Cl **75** *SC* **75.5.1** *P* **582** *L* **8** # 1

Hajduczenia, Marek — Bright House Network

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

Extra empty spaces

SuggestedRemedy

Remove lines 8-12

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **30** *SC* **30.5.1.1.17** *P* **439** *L* **54** # 2

Hajduczenia, Marek — Bright House Network

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

If a Clause 45 MDIO Interface is present, then this attribute maps to the FEC corrected blocks counter(s) (see 45.2.7.5 and 45.2.1.94 for 10GBASE-R, 45.2.3.39 for 10GBASE-PR and 10/1GBASE-PRX, 45.2.1.116 for BASE-R, and 45.2.1.103 for RS-FEC).;

Reference to 45.2.7.5 AN package identifier (Registers 7.14 and 7.15) is not correct and should point to 45.2.8.5 FEC corrected blocks counter (Register 29.10)

SuggestedRemedy

Change reference from 45.2.7.5 to 45.2.8.5

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **30** *SC* **30.5.1.1.18** *P* **440** *L* **25** # 3

Hajduczenia, Marek — Bright House Network

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

If a Clause 45 MDIO Interface is present, then this attribute maps to the FEC uncorrectable blocks counter(s) (see 45.2.7.5 and 45.2.1.95 for 10GBASE-R, 45.2.3.40 for 10GBASE-PR and 10/1GBASE-PRX, 45.2.1.117 for BASE-R, and 45.2.1.104 for RS-FEC).;

Reference to 45.2.7.5 AN package identifier (Registers 7.14 and 7.15) is not correct and should point to 45.2.8.6 FEC uncorrected blocks counter (Register 29.11)

SuggestedRemedy

Change reference from 45.2.7.5 to 45.2.8.6

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **45** *SC* **45.2.3** *P* **175** *L* **24** # 4

Anslow, Pete — Ciena

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

Register 3.23 is not allocated to anything, but it is not marked as "Reserved" in Table 45-119.
Similar issue with register 4.23 in Table 45-164.

SuggestedRemedy

Show register 3.23 as reserved in Table 45-119.
Show register 4.23 as reserved in Table 45-164.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **81** *SC* **81.5.3.2** *P* **124** *L* **25** # 5

Anslow, Pete — Ciena

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

In PICS item PL7, "RXD<0:63>" should be "RXD<63:0>" as it is in the referenced subclause 81.1.7.2.3

SuggestedRemedy

Change "RXD<0:63>" to "RXD<63:0>"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **82** *SC* **82.2.3.7** *P* **139** *L* **4** # 6

Anslow, Pete — Ciena

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

82.2.3.7 contains "TXD<0:7> and RXD<0:7>" but everywhere else in this clause the higher number comes first.

SuggestedRemedy

Change "TXD<0:7> and RXD<0:7>" to "TXD<7:0> and RXD<7:0>"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **86A** *SC* **86A.5.3.3** *P* **662** *L* **11** # 7

Anslow, Pete Ciena

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

86A.5.3.3 includes "If the test pattern is PRBS9, the transitions within sequences of five zeros and four ones, and nine ones and five zeros, respectively, are measured. These are bits 10 to 18 and 1 to 14, respectively, where bits 1 to 9 are the run of nine zeros."
However, if the nine ones and five zeros are bits 1 to 14, then bits 1 to 9 cannot be a run of nine zeros.

SuggestedRemedy

Change "where bits 1 to 9 are the run of nine zeros" to "where bits 1 to 9 are the run of nine ones"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

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

Anslow, Pete Ciena

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

Changes have been made to the P802.3bm draft in response to the 38 comments received during the second sponsor ballot recirculation. These changes should also be made to the revision draft.

SuggestedRemedy

Make the changes shown in:
http://www.ieee802.org/3/bm/private/P802d3bm-D3p3_CMP.pdf
to the revision draft.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **75** *SC* **75.7.10** *P* **587** *L* **32** # 9

Anslow, Pete Ciena

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

75.7.10 says "See 58.7.9 for details of the measurement for 1 Gb/s PHYs and 52.9.10 for 10 Gb/s PHYs."

58.7.9 gives details of the dispersion and reflection to be used in the test for the 1 Gb/s PHYs in Table 58-12. However, for the 10 Gb/s PHYs the dispersion and reflection level to be used is not stated.

SuggestedRemedy

Add text and a Table to define the dispersion and reflection levels to be used for the TDP test for 10 Gb/s PHYs as per the changes shown in anslow_1_0115

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **45** *SC* **45.2.1.39.4** *P* **91** *L* **11** # 10

Anslow, Pete Ciena

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

In 45.2.1.39.3 "Max SNR margin (1.59.13:5)" the last sentence is:
"The SNR margin is in units of dB, derived by dividing the value of bits 13:5 by 4." which make sense.
However, the last sentence of:
45.2.1.39.4 "Target SNR margin (1.60.8:0)" and
45.2.1.39.5 "Minimum SNR margin (1.61.8:0)"
is identical to that quoted for 45.2.1.39.3 above which doesn't make sense as the bit range is not appropriate for these subclauses.

SuggestedRemedy

In 45.2.1.39.4 change:
"The SNR margin is in units of dB, derived by dividing the value of bits 13:5 by 4." to:
"The target SNR margin is in units of dB, derived by dividing the value of bits 8:0 by 4."
In 45.2.1.39.5 change:
"The SNR margin is in units of dB, derived by dividing the value of bits 13:5 by 4." to:
"The minimum SNR margin is in units of dB, derived by dividing the value of bits 8:0 by 4."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **45** *SC* **45.2.3.1.2** *P* **177** *L* **47** # 11

Anslow, Pete Ciena

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

45.2.3.1.2 and 45.2.3.2.7 (2 instances) contain "the PCS type selection field (3.7.1:0)"
But in Table 45-123 the PCS type selection field is bits 3.7.2:0 (3 bits) not 3.7.1:0

SuggestedRemedy

In 45.2.3.1.2 and 45.2.3.2.7 (2 instances) change "3.7.1:0" to "3.7.2:0"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **45** *SC* **45.5.3.7** *P* **289** *L* **6** # 12

Anslow, Pete Ciena

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

PICS item RM32 has a subclause value of "45.2.5.9" which is the EEE wake error counter in the DTE XS section.
However 45.5.3.7 is the PCS management functions section, so this should point to 45.2.3.10 which is the EEE wake error counter for the PCS
{This was incorrect in the IEEE 802.3az-2010 amendment]

SuggestedRemedy

Change "45.2.5.9" to "45.2.3.10"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **78** *SC* **78.4.3** *P* **51** *L* **38** # 13

Anslow, Pete Ciena

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

The second to last paragraph of 78.4.3 starts:
"The transmitting link partner may advertise a change of Fast_Wake_Enable through the aLldpXdot3LocTxFW (30.12.3.1.24) attribute in the LldpXdot3LocSystemsGroup managed object class (30.12.2).
But 30.12.3.1.24 is aLldpXdot3RemTxFw, i.e. Rem not Loc and it is in 30.12.3 not 30.12.2.
Also, the variable names in 78.4.3 have "FW" where the same variable in 30.12 has "Fw"

SuggestedRemedy

Change "aLldpXdot3LocTxFW (30.12.3.1.24)" to "aLldpXdot3LocTxFw (30.12.2.1.24)"
Change the "FW" in variable names in 78.4.3 to match those in 30.12

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **79** *SC* **79.5.3** *P* **73** *L* **18** # 14

Anslow, Pete Ciena

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

Item *EEFW has a subclause of "79.5.7" but that is another table in the PICS. The subclause reference should be "79.3.6"

SuggestedRemedy

Change the *EEFW subclause entry from "79.5.7" to "79.3.6"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **80** *SC* **80.5** *P* **98** *L* **33** # 15

Anslow, Pete Ciena

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

In the last row of Table 80-7, "At PCS receive (with RS-FEC)" has an entry of <curly equals> 2 UI in the 25G column.
This should be should be <curly equals> 10 UI as this column is for the 25G PMD lane rate (same value as for the At RS-FEC transmit row). 2 UI is for the 5G PCS lane rate.

