl **147**   *SC* **147.3.6**   *P* **179**   *L* **24**   # 316
Xu, Dayin   Rockwell Automation

Comment Type **ER**   *Comment Status* **D**   *Editorial*

Delete the line 24 "CRS is generated . variables"

SuggestedRemedy

Delete the line 24 "CRS is generated . variables"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Already dealt with by #381

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Cl* **147**   Page 11 of 17
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   *SC* **147.3.6**   11/4/2018 6:35:38 PM
SORT ORDER: Clause, Subclause, page, line

Cl **147**   *SC* **147.3.6**   *P* **179**   *L* **25**   # 381
Beruto, Piergiorgio   Canova Tech Srl

Comment Type **ER**   *Comment Status* **D**   *Editorial*

Text changes from approved resolution of comment #649 in draft 2.0 didn't meet the specs in draft 2.1. Unfortunately the description of CRS is a critical part of the specifications, thus this comment is a required editorial.

SuggestedRemedy

Change "CRS is generated by PCS Receive as the logical OR of the "transmitting" and "receiving" variables." to "CRS is generated by mapping the PMA_CARRIER.indication(pma_crs) primitive to the MII signal CRS.
CRS shall be asserted when the pma_crs parameter is CARRIER_ON.
CRS shall be de-asserted when the pma_crs parameter is CARRIER_OFF."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
TODO: the requested text (beside the 2 typos) is already there in "147.3.5 Collision detection" and moving it to "147.3.6 Carrier sense" requires other (old) text to be removed, so the TODOs are as follows:
- 179/25: delete the following text from "147.3.6 Carrier sense":
====
CRS is generated by PCS Receive as the logical OR of the "transmitting" and "receiving" variables.
====
- 179/15-18: move the following 3 lines (1 header and 2 list items) to the end of "147.3.6 Carrier sense" and apply standard list style to it (including "keep with next"):
====
CRS is generated by mapping the PMA_CARRIER.indication (pma_crs) primitive to the MII signal CRS:
a) CRS shall be asserted when the pma_crs parameter is CARRIER_ON.
B) CRS shall be deasserted when the pma_crs parameter is CARRIER_OFF.
====
Note: "B)" is not capital, but Access keeps auto-fixing it.
- 175/6-10: remove the definition of "receiving" from "147.3.3.2 Variables"
- 177: remove the manipulation of "receiving" from states WAIT_SYNC, SYNCING and WAIT_SSD

Cl **147**   *SC* **147.4.1**   *P* **181**   *L* **8**   # 318
Xu, Dayin   Rockwell Automation

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

Add reference of the PMA management entity

SuggestedRemedy

Add "(see 1.2294.15 in 45.2.1.186c.1)" after " the management entity"

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
The management entity has many ways of communicating a reset. Clause 30 and Clause 45 are 2 optional, but specified ways. Just saying the management entity is more correct, without the reference.

Cl **147**   *SC* **147.4.2**   *P* **181**   *L* **12**   # 319
Xu, Dayin   Rockwell Automation

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

Reword the sentence

SuggestedRemedy

Change the sentence from " During transmission, PMA_UNITDATA.request conveys to the PMA using tx_sym the value of the symbols to be sent over the single transmit pair." to " During transmission, PMA_UNITDATA.request conveys the tx_sym variable to the PMA. The value of the tx_sym variable is sent over the single balanced pair of conductors, BI_DA."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **147**   *SC* **147.8**   *P* **188**   *L* **31**   # 421
Jones, Peter   Cisco

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

"mixing segment" is already defined in 1.4.332 mixing segment

SuggestedRemedy

Change "The term "mixing segment" used in this clause refers to single balanced pair of conductors which may have more than two MDIs attached." to "The 10BASE-T1S mixing segment (1.4.332) is a single balanced pair of conductors which may have more than two MDIs attached".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Cl* **147**   Page 12 of 17
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   *SC* **147.8**   11/4/2018 6:35:38 PM
SORT ORDER: Clause, Subclause, page, line

Cl **147**　　*SC* **147.8.3**　　　*P* **189**　　*L* **14**　　# 422
Jones, Peter　　　　　　　　　　Cisco

Comment Type **E**　　*Comment Status* **D**　　　　　*Editorial*
Editorial cleanup - 147.8.1 and 147.8.3 use inconsistent language for the same thing. "between any two MDI attachment points" vs "between any pair of MDI attachment points."

SuggestedRemedy
Change "between any pair of MDI attachment points." to "between any two MDI attachment points."

