Cl **76** *SC* **76.3.2.5.2** *P* **622** *L* **54** # i-1

Hajduczenia, Marek — Bright House Network

Comment Type **TR** *Comment Status* **X**

Definition of SH_DATA and SH_CTRL is incorrect. They both contain exactly the same description and their binary representation is the same (10), which is incorrect.
Based on the historic search through revisions, it seems that Maintenance Request 1218 (http://www.ieee802.org/3/maint/requests/maint_1218.pdf) has not been implemented correctly in 802.3-2012 in the first version of the draft and then it was not captured during ballot.

SuggestedRemedy

Use the following definitions for SH_DATA and SH_CTRL. Make sure that links are live.

SH_DATA
Type: 2-bit unsigned
The value of synchronization header indicating a that the given 66-bit block is a data block, as defined in 49.2.4.3.
Value: 0x02 (binary representation 10)

SH_CTRL
Type: 2-bit unsigned
The value of synchronization header indicating that the given 66-bit block is a control block, as defined in 49.2.4.3.
Value: 0x01 (binary representation 01)

Proposed Response *Response Status* **O**

Cl **30** *SC* **30.3.2** *P* **387** *L* **29** # i-2

Hajduczenia, Marek — Bright House Network

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

Title of subclause 30.3.2 seems odd: "PHY devicePHY device managed object class" - it seems that "PHY device" is repeated unnecessarily.
As far as I can trace, it is also present even in 802.3-2000.

SuggestedRemedy

Remove one instance of "PHY device" from title of 30.3.2 - it is a "PHY device managed object class"

Proposed Response *Response Status* **O**

Cl **77** *SC* **77.2.2.3** *P* **662** *L* **45** # i-3

Hajduczenia, Marek — Bright House Network

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

"In the ONU, this variable is assigned in the GATE Processing ONU Activation state diagram (see Figure 77-14)." is incorrect. Figure 77-14 (page 671) is the ONU Control Multiplexer state diagram

SuggestedRemedy

Change "GATE Processing ONU Activation state diagram" to "ONU Control Multiplexer state diagram"

Proposed Response *Response Status* **O**

Cl **77** *SC* **77.5.4.3** *P* **714** *L* **11** # i-4

Hajduczenia, Marek — Bright House Network

Comment Type **ER** *Comment Status* **X**

Items SM3 through SM5 have incorrect cross references to figures. For example, ONU Control Parser mentioned in SM3 is pointed to Figure 77-14, and should point to Figure 77-12 instead (page 669)

SuggestedRemedy

Implement the following changes:
in SM3, change Figure 77-14 to Figure 77-12
in SM4, change Figure 77-15 to Figure 77-13
in SM5, change Figure 77-16 to Figure 77-14

Proposed Response *Response Status* **O**

Cl **64** *SC* **64.4.4.3** *P* **344** *L* **8** # i-5

Hajduczenia, Marek — Bright House Network

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

Text size in SM2 through SM5 in Value/Comment column is larger than in SM1, SM7 etc.

SuggestedRemedy

Align the text size in SM2 through SM5 in Value/Comment column with the remainder of PICS tables

Proposed Response *Response Status* **O**

Cl **81** *SC* **81.2.2** *P* **107** *L* **11** # i-6
RAN, ADEE Intel Corporation

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

Bit sequence of preamble and SFD is badly formatted. Compare to 46.2.2

SuggestedRemedy

Reformat similar to 46.2.2

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.1.102** *P* **136** *L* **44** # i-7
RAN, ADEE Intel Corporation

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

Table 45-80, in row 1, "Name" does not match the title of 45.2.1.102.1 (PCS align status); and in row 2, "Name" does not match the title of 45.2.1.102.2 (RS-FEC align status).

The subclause titles seem more appropriate for re-use in 802.3by (where both the RS-FEC and the PCS are single-lane). Also, "PCS lane alignment status" can be confused with the PCS variable (Table 45-136).

SuggestedRemedy

Change table "name" fields to match subclause titles:
In row 1, change name to "PCS align status".
In row 2, change name to "RS-FEC align status".

Change "PCS lane alignment status" to "PCS align status" in 45.2.1.110 accordingly.

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.1.102.3** *P* **137** *L* **37** # i-8
RAN, ADEE Intel Corporation

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

Following the change in the definition of amps_lock in D2.1 (comment #66 on D2.0), it seems that the text here and in 45.2.1.102.4, 45.2.1.102.5 and 45.2.1.102.6 should change accordingly.

SuggestedRemedy

Change "FEC lane 3" to "Lane 3 of the PMA service interface", and similarly for lanes 2, 1, and 0.

Proposed Response *Response Status* **O**

Cl **85** *SC* **85.7.2** *P* **222** *L* **17** # i-9
RAN, ADEE Intel Corporation

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

Text refers to "preset state specified in 85.8.3.3.1" but there is no specification of preset there (only initialize).

Preset is defined in 72.6.10.2.3.1 and referred to in 85.8.3.3 (item 1, page 228 line 6) in the context of measurement procedure - but the response to PRESET request is not defined anywhere in clause 85.

Similar issues in clause 92 (92.7.2 refers to 92.8.3.5, which does not fully define the preset state - only initialize is defined in 92.8.3.5.3) and in clause 93 (93.7.2 refers to 93.8.1.5, only initialize defined in 93.8.1.5.3).

SuggestedRemedy

Either of the following:

1. Add a new subclause defining preset after 85.8.3.3.1 (using 94.3.10.6.1 as a model) and refer to it instead.

2. Add content to 85.8.3.3.1 that describes response to PRESET request, and change its title accordingly.

Apply the chosen remedy in clauses 92 and 93 too.

Proposed Response *Response Status* **O**

Cl **91** *SC* **91.5.4.2.1** *P* **389** *L* **28** # i-10
RAN, ADEE Intel Corporation

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

current_pcsl and first_pcsl definitions were changed from using "FEC lane" to "lane of the PMA service interface", apparently as a result of comment #66 on D2.0.

This change was not requested in the comment and does not seem to be justified; "FEC lane" is used throughout clause 91 and the old definitions are just as valid (comment #66 only refers to amps_lock).

SuggestedRemedy

Change the definitions of current_pcsl and first_pcsl back to the text in D2.0 (and in the original 802.3bj).