SuggestedRemedy

In the last row of Table 80-7, "At PCS receive (with RS-FEC)" in the 25G column, change <curly equals> 2 UI to <curly equals> 10 UI.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **82** *SC* **82.7.6.4** *P* **172** *L* **31** # 16

Anslow, Pete Ciena

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

In the Feature entry of item AN1* and the Value/Comment entry for item AN2, the word "PMD" appears part way down the list rather than at the end.
Also the * in "AN1*" should be at the start not the end.

SuggestedRemedy

Move the word "PMD" to the end of the list (2 instances) and change "AN1*" to "*AN1"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **33** *SC* **33.1.4** *P* **609** *L* **43** # 17

Anslow, Pete Ciena

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

In the bottom row of Table 33-1, in "twisted-pair cabling per 14.4 and 14.5", "14.4" and "14.5" should be cross-references

SuggestedRemedy

Make "14.4" and "14.5" cross-references.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **59** *SC* **59.3.1** *P* **138** *L* **10** # 18

Anslow, Pete Ciena

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

Table 59-4, Table 60-4, Table 60-7, and Table 60-10 all use a blank row as a separator between a set of spot values and the range from 1480 nm to 1500 nm. This is not appropriate as blank cells in such tables should contain an em dash according to the IEEE style manual (13.3.2).
A comment was made regarding this against P802.3bk D2.0 See:
http://www.ieee802.org/3/bk/comments/8023bk_D20_resolved.pdf#page=12
The comment included:
"Remove the blank row - change the ruling thickness between rows to provide a separator."
The response included:
"Blank row remains as is. The blank row in Table 60-8b matches that used in Tables 59-4, 60-4 and 60-7 of IEEE Std 802.3-2012. Replacing the blank row with a thick line in all of these tables would be more appropriate to a revision of the base standard 802.3."

SuggestedRemedy

Replace the blank row in Table 59-4, Table 60-4, Table 60-7, and Table 60-10 with a thicker separator line.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

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

Anslow, Pete Ciena

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

The 802.3 words page:
http://www.ieee802.org/3/WG_tools/editorial/requirements/words.html
asks for "common-mode (when used as an adjective)".
Places in 802.3 that do not conform with this are:
23.12.4.13 PME45 and PME46, 32.6.1.3.6, 32.6.1.4.3 (2 instances), 32.13.5.8 PME56, PME65, Figure 54-3, Figure 55-41 (2 instances), Figure 55-42 (2 instances), Figure 85-5, 70.7.1.5, 71.7.1.4, 72.7.1.4

SuggestedRemedy

Change to "common-mode" in all of the identified instances

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **00** *SC* **0** *P* *L* # 20

Anslow, Pete Ciena

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

The 802.3 words page:
http://www.ieee802.org/3/WG_tools/editorial/requirements/words.html
asks for "implementor (not implementer)"
However the 2014 IEEE-SA Standards Style Manual requires the boilerplate text to include "Implementers of IEEE Standards documents ..." as per the beginning of Section 1 of this draft.
The best way to remove this inconsistency seems to be to change the 802.3 recommended spelling to "implementer".

SuggestedRemedy

Change all instances of "implementor" to "implementer" throughout the draft and also change the 802.3 words page:
http://www.ieee802.org/3/WG_tools/editorial/requirements/words.html
to match.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **03** *SC* **3.1.1** *P* **85** *L* **2** # 21

Anslow, Pete — Ciena

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

The second to last paragraph of 3.1.1 contains "... that portion of the packet from the dEstination Address field through ..." where the capitalization of "dEstination" is incorrect.

SuggestedRemedy

Change "dEstination" to "Destination"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **04A** *SC* **4A** *P* **577** *L* **3** # 22

Anslow, Pete — Ciena

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

Annex 4A is a normative Annex but in Framemaker the heading "Annex 4A" has a paragraph tag of "AI,Annex" which is the tag for an informative Annex.
This has the effect that the Table of Contents will say (informative) when it is generated with the format used for the published version. (see page 53 (page li) in the 802.3-2012 table of contents)

SuggestedRemedy

Change paragraph tag to "AN,Annex".
[It would also be helpful to import the reference pages from one of the other sections to the section 1 TOC so that it is formatted for Annex titles as per the published standard.]

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **77** *SC* **77.3.6.2** *P* **707** *L* **9** # 23

Remein, Duane — Huawei Technologies

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

Shall with no PICS statement.
The following requirement is not tracked in the PICS
d) Queue #n Report. This value represents the length of queue #n at time of REPORT message generation. The reported length shall be adjusted and rounded up to the nearest time_quantum to account for the necessary inter-frame spacing and preamble. FEC parity overhead is not included in the reported length. The Queue #n Report field is an unsigned 16 bit integer representing the transmission request in units of time_quanta. This field is present only when the corresponding flag in the Report bitmap is set.

SuggestedRemedy

Add PICS
MP8a | 77.3.6.2 | REPORT Queue #n length roundeing | ONU:M | Yes[]

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

The new PICS would be MP9 and the existing PICS MP9 and onward would be renumbered accordingly.

Also correct the typo "roundeing".

Add PICS
MP9 | 77.3.6.2 | REPORT Queue #n length rounding | ONU:M | Yes[]

Renumber existing PICS MP9 and onward accordingly.

Cl **53** *SC* **53.8.2.1** *P* **541** *L* **31** # 24

Ran, Adee Intel

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

The change of reference from 53.7.1 to 48B.3, although suggested by me in maintenance request 1258, turned out to be incorrect. Annex 48B.3 is about jitter output test methodology, quite different from jitter tolerance which is discussed in this subclause. This annex also uses a different metodology (curve fitting to a dual-Dirac model) than the one used here (full BERT scan).

The correct method is based on the transmit jitter measurement in clause 53 (but subclause 53.8.1, unlike the original reference). "Based on" but not "defined in". Subclause 53.8.2.1 actually lists the differences from 53.8.1 - for example, a minimum stress mask (figure 53-4) instead of a maximum jitter mask (figure 53.3).

SuggestedRemedy

Delete the sentence

"The test method for verification of the input jitter is defined in 48B.3."

Instead, add the following paragraph at the beginning of 53.8.2.1 (before the current first paragraph):

"The test method for verification of the input jitter is based on the one defined in 53.8.1, with the following requirements."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See comment #49

Cl **46** *SC* **46.4.2.2** *P* **328** *L* **7** # 25

Ran, Adee Intel

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

Subclause 46.4.2.2, titled "State diagram", is empty. Its parent subclause 46.4.2 titled "Transmit LPI state diagram" contains the state diagram mentioned. There seems to be no need for a nested subclause.