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

Cl **148**　　*SC* **148**　　　*P* **201**　　*L* **1**　　# 389
Beruto, Piergiorgio　　　　　　　Canova Tech Srl

Comment Type **E**　　*Comment Status* **D**　　　　　*Editorial*
All timer names are uppercase, but it appears that in other clauses these are lowercase.

SuggestedRemedy
Change all timer names to lowercase across clause 148. Implement this comment after all other comments have been resolved.

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

Cl **148**　　*SC* **148.1**　　　*P* **201**　　*L* **14**　　# 423
Jones, Peter　　　　　　　　　　Cisco

Comment Type **E**　　*Comment Status* **D**　　　　　*Editorial*
Which part of clause 22 is being referred to?

SuggestedRemedy
Change "When disabled, the system operates as specified in Clause 22." to "When disabled, the system operates as defined in Clause 22 Reconciliation Sublayer ".

Proposed Response　　　*Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE.
Change "When disabled, the system operates as specified in Clause 22." to "When disabled, the system operates as defined in Clause 22 RS".

Cl **148**　　*SC* **148.2**　　　*P* **201**　　*L* **18**　　# 424
Jones, Peter　　　　　　　　　　Cisco

Comment Type **ER**　　*Comment Status* **D**　　　　　*Editorial*
Editorial cleanup. Throughout 148, use "station" instead of "PHY" when referring to a device on the mixing segment

SuggestedRemedy
Throughout clause 148, when referring to a network mode, change "each PHY", "the PHY", ... to "each station", "the station", ..

Proposed Response　　　*Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE.
Station is the whole attached LAN station, including the MAC. That would likely create confusion about PLCA being an RS.

Propose to make the following changes instead:

- p201 line 18: change "The working principle of PLCA is that each PHY on a multidrop network is granted transmit opportunities based on its assigned node ID unique to the local collision domain (set by management interface). At any time, only the PHY owning a transmit opportunity is allowed to send data over the medium, therefore avoiding physical collisions."

into

"The working principle of PLCA is that transmit opportunities on a multidrop network are granted based on a node ID unique to the local collision domain (set by management interface). At any time, only the owner of the current transmit opportunity is allowed to send data over the medium, therefore avoiding physical collisions."

- p201 line 24: change "Transmit opportunities are generated in a round-robin fashion every time the PHY with node ID = 0 signals a BEACON on the medium, indicating the start of a new cycle. This happens after each node has had a transmission opportunity."

into

"Transmit opportunities are generated in a round-robin fashion every time the node with ID = 0 (PLCA coordinator) signals a BEACON on the medium, indicating the start of a new cycle. This happens after each node has had a transmission opportunity."

- p202 line 38: change "PHY" with "Physical Layer entity"

- p205 line 8: change "data when PHY transmit opportunity is met" with "data when the transmit opportunity is met"

- p206 line 17: change
"148.4.4 Requirements for specific RS and PHY specification
Specific RS and PHY specifications that include PLCA capability shall comply with the

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
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Cl **148**
SC **148.2**

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requirements
defined in this subclause."

with

"148.4.4 Requirements for the PHY
PHYs supporting PLCA shall comply with the requirements defined in this subclause"

p. 207 lines 33, 39, 42, 45, 46, 51: change "PHYs" with "nodes"
p. 208 lines 1, 4, 7, 18, 21, 26, 28, 29, 33, 34, 39: change "PHYs" with "nodes" and "PHY" with "node"
p. 208 line 24: change "the PHY waits for all nodes" with "this node waits for all other nodes"
p. 211 lines 50, 53: change "PHYs" with "nodes"
p. 212 lines 9, 47: change "PHYs" with "nodes" and "PHY" with "node"
p. 212 line 48: change "PHYs" with "PLCA RS"
p. 213 lines 2, 44: change "PHYs" with "nodes" and "PHY" with "node"
p. 213 line 2: change "PHYs" with "nodes" and "PHY" with "node"

| *Cl* **148** | *SC* **148.2** | *P* **201** | *L* **18** | # | 425 |

Jones, Peter   Cisco

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

SuggestedRemedy
Change " is granted transmit opportunities based on its assigned node ID ." to " is granted transmit opportunities in sequence based on its assigned node ID ."

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

| *Cl* **148** | *SC* **148.3** | *P* **201** | *L* **37** | # | 374 |

Beruto, Piergiorgio   Canova Tech Srl

Comment Type **E**   *Comment Status* **D**   *Editorial*
TSSI is not defined for mixing-segment networks, while PLCA is only defined for mixing-segment.

SuggestedRemedy
Remove "Ethernet support for time synchronization protocols is defined in Clause 90."