Proposed Response *Response Status* **O**

Cl **91** *SC* **91.6** *P* **397** *L* **43** # i-11

RAN, ADEE — Intel Corporation

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

Table 91-4, row 1 refers to the variable "align_status", which is not defined in the RS-FEC sublayer. This should be "rx_align_status". (align_status is a PCS variable that reflects the initial lane alignment and does not change during LPI QUIET periods; the RS-FEC does not need such a variable).

SuggestedRemedy

Change "align_status" to "rx_align_status".

Proposed Response *Response Status* **O**

Cl **92** *SC* **92.1** *P* **405** *L* **49** # i-12

RAN, ADEE — Intel Corporation

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

"Figure 93-1 shows the relationship of the 100GBASE-CR4 PMD sublayers..."

This text seems to be inherited from clause 85 which had two PMDs (CR4 and CR10). But in this clause there is only one PMD (100GBASE-CR4).
Likewise in 93.1. (KR4)

SuggestedRemedy

Change "sublayers" to "sublayer" here and in 93.1 (page 454 line 43).

Proposed Response *Response Status* **O**

Cl **92** *SC* **92.11.1.2** *P* **435** *L* **42** # i-13

RAN, ADEE — Intel Corporation

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

In Figure 92-16, the y axis label does not match the figure title and content.

SuggestedRemedy

Change "Insertion loss" to "Return loss" in y axis label.

Proposed Response *Response Status* **O**

Cl **92** *SC* **92.14.4.2** *P* **450** *L* **14** # i-14

RAN, ADEE — Intel Corporation

Comment Type **G** *Comment Status* **X**

MF10 seems to be a duplicate of MF9

SuggestedRemedy

Delete MF10 row

Proposed Response *Response Status* **O**

Cl **93** *SC* **93.8.2.4** *P* **471** *L* **16** # i-15

RAN, ADEE — Intel Corporation

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

Wrong variable name: FEC_symbol_error_i should be FEC_symbol_error_counter_i (see 91.6.11). Also in 94.3.13.4.2 and 93C.2.

SuggestedRemedy

Change all instances of FEC_symbol_error_i to FEC_symbol_error_counter_i

Proposed Response *Response Status* **O**

Cl **93** *SC* **93.11.4.5** *P* **482** *L* **25** # i-16

RAN, ADEE — Intel Corporation

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

Typo in ES1 "Feature".

SuggestedRemedy

Change "Generate" to "General".

Proposed Response *Response Status* **O**

Cl **31B** *SC* **31B.3.7** *P* **742** *L* **40** # i-17

RAN, ADEE — Intel Corporation

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

"Pause_quantum bit times" used in several instances is a dimension mismatch. Pause_quantum is defined earlier as a period of time, rather than a pure number, and bit time has dimension of time too.

SuggestedRemedy

Change "more than pause_quantum bit times" to "one pause_quantum".
Change "(pause_quantum + 64) bit times" in line 43 to "one pause_quantum + 64 BT".
Change "pause_quantum bit times" to "pause_quanta" on page 742 line 45, line 49, and line 51, and on page 743 line 2, and line 5.
Apply similar changes to the corresponding PICS.

Proposed Response *Response Status* **O**

Cl **00** *SC* **0** *P* *L* # i-18

RAN, ADEE — Intel Corporation

Comment Type **G** *Comment Status* **X**

In the 2012 edition and in past projects, annex top-level bookmarks included the title, similar to the clauses. In this project, only the annex label is included - the title is a second-level bookmark. This can make life more difficult for readers.

SuggestedRemedy

Change whatever is needed so that annex top-level bookmarks include the title.

Proposed Response *Response Status* **O**

Cl **01** *SC* **1.4.117** *P* **76** *L* **39** # i-19

RAN, ADEE — Intel Corporation

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

In the definition of bit time (BT), the example states the bit _rate_ in 100BASE-T, but it is actually the bit time.

SuggestedRemedy

Change "bit rate" to "bit time".

Proposed Response *Response Status* **O**

Cl **49** *SC* **49.2.13.2** *P* **390** *L* **26** # i-20

RAN, ADEE — Intel Corporation

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

In definition of test_amp, "Boolean variable this is set..." seems incorrect.

SuggestedRemedy

Change "this is" to "that is".

Proposed Response *Response Status* **O**

Cl **49** *SC* **49.2.8** *P* **405** *L* **14** # i-21

RAN, ADEE — Intel Corporation

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

"The optional PRBS9 pattern is defined in 68.6.1" - but 68.6.1 does not define PRBS9 (it only mentions it).
The appropriate definition appears in a footnote of table 68-6.

SuggestedRemedy

Change "in 68.6.1" to "in footnote a of Table 68-6".
Alternatively, copy the definition from the footnote here instead of referring to it.

Proposed Response *Response Status* **O**

Cl **49** *SC* **49.2.13.2** *P* **408** *L* **32** # i-22

RAN, ADEE — Intel Corporation

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

Definition of signal_ok uses wrong primitive names, PMA_UNITDATA.indication(SIGNAL_OK), and likewise for WIS. This is not the signal indication.

SuggestedRemedy

Change PMA_UNITDATA.indication(SIGNAL_OK) to PMA_SIGNAL.indication(SIGNAL_OK), and similarly for WIS.

Proposed Response *Response Status* **O**

Cl **71** *SC* **71.2** *P* **445** *L* **1** # i-23

RAN, ADEE Intel Corporation

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

The EEE service interface primitives are followed by "These messages are defined for the PCS in 48.2.6.1.6." But 48.2.6.1.6 does not define messages - it defines PCS timers. This seems to be an incorrect reference - messages are listed in 48.2.6.1.7.

SuggestedRemedy

Change "48.2.6.1.6" to "48.2.6.1.7".

Proposed Response *Response Status* **O**

Cl **72** *SC* **72.1** *P* **465** *L* **25** # i-24

RAN, ADEE Intel Corporation

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

Clause 74 is labeled "FEC" here, but FEC has become a generic term. Clause 74 is now titled "FEC sublayer for BASE-R PHYs". In recent projects it is often referred to as BASE-R FEC. It would be advisable to make this consistent.

Suggest using the term "BASE-R FEC" consistently when referring specifically to clause 74, and the term "RS-FEC" consistently when referring specifically to clause 91. "FEC" should be used when referring to either one.