SuggestedRemedy

Delete subclause 46.4.2.2.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **01** *SC* **1.4.304** *P* **79** *L* **20** # 26

Ran, Adee Intel

Comment Type **E** *Comment Status* **D** *adhoc*

ordered_set is defined with reference only for 1000BASE-X PCS (clause 36), but also used in other places: clauses 46 (RS and XGMII), 48 (10GBASE-X PCS), 49 (10GBASE-R PCS), 55 (10GBASE-T), 81 (RS, XLGMII and CGMII) and 82 (40GBASE-R and 100GBASE-R PCS).

It does not seem necessary to list all the clauses that use this term.

SuggestedRemedy

Delete "As used in the 1000BASE-X PCS".

Delete the last sentence "(See IEEE Std 802.3, Clause 36.)".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Option 1: PROPOSED REJECT.
The definition is specific to Clause 36 and is correct as it written. For example, in Clause 82 for example ordered sets are used to extend the ability to send control and status information over the link such as remote fault and local fault status but not for the delineation of a packet or synchronization between the transmitter and receiver circuits at opposite ends of a link.

Option 2: PROPOSED ACCEPT IN PRINCIPLE.
Delete the definition.

Option 3: PROPOSED ACCEPT IN PRINCIPLE

Replace the definition with the following.
"ordered set: A single special code-group, a combination of special and data code-groups, or a combination of a control character and data characters that are used to send control and status information such as remote fault and local fault status over the link. Also used by the 1000BASE-X and 10GBASE-X PCS for delineation of a packet and synchronization between the transmitter and receiver circuits at opposite ends of a link. (See IEEE Std 802.3, Clause 36, Clause 48, Clause 49, Clause 55, and Clause 82)."

Also see #27.

Cl **46** *SC* **46.1.7.5.3** *P* **312** *L* **39** # 27

Ran, Adee Intel

Comment Type **E** *Comment Status* **D** *adhoc*

Mixed usage of "ordered set" and "ordered_set" in this clause (compare to page 323 line 18).

"ordered set" also appears in 46.1.7.5.3, 46.3.4, 46.6.3.2, 49.2 (multiple subclauses), 49.3.4.1, 81.1.7.5.3, 81.3.4, 81.4.3.2, 82.2 (multiple subclauses), 82.7.4.

"ordered_set" is defined in clause 1 and used throughout clause 36, so should probably be used consistently in all these places. But it can be corrected to "ordered set" consistently.

SuggestedRemedy

Change "ordered set" to "ordered_set", or vice versa, consistently throughout the standard.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Replace instances of "ordered_set" with "ordered set".

Cl **92** *SC* **92.8.3.2** *P* **416** *L* **36** # 28

Ran, Adee Intel

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

Several types of return loss are used here. Equations 92-1 and 92-2 refer just to "return loss" without saying which one, while other equations state the specific type of return loss.

SuggestedRemedy

Insert "differential" before "return loss" in the description of 92-1.
Insert "common-mode to differential" before "return loss" in the description of 92-2.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

For equation 92-1, on page 416, line 36 change:
"is the return loss at frequency f" to:
"is the differential output return loss at frequency f"
For equation 92-2, on page 416, line 52 change:
"is the return loss at frequency f" to:
"is the common-mode to differential mode output return loss at frequency f"
For equation 92-20, on page 424, line 21 change:
"is the return loss at frequency f" to:
"is the differential input return loss at frequency f"
For equation 92-21, on page 424, line 33 change:
"is the return loss at frequency f" to:
"is the differential to common-mode input return loss at frequency f"

Cl **93A** *SC* **93A.2** *P* **694** *L* **74** # 29

Ran, Adee Intel

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

Index mismatch in equation 93A-50: n is not defined.

SuggestedRemedy

Change "i" to "n" in summation limits.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **94** *SC* **94.3.12.6.1** *P* *L* # 30

Ran, Adee Intel

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

Items 4-6 in the list and and equation 94-15 use j as an index, but j is also defined as the imaginary unit.

SuggestedRemedy

To avoid confusion, change index j to n in items 4-6 and equation 94-15.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Since uppercase N is already used, change the index j to k in items 4 to 6 and Equation 94-15.
In item 5 "j=sqrt(-1)" and Equation 94-16 change j to be in upright font as the IEEE style guide requires mathematical constants to be "set in upright (Roman) text".

Cl **73** *SC* **73.7.4.1** *P* **513** *L* **3** # 31

Ran, Adee Intel

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

Long sentence, confusing punctuation and phrasing.

SuggestedRemedy

Delete the comma after "10GBASE-KX4", and instead add a comma after "have disabled Auto-Negotiation".

Change "that do not provide Clause 73 Auto-Negotiation" to "but do not provide Clause 73 Auto-Negotiation"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **82** *SC* **82.2.19.2.2** *P* **151** *L* **18** # 32
Ran, Adee Intel

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

Definition of first_rx_lpi_active is related to figure 82-19. There is no state RX_LPI_ACTIVE in this diagram.

SuggestedRemedy

Change RX_LPI_ACTIVE to RX_ACTIVE.

Add cross reference to diagram (figure 82-19).

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change:
"… the receiver is in state RX_LPI_ACTIVE in the LPI receive state diagram and R_TYPE(rx_coded) = LI …" to:
"… the receiver is in state RX_ACTIVE in the LPI receive state diagram (see Figure 82-19) and R_TYPE(rx_coded) = LI …"

Cl **82** *SC* **82.2.19.3.1** *P* **166** *L* **21** # 33
Ran, Adee Intel

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

Comment is related to figure 82-19-LPI Receive state diagram.

rx_down_count is used in the diagram, but is not defined anywhere in this clause. It is defined in clause 91 with reference to 82.2.9.

SuggestedRemedy

Add definition in 82.2.19.2.2 (based on the one in clause 91):

rx_down_count
The value that results from the bit-wise exclusive-OR of the Count Down (CD3) byte and the M0 byte of the current received Rapid Alignment Marker (see 82.2.9).

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **73** *SC* **73.9.1.3** *P* **518** *L* **3** # 34
Ran, Adee Intel

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

Incorrect cross reference: link_status is set in Arbitration state diagram, 73-12.

SuggestedRemedy

Change reference from 73-11 to 73-12.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **30** *SC* **30.3.1.1.1** *P* **378** *L* **18** # 35
Ran, Adee Intel

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

Period and semicolon at end of sentence. Is this intentional?

Occurs multiple times in this clause.

SuggestedRemedy

Delete the semicolons in all such cases.

Proposed Response *Response Status* **W**

PROPOSED REJECT.

The semicolons are intentional.

The management objects in 30.3 through 30.3.7 are based on the template requirements of ISO/IEC 10165-4:1991 (the semicolon is part of the template).

Cl **53** *SC* **53.8.2.1** *P* **541** *L* **9** # 36
Ran, Adee Intel

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

Stray space in exponent "1 2".

SuggestedRemedy

Delete the space.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **72** *SC* **72.10.4.4** *P* **499** *L* **22** # 37

Healey, Adam — Avago Technologies

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

Implement revision request #1267:
Status and Support content in the PICS table for CF7 are blank.

SuggestedRemedy

Add the appropriate Status and Support content for item CF7.
Change status to "M" for Mandatory.
Chage support to "Yes [ ]"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **72** *SC* **72.10.4.5** *P* **501** *L* **45** # 38

Healey, Adam — Avago Technologies

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

Implement revision request #1268:
Status and Support content in the PICS table for TC10 are blank.