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

| *Cl* **148** | *SC* **148.3** | *P* **201** | *L* **37** | # | 172 |

Anslow, Pete   Ciena

Comment Type **E**   *Comment Status* **D**   *Editorial*
Comment #118 against D2.0 was:
Cl 148, SC 148.3, P 173, L 38
Comment
"Clause 90" is an external cross-reference, so should be in forest green
SuggestedRemedy
Apply Character Tag "External" to "Clause 90"
ACCEPT
However, this has not been implemented.

SuggestedRemedy
Apply Character Tag "External" to "Clause 90"

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE.
The commenter is right.
However, this text is going to be removed by accepting #374.

| *Cl* **148** | *SC* **148.3** | *P* **202** | *L* **18** | # | 468 |

Law, David   HPE

Comment Type **E**   *Comment Status* **D**   *Editorial*
As this figure is showing the 'Relationship of PLCA generic Reconciliation Sublayer to the ISO/IEC OSI reference model and the IEEE 802.3 Ethernet Model' only the Reconciliation Sublayer should be cross-hatched.

SuggestedRemedy
See comment.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT.
Duplicate of #173

| *Cl* **148** | *SC* **148.3** | *P* **202** | *L* **18** | # | 173 |

Anslow, Pete   Ciena

Comment Type **E**   *Comment Status* **D**   *Editorial*
In Figure 148-1 the MDI should not be shaded

SuggestedRemedy
Remove the shading

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

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Cl* **148**   Page 14 of 17
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   *SC* **148.3**   11/4/2018 6:35:38 PM
SORT ORDER: Clause, Subclause, page, line

Cl **148**   *SC* **148.4.1**   *P* **202**   *L* **36**   *#* 427
Jones, Peter   Cisco

Comment Type **ER**   *Comment Status* **D**   *Editorial*
    PLCA is not a "generic Reconciliation sublayer (gRS)"

SuggestedRemedy
    delete "Within the scope of Clause 148, the term generic Reconciliation sublayer (gRS) is
    used to denote
    any IEEE 802.3 Reconciliation sublayer (RS) used to interface a MAC with any PHY
    supporting the PLCA
    capability through the MII."

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

Cl **148**   *SC* **148.4.1.1**   *P* **203**   *L* **7**   *#* 373
Beruto, Piergiorgio   Canova Tech Srl

Comment Type **E**   *Comment Status* **D**   *Editorial*
    Figure 148-2 is wrong. It should not contain references to TS service interface, nor
    TS_SFD detect blocks. Besides, Figure 148-3 already contains all the information inteded
    to be provided by Figure 148-2.

SuggestedRemedy
    remove subclause 148.4.1.1 along with figure 148-2.

    In clause 148.4.2 replace:
    "PLCA state diagrams are contained in the generic RS as shown in Figure 148-3.
    Interaction with optional
    Clause 90 (Ethernet support for time synchronization protocols) is also depicted."
    with :
    "Figure 148-3 depicts the RS interlayer service interfaces. The PLCA RS contains the
    Control and Data state diagrams, the variable delay line and command detect logic."

    In figure 148-3 add a dashed vertical line with label as in current Figure 148-2 indicating
    the PLS service interface boundary

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

Cl **148**   *SC* **148.4.4.1.1.**   *P* **206**   *L* **35**   *#* 428
Jones, Peter   Cisco

Comment Type **E**   *Comment Status* **D**   *Editorial*
    Saying "PHY Specifications" or "RS Specifications" is redundant. It should just be "PHYs"
    or "RSs". This is in (at least) 148.4.4, 148.4.4.1.1, 148.4.4.1.2 .

SuggestedRemedy
    Change "PHY Specifications" to "PHYs" and "RS Specifications" to "RSs" thoughout
    clause.

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT IN PRINCIPLE.
    I think RSs is not a proper abbreviation for Reconciliation Sublayers, just use RS.

    Change "PHY Specifications" to "PHYs" and "RS Specifications" to "RS" throughout clause.

Cl **148**   *SC* **148.4.5.1**   *P* **207**   *L* **29**   *#* 174
Anslow, Pete   Ciena

Comment Type **E**   *Comment Status* **D**   *Editorial*
    This says "as shown in Figure 148-4 and Figure 148-4" which is the same figure number
    twice.