SuggestedRemedy

Change "FEC" to "BASE-R FEC", here and in the following additional places:

80.1.4, page 78, line 47 and line 51 (second instance)
80.3.1, page 83, line 35
Figures 80-2 and 80-3 (the sublayer is specifically BASE-R FEC)
Figure 80-5 "FEC or RS-FEC" block - change to either "FEC" or "BASE-R FEC or RS-FEC"
80.3.3.6, page 90 lines 41 and 43
80.3.3.6.3, page 91 lines 8 and 9
Figures 80-6 and 80-7
82.1.4, page 130 lines 15, 17
82.2.19.2.2, page 152 line 3
Figure 83-2
Table 84-1 (change "FEC for BASE-R" to "BASE-R FEC")
Figure 84-1
Table 85-1
Figure 85-1 (and add "optional")

Editorial license should be granted.

Proposed Response *Response Status* **O**

Cl **72** *SC* **72.2** *P* **466** *L* **8** # i-25

RAN, ADEE Intel Corporation

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

The EEE service interface primitives are followed by "These messages are defined for the PCS in 49.2.13.2.2." But 49.2.13.2.2 does not define messages - it defines PCS variables. There is no "messages" subclause in clause 49.

SuggestedRemedy

Change
"These messages are defined for the PCS in 49.2.13.2.2."
to
"These messages affect the PCS variables as described in 49.2.13.2.2."

Proposed Response *Response Status* **O**

Cl **51** *SC* **51.2.3** *P* **466** *L* **32** # i-26

RAN, ADEE Intel Corporation

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

PMA_SIGNAL.indication, as defined, does not use PMD_SIGNAL.indication(SIGNAL_DETECT) received from the PMD. The PMD in clause 72 uses SIGNAL_DETECT to convey the status of the PMD training, so its value should be propagated over the PMA. Other 10G serial PMDs also provide this signal.

SuggestedRemedy

Insert before "to the PMA client.":
"and the value of PMD_SIGNAL.indication(SIGNAL_DETECT) ".

Proposed Response *Response Status* **O**

Cl **93A** *SC* **93A.1** *P* **683** *L* **9** # i-27

RAN, ADEE Intel Corporation

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

In Table 93A-2, Physical Layer specifications that employ COM, 100GBASE-CR4 (Clause 92) is missing.

SuggestedRemedy

Add a Row in this table for 100GBASE-CR4 (Clause 92), using parameter values in Table 93-8.

Proposed Response *Response Status* **O**

Cl **31B** *SC* **31B.3.4.2** *P* **740** *L* **31** # i-28
RAN, ADEE Intel Corporation

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

"pause quanta" (with a space) is used in the definition of n_quanta_tx, but most of the occurrences in the standard use "pause_quanta" instead. Consistent use of the underscore version is suggested.

A few other occurrences with a space should be corrected as well.

SuggestedRemedy

Change "pause quanta" to "pause_quanta" here, and in the following additional places:
1. 71.4, page 446 line 11
2. 74.6, page 546 line 15, line 18 and line 21
3. 74.11.3, page 561 line 7, 8 and 10
4. 83.7.3, page 198 line 37, line 40.

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.1.1.3** *P* **54** *L* **46** # i-29
Marris, Arthur Cadence Design Syst

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

Missing space

SuggestedRemedy

Change: 45.2.1.1.3 Speed selection (1.0.13,1.0.6, 1.0.5:2)
To: 45.2.1.1.3 Speed selection (1.0.13, 1.0.6, 1.0.5:2)

Proposed Response *Response Status* **O**

Cl **73** *SC* **73.10.1** *P* **519** *L* **21** # i-30
Marris, Arthur Cadence Design Syst

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

Spelling

SuggestedRemedy

Change: ENABLE; connects the PMD (both tranmit and receive) to the MDI.

To: ENABLE; connects the PMD (both transmit and receive) to the MDI.

and run spell check to look for similar typos.

Proposed Response *Response Status* **O**

Cl **44** *SC* **44.1.3** *P* **38** *L* **38** # i-31
Marris, Arthur Cadence Design Syst

Comment Type **TR** *Comment Status* **X**

10G Ethernet is full duplex only so why describe the MAC as "the IEEE 802.3 (CSMA/CD) MAC"?

SuggestedRemedy

Change: "the IEEE 802.3 (CSMA/CD) MAC"
To: "the IEEE 802.3 MAC"

also scrub the rest of the document and either delete "CSMA/CD" or replace with the word "Ethernet" when the standard is concerned with 10G speeds and above.

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.1.10.1** *P* **70** *L* **15** # i-32
Marris, Arthur Cadence Design Syst

Comment Type **TR** *Comment Status* **X**

Missing definition for bit 1.11.10 40G/100G extended abilities.

SuggestedRemedy

Add new 45.2.1.10.1 and renumber existing subclauses

45.2.1.10.1 40G/100G extended abilities (1.11.10)
When read as a one, bit 1.11.10 indicates that the PMA/PMD has 40G/100G abilities listed in register 1.13. When read as a zero, bit 1.11.10 indicates that the PMA/PMD does not have 40G/100G abilities.

Proposed Response *Response Status* **O**

Cl **01** *SC* **1.4.102** *P* **75** *L* **43** # i-33
Marris, Arthur Cadence Design Syst

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

No references to Clauses 37 and 73.

SuggestedRemedy

Change to:
1.4.102 Auto-Negotiation: The algorithm that allows two devices at either end of a link segment to negotiate common data service functions. (See IEEE Std 802.3, Clause 28, Clause 37 and Clause 73.)

Proposed Response *Response Status* **O**

Cl **30** *SC* **30.6.1.1.5** *P* **445** *L* **3** # i-34
Marris, Arthur Cadence Design Syst

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

Extra space

SuggestedRemedy

Remove extra space before " Full duplex 1000BASE-X as specified in Clause 31 and Clause 36"

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.1.101.2** *P* **136** *L* **32** # i-35
Marris, Arthur Cadence Design Syst

Comment Type **ER** *Comment Status* **X**

"(see 91.5.3.3)" is first mentioned in 45.2.1.101.1 and then unnecessarily repeated in subsequent subclauses.

SuggestedRemedy

Delete "(see 91.5.3.3)" on lines 32 and 33 on page 136. And on lines 10, 17 and 23 on page 138.