SuggestedRemedy

Add the appropriate Status and Support content for item TC10.
Change status to "M" for Mandatory.
Chage support to "Yes [ ]"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **72** *SC* **72.10.4.5** *P* **502** *L* **20** # 39

Healey, Adam — Avago Technologies

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

Implement revision request #1269:
Status and Support content in the PICS table for TC19 are blank.

SuggestedRemedy

Add the appropriate Status and Support content for item TC19.
Change status to "M" for Mandatory.
Chage support to "Yes [ ]"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **30** *SC* **30.12.1.1.1** *P* **487** *L* **44** # 40

Healey, Adam — Avago Technologies

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

The EEE TLV and EEE Fast Wake TLV are missing from the definition of the bit string for the aLldpXdot3PortConfigTLVsTxEnable attribute. The grammar can also be improved.

SuggestedRemedy

Change the contents "BEHAVIOR DEFINED AS" section to the following.

"A read-write string of 6 bits indicating, for each of the IEEE 802.3 optional LLDP TLVs, if transmit is enabled on the local LLDP agent by the network management. A "1" in the bitstring indicates transmit of the TLV is enabled, "0" indicates transmit of the TLV is disabled. The value of this attribute is preserved across reset including loss of power.

The first bit indicates if the MAC/PHY configuration/status TLV transmit is enabled, the second bit indicates if the Power via MDI TLV transmit is enabled, the third bit indicates if the deprecated Link Aggregation TLV transmit is enabled, the fourth bit indicates if the Maximum Frame Size TLV transmit is enabled, the fifth bit indicates if the EEE TLV is enabled, and the sixth bit indicates if the EEE Fast Wake TLV is enabled."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **30** *SC* **30.2.5** *P* **337** *L* **37** # 41

Healey, Adam — Avago Technologies

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

In Table 30-7, the following attributes are not assigned to any package.
aLldpXdot3RemPowerType
aLldpXdot3RemPowerSource
aLldpXdot3RemPowerPriority
aLldpXdot3RemPDRequestedPowerValue
aLldpXdot3RemPSEAllocatedPowerValue

SuggestedRemedy

Assign the attributes (mark with an X) to the "LLDP Power via MDI Remote Package".
Remove the extraneous shading from the "LLDP Power via MDI Remote Package" column.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **85** *SC* **85.8.4.2.3** *P* **236** *L* **28** # 42

Dudek, Mike QLogic

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

There is an incorrect reference. In order to characterize the insertion loss of the channel the test references shown in Figure 85-8 are needed.

SuggestedRemedy

Change Figure 85-7 to Figure 85-8.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **46** *SC* **46.1.7.3** *P* **7** *L* **42** # 43

Brown, Matt AppliedMicro

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

Reference to Figure 46-11 should be Figure 46-13

SuggestedRemedy

Change "Figure 46-11" to "Figure 46-13".
Same change is required on page 327 line 42.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

These two cross references pointed to the "Transmit LPI state diagram" in the P802.3az amendment.
Change "Figure 46-11" to "Figure 46-13" on Page 312, line 7 and Page 327, line 42.

Cl **80** *SC* **80.1.2** *P* **79** *L* **19** # 44

Kolesar, Paul CommScope

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

The stated reach of "up to at least 100 m" fails to acknowledge the 150 m capability of this PHY on OM4 cabling. Although considered officially an "engineered solution" due to a reduction in allowed connection insertion loss from 1.5 dB to 1.0 dB, this type of special restriction did not impose limiting the stated reach of 40GBASE-ER4 or 100GBASE-ER4 which are rated to 30 km without special engineering, but are stated in this table to support 40 km.

SuggestedRemedy

There are two choices to removing the inequitable handling of stated reaches in this table. The first is preferred.
1. Change 100 m to 150 m on line 19.
2. Change 40 km to 30 km on lines 27 and 53.

Proposed Response *Response Status* **W**

PROPOSED REJECT.

This topic was discussed in the P802.3ba project after the change was made to increase the reach of 40GBASE-SR4 over OM4 to 150 m. The decision was made at that time to keep the reach in the description of 40GBASE-SR4 at 100 m. Making a change in the description of 40GBASE-SR4 or 100GBASE-ER4 now when there has been no change in the specifications would cause confusion.
See also comment #45

Cl **80** *SC* **80.1.2** *P* **79** *L* **45** # 45

Kolesar, Paul CommScope

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

The stated reach of "up to at least 100 m" fails to acknowledge the 150 m capability of 100GBASE-SR10 on OM4 cabling. Although considered officially an "engineered solution" due to a reduction in allowed connection insertion loss from 1.5 dB to 1.0 dB, this type of special restriction did not impose limiting the stated reach of 40GBASE-ER4 or 100GBASE-ER4 which are rated to 30 km without special engineering, but are stated in this table to support 40 km.

SuggestedRemedy

There are two choices to removing the inequitable handling of stated reaches in this table. The first is preferred.
1. Change 100 m to 150 m on line 45.
2. Change 40 km to 30 km on lines 27 and 53.

Proposed Response *Response Status* **W**

PROPOSED REJECT.

This topic was discussed in the P802.3ba project after the change was made to increase the reach of 100GBASE-SR10 over OM4 to 150 m. The decision was made at that time to keep the reach in the description of 100GBASE-SR10 at 100 m. Making a change in the description of 100GBASE-SR10 or 100GBASE-ER4 now when there has been no change in the specifications would cause confusion.
See also comment #44

Cl **73** *SC* **73.7.7.1** *P* **515** *L* **41** # 46

Marris, Arthur Cadence Design Syst

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

Table and Figure numbers incorrect in Clause 73

SuggestedRemedy

Change number of Figure 73-8 to Figure 73-7
and Table 73-7 to Table 73-5 and chack subsequent numbering is correct

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Verify all table and figure numbers in Clause 73.

Cl **25** *SC* **25.5.1** *P* **232** *L* **8** # 47

Marris, Arthur Cadence Design Syst

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

Address maintenace request 1270

SuggestedRemedy

In figure 35-3 replace ‘(link_status not OK) + (tx_quiet = TRUE) * gotNRZbit.indicate)’ entry into ZERO_V state with:
tx_quiet = TRUE

In figure 25-4 make similar change to:
rx_quiet = TRUE

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Delete the definition of the variable "link_status" from 25.5.1.1.1.

In Figure 25-3, replace "link_status != OK + tx_quiet = TRUE *gotNRZbit.indicate" with "tx_quiet = TRUE".

Delete the definition of the variable "link_status" from 25.5.2.1.1.

In Figure 25-4, replace "link_status != OK + rx_quiet = TRUE" with "rx_quiet = TRUE".

Cl **24** *SC* **24.2.4.4.4** *P* **200** *L* **7** # 48

Marris, Arthur — Cadence Design Syst

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

The problem occurs when the MAC de-asserts LPI_Req, causing the FSM to go from "RX_SLEEP" to "WAIT_IDLE".
While it is in "WAIT_IDLE", and before lpi_rx_ti_timer_done, the MAC regrets, and re-assets LPI_Req.
The FSM will go back to "RX_SLEEP".
The problem is that the lpi_rx_ts_timer is not restarted on this transition, since it is only restarted on "START_RX_SLEEP".
From this points the lpi_rx_ts_timer continues incrementing from the point it was due to the previous LPI request.
It will cause the lpi_rx_ts_timer to expire prematurely, and the FSM will go to "RX_LPI_LINK_FAIL". This fails the link with no justification.

SuggestedRemedy

Make state transition go to START_RX_SLEEP rather than RX_SLEEP

Proposed Response *Response Status* **W**

PROPOSED REJECT.