SuggestedRemedy
    Change the second part of the state diagram "PLCA Control state diagram (continued)" to
    be Figure 148-5

Proposed Response   *Response Status* **W**
    PROPOSED REJECT.
    Issue is solved by #401
    We already accepted comment on D2.0 asking for joining 148-4 and 148-5 into a single
    figure.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Cl* **148**   Page 15 of 17
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   *SC* **148.4.5.1**   11/4/2018 6:35:38 PM
SORT ORDER: Clause, Subclause, page, line

Cl **148**	*SC* **148.4.5.1**	*P* **208**	*L* **17**	#	430

Jones, Peter   Cisco

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

editorial cleanup

SuggestedRemedy

Change "switch to RESYNC state if a BEACON is received, starting a new cycle. This can only happen to PHYs with local_nodeID != 0." to "switch to RESYNC state if a BEACON is received with local_nodeID != 0 starting a new cycle."
PHYs with local_nodeID != 0"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change "switch to RESYNC state if a BEACON is received, starting a new cycle. This can only happen to PHYs with local_nodeID != 0." to "switch to RESYNC state if a BEACON is received with local_nodeID != 0, which starts a new cycle."

Cl **148**	*SC* **148.4.5.1**	*P* **208**	*L* **20**	#	469

Law, David   HPE

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

The abbreviation 'TO' in 'In this case the PHY skips his TO and waits ...' is not defined, please define the abbreviation 'TO' on first use.

SuggestedRemedy

See comment.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change "skips his TO and" to "skips its transmit opportunity (TO) and"

Cl **148**	*SC* **148.4.5.1**	*P* **209**	*L* **16**	#	74

Slavick, Jeff   Broadcom

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

In Figure 148-4, isn't the command to start a timer "Start" regardless of whether the time is running or halted.

SuggestedRemedy

Change "restart" to "start" in the RECOVER state of Figure 148-4 1 of 2

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Search and replace all occurrences of "restart <timer name>" with "start <timer name>" troghout all C147 and C148 state diagrams.

Cl **148**	*SC* **148.4.5.2**	*P* **212**	*L* **6**	#	434

Jones, Peter   Cisco

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

The draft contains variants of a "If MDIO is not implemented, a similar functionality shall be provided by another interface" 10 times, and variants of "When MDIO is not present, the functionality of YYYY can be provided by equivalent means." 5 times. This redundant text does not improve the draft. Clause 45 already says "The MDIO electrical interface is optional. Where no physical embodiment of the MDIO exists, provision of an equivalent mechanism to access the registers is recommended."

SuggestedRemedy

remove all cases of "If MDIO is not implemented, a similar functionality shall be provided by another interface" and "When MDIO is not present, the functionality of YYYY can be provided by equivalent means." throughout the draft.

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
While MDIO is optional, calling out where equivalent functionality must be provided (versus simply where the MDIO operation truly is optional, and, perhaps optional control isn't there if the MDIO isn't in place) is 802.3 standard editorial practice. Omitting these statements would reduce clarity and, experience serves, result in additional required comments during balloting.

Cl **148**	*SC* **148.4.6.1**	*P* **213**	*L* **10**	#	436

Jones, Peter   Cisco

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

editorial cleanup

SuggestedRemedy

change "PLCA Data state diagram is responsible for detecting when the MAC is ready to send a packet and delay the transmission until a transmit opportunity is met" to "PLCA Data state diagram is responsible for detecting when the MAC is ready to send a packet and delaying the transmission until a transmit opportunity is detected"

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 U/unsatisfied Z/withdrawn
SORT ORDER: Clause, Subclause, page, line

Cl **148**
SC **148.4.6.1**

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Cl **148**   *SC* **148.4.6.1**   *P* **213**   *L* **16**   # 404

Asmussen, Jes   Rockwell Automation

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

This paragraph is missing reference of the IDLE state.

SuggestedRemedy

Modify sentence to say "When PLCA functions are enabled, the PLCA Data state diagram transitions to the IDLE state and waits for the MAC to start a transmission or the PHY to assert carrier sense".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change "When PLCA functions are enabled, the PLCA Data state diagram waits for the MAC to start a transmission
or the PHY to assert carrier sense."

to

"When PLCA functions are enabled, the PLCA Data state diagram transitions to the IDLE state and waits for the MAC to start a transmission or the PHY to assert carrier sense"

Accepted in principle because suggested remedy didn't include what to change exactly.

Cl **148**   *SC* **148.5.1**   *P* **208**   *L* **36**   # 433

Jones, Peter   Cisco

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

Sentence doesn't make sense " PLCA switch in RECEIVE state to wait until the end of the transmission and increment curID properly."

SuggestedRemedy

Change to "PLCA switches to RECEIVE state to wait until the end of the transmission and increment curID properly."

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 U/unsatisfied Z/withdrawn
SORT ORDER: Clause, Subclause, page, line

Cl **148**
SC **148.5.1**

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