Proposed Response *Response Status* **O**

Cl **73** *SC* **73.10.1** *P* **516** *L* **43** # i-36
Marris, Arthur Cadence Design Syst

Comment Type **TR** *Comment Status* **X**

PD should only be for the 1000BASE-KX PMA and 10GBASE-KX4 PMA as these are the only two PHYs that support parallel detect and should have link_control_[PD] <= SCAN_FOR_CARRIER set in the Arbitration state diagram of Figure 73-11. It should not be a requirement to "SCAN_FOR_CARRIER; connects the PMD receiver to the MDI and isolates the PMD transmitter from the link." for any other PHY type.

SuggestedRemedy

Change to:
PD; represents all of the following that are present: 1000BASE-KX PMA or 10GBASE-KX4 PMA

Proposed Response *Response Status* **O**

Cl **74** *SC* **74.2** *P* **537** *L* **19** # i-37
Marris, Arthur Cadence Design Syst

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

Delete "74.2 Objectives" as has been done for 80.1.2. It is cumbersome keeping this list up-to-date whenever a new speed or PHY type is added.

SuggestedRemedy

Change to:
74.2 Objectives

NOTE--The contents of this subclause have been deleted.

Proposed Response *Response Status* **O**

Cl **69** *SC* **69.1.1** *P* **420** *L* **8** # i-38
Marris, Arthur Cadence Design Syst

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

The font size of the first paragraph seems too small

SuggestedRemedy

Correct font size

Proposed Response *Response Status* **O**

Cl **69** *SC* **69.1.1** *P* **420** *L* **12** # i-39
Marris, Arthur Cadence Design Syst

Comment Type **TR** *Comment Status* **X**

The second paragraph does not read well and the list of PHY types is cumbersome making it awkward to add new ones for new speeds.

SuggestedRemedy

Change to:
Backplane Ethernet supports the IEEE 802.3 full duplex MAC operating at 1000 Mb/s, 10 Gb/s, 40 Gb/s, or 100 Gb/s providing a bit error ratio (BER) better than or equal to 10-12 at the MAC/PLS service interface. The following Physical Layers are supported:
* 1000BASE-KX for 1 Gb/s
* 10GBASE-KX4 for 10 Gb/s four-lane
* 10GBASE-KR for 10 Gb/s single-lane
* 40GBASE-KR4 for 40 Gb/s four-lane
* 100GBASE-KR4 and 100GBASE-KP4 for 100 Gb/s four-lane

Proposed Response *Response Status* **O**

Cl **69** *SC* **69.1.2** *P* **422** *L* **34** # i-40

Marris, Arthur — Cadence Design Syst

Comment Type **TR** *Comment Status* **X**

"69.1.2 Relationship of Backplane Ethernet to the ISO OSI reference model" has nothing to do with how GMII and XGMII are defined.

So delete "It is important to note that, while this specification defines interfaces in terms of bits, octets, and frames, implementers may choose other data-path widths for implementation convenience. The only exceptions are as follows:" and the list that follows.

SuggestedRemedy

Delete text from lines 34 to 54 on page 422.

Proposed Response *Response Status* **O**

Cl **73** *SC* **73.7.7.1.1** *P* **514** *L* **22** # i-41

Marris, Arthur — Cadence Design Syst

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

Wrong paragraph type.
Change "73.7.7.1.1" to "73.7.7.2"

SuggestedRemedy

Change "73.7.7.1.1" to "73.7.7.2"

Proposed Response *Response Status* **O**

Cl **73** *SC* **73.7** *P* **510** *L* **19** # i-42

Marris, Arthur — Cadence Design Syst

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

The second sentence does not read very well and does not mention the DME receiver.

SuggestedRemedy

Change:
The receive function incorporates a receive switch to control connection to the 1000BASE-KX, 10GBASE-KX4, 10GBASE-KR 40GBASE-KR4, 40GBASE-CR4, 100GBASE-CR10, 100GBASE-KR4, 100GBASE-KP4, or 100GBASE-CR4 PHYs.

To:
"The receive function incorporates a receive switch to control connection of the MDI to the DME page receiver or PHY."

Proposed Response *Response Status* **O**

Cl **00** *SC* **0** *P* **233** *L* **29** # i-43

Anslow, Peter — Ciena Corporation

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

The draft is almost consistent in its use of "signaling" rather than "signalling".
There are 707 instances of "signaling" and 6 instances of "signalling". These are in 45.2.5.8.2 (2 instances), 55.3.5.3 (2 instances), 55.4.5.4, and 94.4.3.

SuggestedRemedy

Change all 6 instances to "signaling"

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.1.1.3** *P* **54** *L* **46** # i-44

Anslow, Peter — Ciena Corporation

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

Space missing in title of 45.2.1.1.3

SuggestedRemedy

Change:
"Speed selection (1.0.13,1.0.6, 1.0.5:2)" to:
"Speed selection (1.0.13, 1.0.6, 1.0.5:2)"

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.3.6** *P* **182** *L* **14** # i-45

Anslow, Peter — Ciena Corporation

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

Footnote a to Table 45-123 is "aR/W = Read/Write", but the column also includes an "RO"

SuggestedRemedy

Change the footnote to "aRO = Read only, R/W = Read/Write"
Check the footnotes to the other tables in Clause 45 so that they reflect the entries in the R/W column.

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.1.89** *P* **126** *L* **6** # i-46

Anslow, Peter Ciena Corporation

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

The rightmost column heading for tables 45-69, 45-204, and 45-209 differ from the rest of the tables in Clause 45 in being labelled "RO" rather than "R/W"

SuggestedRemedy

Change the rightmost column heading for tables 45-69, 45-204, and 45-209 from "RO" to "R/W"

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.1.88** *P* **125** *L* **2** # i-47

Anslow, Peter Ciena Corporation

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

Subclauses 45.2.1.88 and 45.2.1.89 contain no text

SuggestedRemedy

Add to subclause 45.2.1.88:
"The assignment of bits in the 1000BASE-KX control register is shown in Table 45-68."
Add to subclause 45.2.1.89:
"The assignment of bits in the 1000BASE-KX status register is shown in Table 45-69."

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.1.1** *P* **53** *L* **37** # i-48

Anslow, Peter Ciena Corporation

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

In some tables in Clause 45, in the description column there are entries that look like those for bits 1.0.13, 1.0.6, and 1.0.5:2. In some cases, the headings of the columns of bit values are in underline font , but some are not. The meaning of the underline is not clear. For bit 1.0.6, the headings are only partly underlined.
The use of underline font here makes showing changes in amendment text difficult.