Per 22.7 and Figure 22-23, when LPI_REQUEST is set to DEASSERT, it may not be set to ASSERT until the expiration of tw_timer. The terminal count of tw_timer is Tw_sys_tx which must be at least 30 microseconds. Since the terminal count for lpi_rx_ti_timer is 0.8 to 0.9 microseconds, even a fickle LPI client cannot re-assert LPI_REQUEST before lpi_rx_ti_timer_done becomes true. The scenario described in the comment cannot occur.

The purpose of the WAIT_IDLE state is to account for the possibility that IDLES will be falsely detected during the transition to a quiescent state (but before signal_status is de-asserted). If this is the case, then it is likely a transient condition and some "non-IDLES" signal will subsequently be detected. At this point the state diagram returns to the RX_SLEEP state and waits for lpi_rx_ts_time_done. It is inappropriate to reset the lpi_rx_ts_timer since this scenario does not represent the detection to two consecutive and independent sleep states (it is the same sleep state).

Cl **53** *SC* **53.8.2.1** *P* **541** *L* **31** # 49

Dawe, Piers — Mellanox Technologie

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

This change is turning a simple editorial mis-reference into a technical error. The test method for verification of the input jitter is NOT defined in 48B.3.
48B.3 is a tutorial, not a specification. It offers at least three methods, and for BERT scan, describes a curve fitting method for RJrms, DJ and TJ. The obvious correct reference is 53.8.1, same as a few lines above, which specifies ONE method, with a bathtub mask: "The DJ and RJ values do not need to be individually met, the required mask is defined by the formulas above." not a curve fit.

SuggestedRemedy

Either change "48B.3" to "53.8.1", which I expects represents what was meant when the clause was written;
Or:
Delete: "The test method for verification of the input jitter is defined in 48B.3" (beginning of last paragraph of 53.8.2.1), and insert at the beginning of 53.8.2.1: "The test method for verification of the input jitter is the same as the one defined in 53.8.1, with the following requirements".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change "48B.3" to "53.8.1"

See also, comment #24

Cl **00** *SC* **0** *P* *L* # 50

Hidaka, Yasuo — Fujitsu Laboratories of

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

The table of protocol summary is incomplete in the following clauses, because the horizontal borders before "Date of Statement" is thin.
46.6.2.2
57.7.2.2
81.5.2.2
82.7.2.2
83.7.2.2
84.11.2.2
86.11.2.2
87.13.2.2
88.12.2.2
89.11.2.2
95.12.2.2
83A.7.2.2
83B.4.2.2
83D.6.2.2
83E.5.2.2
86A.8.2.2

SuggestedRemedy

Make the horizontal borders thick, or remove the raw of white space.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change the ruling at the bottom of the "Have any Exception items been required?" and the top of the "Date of Statement" rows to "Thin" for each instance listed (they are currently "Very Thin").

Cl **99** *SC* *P* **2** *L* **6** # 51

Hidaka, Yasuo — Fujitsu Laboratories of

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

As Physical Layer Devices, only cables are listed, and electrical backplane is not listed.

SuggestedRemedy

Add ", or electrical backplanes" after ", or fiber optic cables".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **93A** *SC* **93A.1.5** *P* **689** *L* **17** # 52

Ewen, John — IBM

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

Variable of integration in equation 93A-24 is incorrect.

SuggestedRemedy

Change "dt" to "df"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **00** *SC* *P* **391** *L* **7** # 53

Grow, Robert
RMG Consulting

Comment Type **TR** *Comment Status* **D** *adhoc*

The standard needs to include reference to Company ID (CID) with many references to OUI updated to be OUI or CID. This does not apply to the deprecated OUI-22 uses; or variable names, MIB objects, etc., but may be required in the explanatory text to those and other similar items. Implementation of these changes may avoid RAC comments during Sponsor ballot.

SuggestedRemedy

The following are identified changes to Sections 1 through 4. Recommended changes to other Sections may follow in this ballot, before the BRC meeting, or in recirculation ballots.

1.4 – Replace definition with: Organizationally Unique Identifier (OUI): A 24-bit unique number that defines a manufacturer or other organization. (OUI and CID are non-overlapping and therefore mutually unique.)

1.4 – Insert definition: Company ID (CID): A 24-bit unique number that defines a manufacturer or other organization. (OUI and CID are non-overlapping and therefore mutually unique.)

1.5 – Insert acronym: CID Company ID
[There already is an expansion for CID, Consecutive Identical Digit, this would be the second but context should be sufficient to distinguish.]

28C.6 – Replace most occurrences of OUI with OUI or CID. First paragraph, all but line 16. Second paragraph, change “OUI value” to “OUI/CID value”, change “OUI” in Figure 28C-1 to OUI/CID”

28C.13, l.6 – Replace OUI with OUI or CID twice.

Table 31A-8 – Line 50 and 53, replace OUI with OUI or CID

31C.2 – List item d) Change to read: … Extension Opcode and the Organizationally Unique Identifier (OUI) or Company ID (CID) … Footnote 23, replace “OUIs” with “OUIs and CIDs”, UPDATE REFERENCE TO CURRENT Std 802.

45 PICS. MM25, MM42, WM22, WM40, RM22, RM28, AM36, PM21, PM25, DM20, DM24, VS5, VS7, VSB5, VSB7 — Replace OUI with 22-bits of OUI

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Replace 1.4.305 as follows.
"Organizationally Unique Identifier (OUI): A 24-bit unique number that identifies a manufacturer or other organization. An OUI may be used to form universally administered, globally unique MAC addresses or other extended globally-unique identifier, as part of a context dependent identifier, as part of a protocol identifier, in other management data, etc. OUI and CID <add cross-reference> are non-overlapping and therefore mutually unique.

NOTE—See http://standards.ieee.org/develop/regauth/"

Insert the following defintion in 1.4.
"Company Identifier (CID): A 24-bit unique number that identifies a manufacturer or other organization. Any MAC addresses created from a CID is locally administered and not guaranteed to be globally unique. OUI <add cross-reference> and CID are non-overlapping and therefore mutually unique and either an OUI or CID may be used in most cases for identification of a manufacturer or other organization.

NOTE—See http://standards.ieee.org/develop/regauth/"
[Should we use "Company Identifier" or "Company ID" throughout?]

In 1.5, change the expansion of CID to be "Company Identifier (in Clause 50, Consecutive Identical Digit)".

28C.6 – Replace occurrences of "OUI" with "OUI or CID" with the exception of the phrase "OUI Tagged Message". In the second paragraph, change “OUI value” to “OUI/CID value”. In Figure 28C-1, change “OUI” to OUI/CID”.

28C.13, line 6 – Replace "OUI" with "OUI or CID" twice.

Table 31A-8, lines 50 and 53 - Replace "OUI" with "OUI or CID".

31C.2 – List item d) Change to read: "...Extension Opcode and the Organizationally Unique Identifier (OUI) or Company ID (CID)...". Footnote 23, replace “OUIs” with “OUIs and CIDs”. Update reference to current IEEE Std 802.

45 PICS MM25, MM42, WM22, WM40, RM22, RM28, AM36, PM21, PM25, DM20, DM24, VS5, VS7, VSB5, VSB7 - Replace "OUI" with "22-bits of OUI".