SuggestedRemedy

Either remove the underlining (preferred option) or make the use of underline font consistent).

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.1** *P* **49** *L* **19** # i-49

Anslow, Peter Ciena Corporation

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

In Table 45-3, some entries in the "Register name" column end in "register". This is incorrect as it would result in having to refer to the "PMA/PMD extended ability register register"

SuggestedRemedy

Remove the word "register" or "registers" from the end of any entries in the "Register name" column of Table 45-3

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.1.6** *P* **59** *L* **12** # i-50

Anslow, Peter Ciena Corporation

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

Register 1.7 is the PMA/PMD control 2 register. However the text in 45.2.1.6 is:
"The assignment of bits in the 10G PMA/PMD control 2 register is shown in Table 45-7."
which includes a spurious "10G".

SuggestedRemedy

Remove the "10G"

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.1.6** *P* **60** *L* **21** # i-51

Anslow, Peter Ciena Corporation

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

Throughout Clause 45, reserved bits are just labelled "reserved". In the row for bits 1.7.5:0 there are occurrences of both "reserved" and "reserved for future use".

SuggestedRemedy

Change the two instances of "reserved for future use" to "reserved"

Proposed Response *Response Status* **O**

Cl **00** *SC* **0** *P* **89** *L* **19** # i-52

Anslow, Peter — Ciena Corporation

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

The PICS proforma tables in the draft are inconsistent regarding the text in the "Implementation identification" section. There are:
69 instances of "Contact point for enquiries about the PICS"
14 instances of "Contact point for queries about the PICS"
1 instance of "Contact point for inquiries about the PICS"
Despite being the most numerous, the word "enquiries" is not preferred by the IEEE and the publication editor has proposed to change to "inquiries" in the IEEE 802.3bm-2015 amendment.

SuggestedRemedy

Change all instances to "inquiries"

Proposed Response *Response Status* **O**

Cl **94** *SC* **94.6** *P* **532** *L* **1** # i-53

Anslow, Peter — Ciena Corporation

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

In the title of 94.6, the text after "Protocol implementation conformance statement (PICS) proforma for Clause 94, " is:
"Physical Medium Attachment (PMA) and Physical Medium Dependent (PMD) sublayer and baseband medium, type 100GBASE-KP4"
but the title of Clause 94 is:
"Physical Medium Attachment (PMA) sublayer, Physical Medium Dependent (PMD) sublayer, and baseband medium, type 100GBASE-KP4"
There is a similar issue with the text in 94.6.1 and in the table in 94.6.2.2.

SuggestedRemedy

Use the exact wording of the Clause 94 title in the title of 94.6, the text in 94.6.1, and in the table in 94.6.2.2

Proposed Response *Response Status* **O**

Cl **00** *SC* **0** *P* *L* # i-54

Anslow, Peter — Ciena Corporation

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

The draft is not consistent in its use of hyphens associated with AC and DC. There are:
33 instances of "AC-coupled" (3 of which are "ac-coupled")
44 instances of "AC-coupling"
4 instances of "DC-blocking"
5 instances of "DC-referenced"
2 instances of "dc-balanced"
25 instances of "AC coupled" (2 of which are "ac coupled")
49 instances of "AC coupling" (1 of which is "ac coupling")
1 instance of "DC coupled"
5 instances of "DC blocking"
3 instances of "DC balanced"

SuggestedRemedy

Change all instances to "AC-coupled", "AC-coupling", "DC-blocking", "DC-referenced", or "DC-balanced" as appropriate.

Proposed Response *Response Status* **O**

Cl **00** *SC* **0** *P* *L* # i-55

Anslow, Peter — Ciena Corporation

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

Now that IEEE Std 802.3bm-2015 has been published, the changes made during the publication process should be incorporated into the draft.

SuggestedRemedy

Incorporate the changes made during the publication process of IEEE Std 802.3bm-2015 into the draft.

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.5.10** *P* **234** *L* **12** # i-56

Anslow, Peter — Ciena Corporation

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

Maintenance request http://www.ieee802.org/3/maint/requests/maint_1114.pdf changed bit 5.24.10 to:
Bit(s) Name Description R/W
5.24.10 Ignored Value 0 or 1, writes ignored RO
with no subclause (expected to be 45.2.5.10.3) explaining the meaning of the bit allocation. The rationale from the maintenance request appears to be that a single device may implement register 5.24 or 4.24 depending on whether it is a DTE XS device or a PHY XS device. Without the text of the maintenance request to refer to, this is difficult to understand.

SuggestedRemedy

Insert a new subclause 45.2.5.10.3 to define this bit:
45.2.5.10.3 Ignored
So that a single device can implement either register 4.24 or register 5.24, bit 5.24.10 can return either a one or a zero and should be ignored.

Proposed Response *Response Status* **O**

Cl **01** *SC* **1.4.131** *P* **77** *L* **51** # i-57

Anslow, Peter — Ciena Corporation

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

The IEEE style manual says that 4 digit numbers should not include a thousands separator (which would be space) unless in a column with 5 digit numbers.

SuggestedRemedy

Change "1,000" to "1000"

Proposed Response *Response Status* **O**

Cl **62** *SC* **62.4.4.2** *P* **272** *L* **12** # i-58

Anslow, Peter — Ciena Corporation

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

The IEEE style manual says that 4 digit numbers should not include a thousands separator (which would be space) unless in a column with 5 digit numbers.

SuggestedRemedy

Change "4,096" to "4096"

Proposed Response *Response Status* **O**

Cl **73** *SC* **73.10.1** *P* **519** *L* **14** # i-59

RAN, ADEE — Intel Corporation

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

link_control is actually a set of variables, one for each technology-dependent PMD. In Figure 73-11, these variables are set independently. As indicated by the first paragraph of in 73.10.1, the definition of link_control should have "_[x]" appended to the variable name.

Applies to link_status as well.

SuggestedRemedy

Change "link_control" to "link_control_[x]" (line 14)
Change "link_status" to "link_status_[x]" (line 22)

Proposed Response *Response Status* **O**

Cl **73** *SC* **73.10.1** *P* **516** *L* **21** # i-60

RAN, ADEE — Intel Corporation

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

Some of the link_control_[x] variables are defined with respect to PMA, while others are defined with respect to PMD. All supported PHYs include PMD sublayers, and the architecture diagrams indicate that the AN interfaces these PMDs.

SuggestedRemedy

Change "PMA" to "PMD" in variables all, 1GKX, 10GKR, 10GKX4, HCD, notHCD, and PD.

Proposed Response *Response Status* **O**

Cl **73** *SC* **73.10.1** *P* **516** *L* **23** # i-61

RAN, ADEE — Intel Corporation

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

"represents that the 1000BASE-KX PMA is the signal source" literally means that link_control_[1GKX]=true. But it can also be false, in which case 1000BASE-KX PMA is not the signal source, and can also refer to link_status instead of link_control.

A simpler and more general phrasing is "represents the 1000BASE-KX PMD" (PMD rather than PMA, as addressed by another comment).

Applies to all other specific PMDs in this list.

SuggestedRemedy

Change "represents that <x> is the signal source" to "represents <x>" for each <x> in this list.

Proposed Response *Response Status* **O**

Cl **73** *SC* **73.10.1** *P* **516** *L* **21** # i-62

RAN, ADEE — Intel Corporation

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

List is not uniformly aligned.

SuggestedRemedy

Shift the tab location rightward to align the second column uniformly.

Proposed Response *Response Status* **O**

Cl **73** *SC* **73.10.1** *P* **516** *L* **42** # i-63

RAN, ADEE — Intel Corporation

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

Parallel detect is only defined for two PMD classes, 1000BASE-KX and 10GBASE-KX4/CX4 (see 73.7.4.1). Only these PMDs should appear in the "PD" list.

SuggestedRemedy

Delete ", 10GBASE-KR PMA, 40GBASE-KR4 PMD, 40GBASE-CR4 PMD, and 100GBASE-CR10 PMD".

Proposed Response *Response Status* **O**

Cl **73** *SC* **73.10.4** *P* **528** *L* **18** # i-64

RAN, ADEE — Intel Corporation

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

Superfluous "+" at the end of condition for transition from ABILITY DETECT to LINK STATUS CHECK.

SuggestedRemedy

Delete the last "+".

Proposed Response *Response Status* **O**

Cl **73** *SC* **73.7.4** *P* **510** *L* **49** # i-65

RAN, ADEE — Intel Corporation

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

The Arbitration function is practically disabled when mr_autoneg_enable is set to false. In that case, enabling the desired technology-dependent PHY, as well as selecting the proper FEC mode, should be done in some other way.

SuggestedRemedy

Add after this paragraph: "if mr_autoneg_enable is false, enabling the desired technology-dependent PHY is controlled by implementation-dependent means".

Add at the end of 73.6.5: "if mr_autoneg_enable is false, the FEC function is controlled by implementation-dependent means". (This may be worded differently if a control variable is added as suggested in another comment).

Proposed Response *Response Status* **O**

Cl **73** *SC* **73.7.4** *P* **510** *L* **54** # i-66

RAN, ADEE — Intel Corporation

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

The technology-dependent interface defined in 73.9 does not include enable/disable control. This control is done by the link_control variables.

SuggestedRemedy

Change "via the Technology-Dependent interface (see 73.9)" to "via the link_control_[x] variables".

Proposed Response *Response Status* **O**

Cl **73** *SC* **73.8** *P* **515** *L* **29** # i-67

RAN, ADEE Intel Corporation

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

MDIO Registers for BASE-R FEC negotiated (7.48.4) and Negotiated Port Type (7.48.1 thru 7.48.11) are defined in clause 45, but not listed in the register mapping table.

It seems that negotiated Port Type should be mapped to the variable vector link_control.

For BASE-R FEC negotiated, there is no variable definition in clause 73. For good order, it is worthwhile to define a variable and link the function in 73.6.5 with an MDIO register.

Note that P802.3by is about to add new FEC bits to AN, and having separate variables would help clarify the relationship between AN and MDIO. A part of this comment may also be implemented as part of 802.3by, but is included here since it is related to existing AN functionality.

SuggestedRemedy

Append rows to table 73-6:
link_control_[x] | {7.48.11:8, 7.48.6:5, 7.48.3:1} Negotiated Port Type
an_baser_fec_control | 74.48.4 BASE-R FEC negotiated

Add a variable definition an_baser_fec_control in 73.10.1 with an appropriate description and specify its setting in 73.6.5, with editorial license.

Proposed Response *Response Status* **O**

Cl **73** *SC* **73.10.4** *P* **526** *L* **1** # i-68

RAN, ADEE Intel Corporation

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

Superfluous "." at start of heading.

SuggestedRemedy

Delete the initial period.

Proposed Response *Response Status* **O**

Cl **73** *SC* **73.11.4.4** *P* **533** *L* **20** # i-69

RAN, ADEE Intel Corporation

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

Missing hyphen in "10GBASEKX4" in feature cell

SuggestedRemedy

Change "10GBASEKX4" to "10GBASE-KX4"

Proposed Response *Response Status* **O**

Cl **83** *SC* **83.5.4** *P* **185** *L* **22** # i-70

RAN, ADEE Intel Corporation

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

This subclause refers to the "cumulative delay contributed by up to four PMA stages in a PHY". But other places that refer to it, Table 80-5 and the PICS in 83.7.3, use the same numeric values without mentioning multiple PMA stages.

I assume the text here is the original intent, so other places should be aligned to it.

SuggestedRemedy

In Table 80-5, rows "40GBASE-R PMA" and "100GBASE-R PMA", prepend to the Notes: "Cumulative value for up to four PMA instances at one end of the link".

In 83.7.3, items DELAY40 and DELAY100, append to Feature: ", cumulative value for up to four PMA instances".

Proposed Response *Response Status* **O**

Cl **83** *SC* **83.3** *P* **179** *L* **8** # i-71

RAN, ADEE Intel Corporation

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

"local loopback" label in Figure 83-5 has a footnote c, "Optional". But 83.5.8 does not mark it as optional, and has a mandatory requirement for a PMA adjacent to some PMDs.

This footnote conflicts with the clause text. Figure footnotes are normative...

SuggestedRemedy

Change c to a new footnote d, with the text "Local loopback is required for PMAs adjacent to some PMDs, and optional for other PMAs. See 83.5.8."