57.4.1 - Change...
"The bit/octet ordering of any Organizationally Unique Identifier (OUI) field within an OAMPDU is identical to the bit/octet ordering of the OUI portion of the DA/SA. Additional detail defining the format of OUIs can be found in IEEE Std 802-2001 Clause 9."
[What is the bit/octect ordering for the CID? Update reference to current IEEE Std 802.]

Figure 57-10 - Replace "OUI" with "OUI/CID".

57.4.3.6 - Replace "Organizationally Unique Identifier (OUI)" with "Organizationally Unique Identifier (OUI) or Company ID (CID)". Replace "OUI value" with "OUI or CID value". In Figure 57-15, replace "OUI" with "OUI/CID".

57.5.2.1 item h) - Change to "OUI/CID. This three-octet field contains the 24-bit Organizationally Unique Identifier or Company ID and shall be as shown in Table 57–10."
In Table 57-10, replace "OUI" with "OUI/CID", replace "Organizationally Unique Identifier" with "Organizationally Unique Identifier or Company ID", and in footnote a) replace "OUIs" with "OUIs or CIDs" in two instances.

57.5.2.3 item c) - Change to "Organizationally Unique Identifier or Company ID. This three-octet field shall contain the 24-bit Organizationally Unique Identifier (OUI) or Company ID (CID).

57 PICS LIT1, LIT10, OIT1, OIT2 - Replace "OUI" with "OUI/CID".

73.11.4.9 - Replace instances of "OUI" in the Value/Comment column with "OUI or CID"

57B.1.1, item j) - Change to "j) Organizationally Unique Identifier (OUI). The OUI field contains the Organizationally Unique Identifier (OUI) to identify the Organization Specific Data. The bit/octet ordering of the Organizationally Unique Identifier field within an OSSPDU is identical to the bit/octet ordering of the OUI portion of the DA/SA."
[What is the bit/octect ordering for the CID?]

57B.1.1, item k) - Replace "OUI" with "OUI/CID".

73A.2 - Replace occurrences of "OUI" with "OUI or CID" with the exception of the phrase "OUI Tagged Message". In the second paragraph, change “OUI value” to “OUI/CID value”. In Figure 73A-1, change “OUI” to OUI/CID”

73A.3 - Replace "OUI" with "device identifier".

Cl **99** *SC* *P* **1** *L* **7** # 54

Grow, Robert RMG Consulting

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

Just a reminder to update year to 2015 on next draft. Congratulations on getting them right for this draft!

SuggestedRemedy

Update year on copyrights on page 1 and 2
Update date in header as usual

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **99** *SC* *P* **3** *L* # 55

Grow, Robert RMG Consulting

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

There appears to be disagreement between the draft, and the style manual. (IEEE Std 802.3-2012 appears to agree with the style manual.

SuggestedRemedy

Fix order of front matter components, perhaps using 2012 as a base. Introduction follows Participants, Notice to Users stuff precedes both.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Reorder the frontmatter components to be consistent with the 2014 style manual.

Also update the list of historical participants.

Cl **22** *SC* **22.2.4.4** *P* **74** *L* **26** # 56

Grow, Robert RMG Consulting

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

Looks like there is p802.3z text that we missed updating with p802.3ae. I don’t think we have any clause 22 management for speeds higher than 1000Mb/s. The text “all PHYs capable of operation at speeds above 100 Mb/s” is not correct.

SuggestedRemedy

Change read “all PHYs capable of operation at 1000 Mb/s.” Though also consider what is being done for 1000BASE-T1 and GEPOF, as the word “all” may not be appropriate to include based on the current 1000BASE-T1 draft.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change the first sentence of the first paragraph to the following.
"The Extended Status register is implemented for 1000BASE-T PHYs and all PHYs using the 1000BASE-X signaling specification."

Future amendments defining 1000BASE-T1 and GEPOF may modify this subclause if necessary.

Cl **30** *SC* **30.5.1.1.2** *P* **432** *L* **13** # 57

Grow, Robert RMG Consulting

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

There appears to be Text from p802.3z that was not updated by p802.3ab. Clause 40 was written some time ago, to be specified is not correct.

SuggestedRemedy

Change “to be specified” to “as specified”

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Note that there are three instances: 1000BASE-T, 1000BASE-THD, and 1000BASE-TFD.

Cl **45** *SC* *P* *L* # 58

Grow, Robert RMG Consulting

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

We haven't done a good job on consistency of text for Reserved bits/registers in clause 45. For example:
Ignore on read, Ignore when read, Value always 0, Value always 0, writes ignored. This continues in the PICS:
Operation is not affected by writes to reserved and unsupported bits, Reserved and unsupported bits return a value of zero,

It appears that text has been written from two perspectives: implementation where ignore write to the bit, and report as 0 when read; and management where the bit is to be written as 0, and ignored when read.

SuggestedRemedy

Pick one perspective and make text consistent across the clause.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change to:
Description column:
"Value always 0, writes ignored."
R/W column:
"RO"

Cl **33** *SC* **33.1.4.1** *P* **610** *L* **1** # 59

Thompson, Geoff GraCaSI S.A.

Comment Type **TR** *Comment Status* **D** *P802.3bt*

(through line 6, i.e. the first paragraph of 33.1.4.1)

Simplify the first paragraph by updating the reference to the 2002 version of 11801 which incorporates the additional requirement.

SuggestedRemedy

33.1.4.1 Cabling requirement

Operation requires Class D, or better, cabling as specified in ISO/IEC 11801:2002. These requirements are also met by Category 5e or better cable and components as specified in ANSI/TIA-568-C.2; or Category 5 cable and components as specified in ANSI/TIA/EIA-568-A.

The second paragraph of this clause can remain unchanged unless the referenced cabling documents already cover this material.

Proposed Response *Response Status* **W**

PROPOSED REJECT.

This topic is better addressed by the IEEE P802.3bt amendment project.

The IEEE 802.3 Maintenance Task Force chair will submit this comment during the next review period for the IEEE P802.3bt draft amendment so that it may be considered and appropriate changes made to that draft.

No changes will be made to the P802.3 revision draft.

Cl **33** *SC* **33.1.4.2** *P* **610** *L* **14** # 60

Thompson, Geoff GraCaSI S.A.

Comment Type **TR** *Comment Status* **D** *P802.3bt*

(through line 28, i.e. the entirety of 33.1.4.2)

The first sentence should be deleted. It would be appropriately handled by updating the reference to 11801 to the 2002 edition which precisely matches this requirement with the following text:
6.4.8 Direct current (d.c.) resistance unbalance

The d.c. resistance unbalance between the two conductors within each pair of a channel shall not exceed 3 % for all classes. This shall be achieved by design.

The remainder of 33.1.4.2 should be deleted as it is purely informative/tutorial material on cabling parameter measurement. It is more appropriate to the referenced cabling documentation. If 802.3 strongly feels that it needs to be retained in our document then it should be moved to an informative annex.
(Ref: 2014 Style Manual, cl. 10.1, last paragraph)

SuggestedRemedy

With both of these actions being taken, the entire sub-clause should be deleted.

Proposed Response *Response Status* **W**

PROPOSED REJECT.

This topic is better addressed by the IEEE P802.3bt amendment project.

The IEEE 802.3 Maintenance Task Force chair will submit this comment during the next review period for the IEEE P802.3bt draft amendment so that it may be considered and appropriate changes made to that draft.

No changes will be made to the P802.3 revision draft.