Proposed Response *Response Status* **O**

Cl **83** *SC* **83.3** *P* **180** *L* **20** # i-72

RAN, ADEE Intel Corporation

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

The statements starting with "The ability to support transition..." and "Transition to the low power state..." use "register" and "direction" in an inconsistent order, which reduces their legibility.

SuggestedRemedy

Change "The ability to support transition to a low power state in the ingress direction is indicated by register 1.1.9 (PMA Ingress AUI Stop Ability, PIASA) and register 1.1.8 for the egress direction (PMA Egress AUI Stop Ability, PEASA)."

To "The ability to support transition to a low power state in the ingress direction is indicated by register 1.1.9 (PMA Ingress AUI Stop Ability, PIASA). The ability to support transition to a low power state in the egress direction is indicated by register 1.1.8 (PMA Egress AUI Stop Ability, PEASA)."

Change "Transition to the low power state is enabled in the ingress direction by register 1.7.9 (PMA Ingress AUI Stop Enable, PIASE) and register 1.7.8 for the egress direction (PMA Egress AUI Stop Enable, PEASE)."

To "Transition to the low power state in the ingress direction is enabled by register 1.7.9 (PMA Ingress AUI Stop Enable, PIASE). Transition to the low power state in the egress direction is enabled by register 1.7.8 (PMA Egress AUI Stop Enable, PEASE)."

Proposed Response *Response Status* **O**

Cl **92** *SC* **92.11.1** *P* **434** *L* **34** # i-74

Lusted, Kent Intel Corporation

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

The term "TP2 or TP3 Test Fixture" becomes ambiguous and incorrect with the P802.3by Draft 1.0 addition of the SFP28 test fixture.

P802.3by Draft 1.0 uses "SFP28 Host test fixture" to distinguish between that fixture and the one used with 100GBASE-CR4. The confusion is compounded by P802.3by supporting the QSFP28 MDI connector in addition to the SFP28 MDI connector.

It becomes challenging in P802.3by to reference the different host test fixtures by referring to the "TP2 or TP3 fixture" and the "SFP28 fixture" when the SFP28 fixture is also a TP2 or TP3 fixture.

SuggestedRemedy

Consider changing title from "TP2 or TP3 test fixture" to "QSFP28 and CFP4 Host test fixture".

Also update the necessary references within Cl 92 text and figures. (Fig 92-15, Fig 92-18)

also impacts 83E.4.1 first paragraph.

Proposed Response *Response Status* **O**

Cl **00** *SC* **0** *P* *L* # i-75

Anslow, Peter Ciena Corporation

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

The draft is almost consistent in its use of "interpacket gap" rather than "inter-packet gap". There are 70 instances of "interpacket gap" and 4 instances of "inter-packet gap". These are in 92.1, 93.1, 94.1, and 95.1.1.
Note- the instance in 95.1.1 will be changed when the changes made during the publication of 802.3bm are applied.

SuggestedRemedy

Change "inter-packet gap" to "interpacket gap" in 92.1, 93.1, and 94.1.

Proposed Response *Response Status* **O**

Cl **01** *SC* **1.3** *P* **66** *L* **5** # i-76

Hiertz, Guido — Ericsson AB

Comment Type **G** *Comment Status* **X**

It would be wise to add a reference regarding the use of units (b, B, V, s etc.) to this standard.

SuggestedRemedy

Add "IEEE Std 260.1(TM)-2004, IEEE Standard Letter Symbols for Units of Measurement (SI Units, Customary Inch-Pound Units, and Certain Other Units)" to the reference section.

Proposed Response *Response Status* **O**

Cl **01** *SC* **1.4.397** *P* **96** *L* **3** # i-77

Hiertz, Guido — Ericsson AB

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

Wrong use of units.

SuggestedRemedy

Replace "125-microsecond" with "125 ≠ s"

Proposed Response *Response Status* **O**

Cl **04** *SC* **4.4.2** *P* **151** *L* **12** # i-78

Hiertz, Guido — Ericsson AB

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

The table heading indicates "Mb/s" and "Gb/s". The cells, however, contain measures of "bits". This seems to be inconsistent.

SuggestedRemedy

Replace all occurrences of "bits" with "b".

Proposed Response *Response Status* **O**

Cl **01** *SC* **1.4.394** *P* **95** *L* **48** # i-79

Hiertz, Guido — Ericsson AB

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

Wrong use of units.

SuggestedRemedy

Replace "eight nanonseconds" with "8 ns"

Proposed Response *Response Status* **O**

Cl **78** *SC* **78.2** *P* **39** *L* **42** # i-80

Hiertz, Guido — Ericsson AB

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

The formatting of the heading of table 78-2 is wrong. Second "s" and the closing bracket ")" is in bold font.

SuggestedRemedy

Replace "s)" with regular font.

Proposed Response *Response Status* **O**

Cl **82** *SC* **82.2.19.2.5** *P* **154** *L* **49** # i-81

Marris, Arthur — Cadence Design Syst

Comment Type **TR** *Comment Status* **X**

FW_TX_WAKE state does not exist

SuggestedRemedy

Delete text "or FW_TX_WAKE"

Proposed Response *Response Status* **O**

Cl **83E** *SC* **83E.5.4.2** *P* **642** *L* **24** # i-82

Dudek, Michael — QLogic Corporation

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

Some of the references for the module output are incorrectly pointing to the host output sections in Annex 83E.

SuggestedRemedy

Change the following references for the module output. TM9, TM10 and TM11 to 83E.3.2.1

Proposed Response *Response Status* **O**

Cl **83E** *SC* **83E.5.4.2** *P* **642** *L* **45** # i-83

Dudek, Michael — QLogic Corporation

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

The transition time is incorrect. It should be 12ps as specified in table 83E-3

SuggestedRemedy

Change the value of TM8 to "Greater or equal to 12ps"

Proposed Response *Response Status* **O**

Cl **55** *SC* **55.5.2** *P* **673** *L* **7** # i-84

Zimmerman, George — Aquantia, and CommS

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

(section 4) - Name of register 1.132 in clause 55 (10GBASE-T Control Register) is incorrect, relative to Clause 45 definition of 1.132 in 45.2.1.65.