Cl **82** *SC* **82.2.19.2.2** *P* **149** *L* **1** # 61

Slavick, Jeff Avago Technologies

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

The NOTE associated with align_status is on the next page

SuggestedRemedy

Move the NOTE associated with align_status to be on the same page as the variable definition for align_status

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **83** *SC* **83.7.3** *P* **197** *L* **43** # 62

Slavick, Jeff Avago Technologies

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

The alignment of the O in the status column for the *KRCR row has a different alignment within it's cell to the rest of the table.

SuggestedRemedy

Make the Status cell for *KRCR have the same vertical and horizontal alignment as the rest of the table (LEFT, TOP instead of MID,MID)

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Fix the alignment in both the Status and Support columns.

Cl **84** *SC* **84.11.3** *P* **211** *L* **28** # 63

Slavick, Jeff Avago Technologies

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

The alignment of the O in the status column for the *LPI row has a different alignment within it's cell to the rest of the table.

SuggestedRemedy

Make the Status cell for *LPI have the same vertical and horizontal alignment as the rest of the table (LEFT, TOP instead of MID,MID)

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Fix the alignment in both the Status and Support columns.

Cl **83A** *SC* **83A.7.3** *P* **587** *L* **16** # 64

Slavick, Jeff Avago Technologies

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

The alignment of the O in the status column for the *LPI row has a different alignment within it's cell to the rest of the table.

SuggestedRemedy

Make the Status cell for *LPI have the same vertical and horizontal alignment as the rest of the table (LEFT, TOP instead of MID,MID)

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **91** *SC* **91.5.3.3** *P* **383** *L* **49** # 65

Slavick, Jeff — Avago Technologies

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

When error marking an uncorreted codeword the specification intends to mark all packets that contain data within the codeword as bad. When the codeoword begins with Alignment markers the first set of data in the codeword is contained in the 6th transcoded block. Marking currently occurs on the 1,3,5,7,...etc transcoded blocks, so we skip the 6th. This allows for a some bad data to potentially not be marked.

SuggestedRemedy

Change: In addition, it shall ensure rx_coded_3<1:0> corresponding to the last (20th) 257-bit block in the codeword is set to 11.

To: In addition, it shall ensure rx_coded_0<1:0> corresponding to the 6th 257-bit block and rx_coded_3<1:0> corresponding to the last (20th) 257-bit block in the codeword is set to 11.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **91** *SC* **91.5.4.2.1** *P* **389** *L* **23** # 66

Slavick, Jeff — Avago Technologies

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

The definition for amps_lock<x> references the deskewed and re-ordered FEC lane instead of the service interface lane. Which is different then how ba did it, and means when looking at amps_lock<0> you also have to look at the FEC lane mapping register to determine which physical lane is locked.

amps_lock<x> Boolean variable that is set to true when the receiver has detected the location of the alignment marker payload sequence for a given FEC lane where x = 0:3.

SuggestedRemedy

Change the definition of amps_lock<x> to read:

Boolean variable that is set to true when the receiver has detected the location of the alignment marker payload sequence for a given lane on the PMA service interface where x = 0:3.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **91** *SC* **91.5.4.2.1** *P* **389** *L* **27** # 67

Slavick, Jeff — Avago Technologies

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

The AM lock state machines operate on a PMA service lane not a FEC lane. Once locked it's assigned a FEC lane number based on the data stream being received.

SuggestedRemedy

Change first_pcsl definition to read:
A variable that holds the PCS lane number that corresponds to the first alignment marker payload that is recognized on a given lane of the PMA service interface. It is compared to the PCS lane number corresponding to the second alignment marker payload that is tested.

Change current_pcsl definition to read:
A variable that holds the PCS lane number corresponding to the current alignment marker payload that is recognized on a given lane of the PMA service interface. It is compared to the variable first_pscl to confirm that the location of the alignment marker payload sequence has been detected.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change "FEC lane" to "lane of the PMA service interface" in two places as per the Suggested Remedy and also change "first_pscl" to "first_pcsl" in current_pcsl definition.

This results in the definitions becoming:

current_pcsl definition:
A variable that holds the PCS lane number corresponding to the current alignment marker payload that is recognized on a given lane of the PMA service interface. It is compared to the variable first_pcsl to confirm that the location of the alignment marker payload sequence has been detected.

First_pcsl definition:
A variable that holds the PCS lane number that corresponds to the first alignment marker payload that is recognized on a given lane of the PMA service interface. It is compared to the PCS lane number corresponding to the second alignment marker payload that is tested.

Cl **11** *SC* **11** *P* **274** *L* **4** # 68

Thaler, Pat — Broadcom

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

IEEE 802.3 is carrying a quite a few Clauses that aren't recommended for new instaltions and are not maintained. In some cases this has been for over 10 years. Perhaps they should be deleted.

SuggestedRemedy

Consider removing the Clauses that have been marked as not recommended for new installations - at least the ones that entered that state over a decade ago.

Proposed Response *Response Status* **W**

PROPOSED REJECT.

There is no harm in continuing to carry clauses that are not recommended for new installations. However, errors may be introduced into the draft in the process of removing such clauses and this could jeopardize the revision project schedule.

This action may be better suited to targeted maintenance projects where all of the consequential changes can be carefully considered without gating amendment projects.

Cl **01** *SC* **1.4.305** *P* **66** *L* **24** # 69

Thaler, Pat — Broadcom

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

Now that the RAC has defined Company ID (CID) that should be included in the definitions. Places where OUI should be checked to see which instances should become OUI or CID. For example, 28C.6 which defines the OUI tag code should now allow a Company ID.

The RAC uses the acronym CID for Company ID but IEEE 802.3 already uses CID for another purpose. That acronyn seems to only be used in Clause 50. Can we do something to indicate that use is only for Clause 50 and add a CID acronym for Company ID?

SuggestedRemedy

Add a definition for Company ID and add text to allow Company ID use for non-address uses of the OUI (except in the xMII uses where the OUI is squeezed into a 22 bit field by dropping the I/G and U/L bits).

Consider adding CID to the acronym list.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See #53.

Cl **30** *SC* **30.12.1.1.1** *P* **487** *L* **44** # 70

Thaler, Pat — Broadcom

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

The TLVs added for EEE should have bits in the bit string to enable their transmission.

SuggestedRemedy

Add the bits for the EEE TLVs.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See comment #40.

Cl **72** *SC* **72.6.10.4.2** *P* **482** *L* **15** # 71

Thaler, Pat — Broadcom

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

The definition of remote_rx_ready says that it is set false when SEND_TRAINING STATE is entered, but it isn't

SuggestedRemedy

Add remoter_rx_ready<= false to the SEND_TRAINING state actions.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Add remote_rx_ready<= false to the SEND_TRAINING state actions.

[There is a typo in the suggested remedy.]

Cl **67** *SC* **67.1** *P* **388** *L* **25** # 72

Booth, Brad — Microsoft

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

In Table 67-1, the number 10000 could use a delimiter to help indicate that it is ten thousand and not one thousand.

SuggestedRemedy

Insert an em-space between 10 and 000. Repeat for all instances in the table.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change "10000" to "10,000" using appropriate delimiter of 1000s.

Cl **69B** *SC* **69B.4.2** *P* **809** *L* **22** # 73
Booth, Brad Microsoft

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

While the editor's note is to be removed prior to publication, it incorrectly references figure 69-2 instead of 69B-2.

SuggestedRemedy

Make correct to editor's note for 69B-2 and 69B-5.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **92A** *SC* **92A.4** *P* **679** *L* **33** # 74
Diminico, Christopher MC Communications

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

Frequency incorrect

SuggestedRemedy

Change 12.9806 12.8906

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **91** *SC* **91.5.4.2.1** *P* **390** *L* **20** # 75
Brown, Matt AppliedMicro

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

The FEC server sublayer is always the PMA. Throughout the rest of this Clause the server interface references use "PMA:" instead of the generic "inst:".
For clarity, "inst:IS_SIGNAL.indication(SIGNAL_OK)" should be "PMA:IS_SIGNAL.indication(SIGNAL_OK)".

SuggestedRemedy

Change: "inst:IS_SIGNAL.indication(SIGNAL_OK)"
To: "PMA:IS_SIGNAL.indication(SIGNAL_OK)"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **28C** *SC* **28C.13** *P* **723** *L* **4** # 76
McClellan, Brett Marvell Semiconducto

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

fix typos

SuggestedRemedy

change "meassages" to "messages"
change "userdefined" to "user-defined"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **55** *SC* **55.3.6.2.2** *P* **637** *L* **34** # 77
McClellan, Brett Marvell Semiconducto

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

The indentation for fr_sigtype does not match other variables.

SuggestedRemedy

indent fr_sigtype and description text, delete unnecessary line breaks.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Indent fr_sigtype and its definition as per the other variables.

Cl **48B** *SC* **48B.1.1** *P* **739** *L* **27** # 78
McClellan, Brett Marvell Semiconducto

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

Missing space.

SuggestedRemedy

SuggestedRemedy: change "Figure 48B-1considers" to "Figure 48B-1 considers"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **55** *SC* **55.3.2.7** *P* **662** *L* **6** # 79

Zimmerman, George CME Consulting

Comment Type **E** *Comment Status* **D** *late*

The text uses a term "complete quiet-refresh cycle", whereas the text in 55.3.5.3 says this is known as a "complete LPI cycle" (and this appears to be the only place the concept is used)

SuggestedRemedy

Replace "complete quiet-refresh cycle" with "complete LPI cycle".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

[Subclause reference should be 55.4.2.7.]
[Reference to 55.3.5.3 in the comment should be to 55.3.5.]

Change the beginning of the last sentence of the 55.4.2.7 to the following.
"The function forces a link retrain if a refresh signal is not reliably detected within a moving time window equivalent to 50 complete LPI cycles (nominally equal to 8.192 ms), …"

Note that 55.3.5 defines a "quiet-refresh cycle" to be a 124 LDPC frame period quiet time plus a 4 LDPC frame period refresh time and defines an "LPI cycle" to be "the time taken to complete a quiet-refresh cycle for all four pairs."

Cl **33** *SC* **33.1.4.2** *P* **610** *L* **14** # 80

Zimmerman, George CME Consulting

Comment Type **E** *Comment Status* **D** *late,P802.3bt*

Title "Channel requirement" is misleading, and "channel" is the incorrect term in 802.3 definitions.

Additionally, unbalance requirements should reference appropriate cabling standards such as TSB-184, which now include this information. The material should be moved to an informative annex.

SuggestedRemedy

Use "link section" for "channel" in clause 33.
Replace section with cabling shall confrm to intra-pair unbalance requirements specified in TIA TSB-184 and ANSI/TIA 568-C.2 (add appropriate ISO documents).

Move unbalance requirements in this section to Informative annex either as a new section in 33A or as informative annex 33B.

Proposed Response *Response Status* **W**

PROPOSED REJECT.

This topic is better addressed by the IEEE P802.3bt amendment project.

The IEEE 802.3 Maintenance Task Force chair will submit this comment during the next review period for the IEEE P802.3bt draft amendment so that it may be considered and appropriate changes made to that draft.

No changes will be made to the P802.3 revision draft.

Cl **33** *SC* **33.2.4.1** *P* *L* # 81

Zimmerman, George CME Consulting

Comment Type **E** *Comment Status* **D** *late,P802.3bt*

"may" indicates an option, "may need" isn't proper standards language.

SuggestedRemedy

replace "may need to have" with "should have".

Proposed Response *Response Status* **W**

PROPOSED REJECT.

This topic is better addressed by the IEEE P802.3bt amendment project.

The IEEE 802.3 Maintenance Task Force chair will submit this comment during the next review period for the IEEE P802.3bt draft amendment so that it may be considered and appropriate changes made to that draft.

No changes will be made to the P802.3 revision draft.

Cl **33** *SC* **33.2.3** *P* **616** *L* **2** # 82

Zimmerman, George — CME Consulting

Comment Type **T** *Comment Status* **D** *late,P802.3bt*

The definition of the PI shows an 8 pin modular jack, and assumes that it is the MDI defined for BASE-T PHYs, which is actually the title of the clause, but the clause doesn't actually specify that the 8 pin modular jack is the same MDI specified in the PHY clauses. It also needs to be updated to reflect 4 pair powering.

SuggestedRemedy

Insert the following before "A PSE may provide":
"A PSE device provides power over the PI. The PI shall be the 8 pin modular jack as connecting hardware as the MDI for highest common denominator PHY type supported (i.e., 10BASE-T, 100BASE-TX, or 1000BASE-T).
Rewrite the first 2 sentences to read:
"A PSE may provide power via one of two valid four-wire connections on the 8 wire connector. In each connection, two conductors associated with a differential twisted pair for the PHY data transmission each carry the same nominal current in both magnitude and polarity."

Proposed Response *Response Status* **W**

PROPOSED REJECT.

This topic is better addressed by the IEEE P802.3bt amendment project.

The IEEE 802.3 Maintenance Task Force chair will submit this comment during the next review period for the IEEE P802.3bt draft amendment so that it may be considered and appropriate changes made to that draft.

No changes will be made to the P802.3 revision draft.

Cl **33** *SC* **33.3.1** *P* **642** *L* **26** # 83

Zimmerman, George — CME Consulting

Comment Type **T** *Comment Status* **D** *late,P802.3bt*

The statement "The PD shall withstand any voltage from 0V to 57V at the PI indefinitely without permanent damage." is incorrect, and misleading. It can't mean applying 0 to 57V across the contacts corresponding to the tip and ring of a differential pair, but is rather meant to be the common mode voltage.

SuggestedRemedy

Change to read: The PD shall withstand any voltage from 0 V to 57 V in the common mode across any combination of pairs, as defined in 33.2.3, at the PI indefinitely without permanent damage."

Proposed Response *Response Status* **W**

PROPOSED REJECT.

This topic is better addressed by the IEEE P802.3bt amendment project.

The IEEE 802.3 Maintenance Task Force chair will submit this comment during the next review period for the IEEE P802.3bt draft amendment so that it may be considered and appropriate changes made to that draft.

No changes will be made to the P802.3 revision draft.

Cl **55** *SC* **55.3.4** *P* **630** *L* **46** # 84

McClellan, Brett — Marvell

Comment Type **E** *Comment Status* **D** *late*

Reference to Table 55-10 is incorrect. The correct table is Table 5-15.

SuggestedRemedy

change "Table 55-10" to "Table 55-15" on page 630 and page 631 inside figure 55-13.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **55** *SC* **55.4.5.1** *P* **665** *L* **36** # 85

McClellan, Brett Marvell

Comment Type **E** *Comment Status* **D** *late*

Missing a definition for pma_reset which appears in Fig 55-28.

SuggestedRemedy

Add text (taken from Clause 40):
“pma_reset
Allows reset of all PMA functions.
Values:ON or OFF
Set by:PMA Reset”

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.