SuggestedRemedy

Change "(10GBASE-T Control Register)" to "(10GBASE-T test mode register)"

Proposed Response *Response Status* **O**

Cl **01** *SC* **1.4.79** *P* **51** *L* **12** # i-85

Booth, Brad — Microsoft Corporation

Comment Type **GR** *Comment Status* **X**

*** Comment submitted with the file 85523100003-Interface Names rev 3.pptx attached ***

There is an inconsistency between the definitions in 1.4 and the term used in the standard. For example, 1.4.82 defines CGMII as 100 Gigabit Media Independent Interface and 1.4.79 as 40 Gigabit Media Independent Interface, but in Figure 81-1 the figure shows them as 100 Gb/s Media Independent Interface and 40 Gb/s Media Independent Interface, respectively. The title of Clause 81 also expands on this issue by stating, "Media Independent Interface for 40 Gb/s and 100 Gb/s operation." Definition 1.4.267 defines Media Independent Interface (MII) as being in Clause 22.

The suggested remedy creates consistency between the definitions in Clause 1 and the terms used throughout the standard. It also creates consistency with the clause headings.

SuggestedRemedy

Change the title of Clause 81 to read:
Reconciliation Sublayer (RS), 40 Gigabit Media Independent Interface (XLGMII) and 100 Gigabit Media Independent Interface (CGMII)

Search and replace instances of:
100 Gb/s Media with 100 Gigabit Media
100 Gb/s Attachment with 100 Gigabit Attachment
40 Gb/s Media with 40 Gigabit Media
40 Gb/s Attachment with 40 Gigabit Attachment
100 Gb/s Four-Lane Attachment Unit Interface with 100 Gigabit Attachment Unit Interface Over Four-Lanes
100 Gb/s Ten-Lane Attachment Unit Interface with 100 Gigabit Attachment Unit Interface Over Ten-Lanes

See attached document for list of changes required.

Proposed Response *Response Status* **O**

Cl **55** *SC* **55.3.6.2.3** *P* **635** *L* **46** # i-86

Slavick, Jeff — Avago Technologies

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

In Figure 55-15 125us_timer_done and 125us_timer_not_done are used but never defined.

SuggestedRemedy

Add the following to 125_ustimer definition:

Values: The condition 125us_timer_done becomes true upon timer expiration.

Additionally change 125us_timer_not_done to !125us_timer_done in Figure 55-15

Proposed Response *Response Status* **O**

Cl **30** *SC* **30.1** *P* **340** *L* **9** # i-87

Marris, Arthur — Cadence Design Syst

Comment Type **ER** *Comment Status* **X**

Mix of spelling between "behaviors" and "behaviours" in Clause 30.

SuggestedRemedy

Use "behaviours" so change "behaviors" to "behaviours" throughout Clause 30.

Proposed Response *Response Status* **O**

Cl **77** *SC* **77.2.2.3** *P* **662** *L* **45** # i-88

Remein, Duane

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

The following statement is incorrect: this variable is assigned in the GATE Processing ONU Activation state diagram (see Figure 77-14). The variable fecOffset is not mentioned in the GATE Processing ONU Activation state diagram (which is Figure 77-29) but rather the ONT Control Multiplexer state diagram (which is Figure 77-14).

SuggestedRemedy

Change to read: this variable is assigned in the ONT Control Multiplexer state diagram (see Figure 77-14).

Proposed Response *Response Status* **O**

Cl **22** *SC* **22.1** *P* **45** *L* **40** # i-89

Grow, Robert — RMG Consulting

Comment Type **TR** *Comment Status* **X**

*** Comment submitted with the file 85554000003-Common Changes r5.docx attached ***

The statement that the MII is for PHYs of 10 Mb/s and above is clearly wrong. The MII is only specified for 10 Mb/s and 100 Mb/s, and the MII interface is also only applicable to some of the 1000 Mb/s PHYs that have been specified.

SuggestedRemedy

The attached file proposes changes to Clauses 22, 34 and 35 to fix this for both existing PHYs and proposed PHYs. If accepted, the PICS for Clause 22 will also need to be revised to provide optionality similar to that in Clause 35.

Proposed Response *Response Status* **O**

Cl **95** *SC* **95.8.8** *P* **555** *L* **22** # i-90

Dawe, Piers J G — Mellanox Technologie

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

This paragraph is pretty much repeated in 95.8.8.1, top of page 556, where it fits better. We can remove the duplication.

SuggestedRemedy

In 95.8.8.1, change "receiver under test" to "PMD under test".
In 95.8.8.1, change the first instance of "when stressed: see 95.8.1.1." to "when stressed and at the specified receive OMA: see 95.8.1.1."
Delete this paragraph here in 95.8.8.

Proposed Response *Response Status* **O**

Cl **95** *SC* **95.8.8** *P* **555** *L* **20** # i-91

Dawe, Piers J G — Mellanox Technologie

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

Use more consistent, possibly less wordy terminology for SRS test and signal in Clause 95. "conformance test" is somewhat redundant; in a standard, a test is a conformance test unless stated otherwise.

SuggestedRemedy

In Clause 95, use:
Stressed receiver conformance test
(though a shorter phrase would be nice), and
test signal
or
stressed receiver test signal.
Some or all of the proposed "stressed receiver test signal" could be just "test signal".
See pdf for details.

Proposed Response *Response Status* **O**

Cl **83E** *SC* **83E.3.3.2.1** *P* **633** *L* **43** # i-92

Dawe, Piers J G — Mellanox Technologie

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

This annex uses "stress signal" 4 times, "stressed signal" 4 times, and "test signal" 3 times. We should use the same term each time. Another option would be "compliance signal".

SuggestedRemedy

Change "stress signal" to "test signal" 4 times, and "stressed signal" to "test signal" 4 times, in 83E.

Proposed Response *Response Status* **O**

Cl **83E** *SC* **83E.3.3.2.1** *P* **633** *L* **48** # i-93

Dawe, Piers J G — Mellanox Technologie

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

clean pattern

SuggestedRemedy

clean signal. Also in 83E.3.4.1.1.

Proposed Response *Response Status* **O**

Cl **83E** *SC* **83E.3.3.2.1** *P* **633** *L* **53** # i-94

Dawe, Piers J G — Mellanox Technologie

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

The data rate should be approximately 1/10th of the stressed pattern data rate (2.578 GBd).

SuggestedRemedy

The signaling rate of the jitter PRBS should be approximately 1/10th of the test signal's signaling rate (i.e, approximately 2.578 GBd).
And again in 83E.3.4.1.1.

Proposed Response *Response Status* **O**

Cl **83E** *SC* **83E.3.4.1.1** *P* **637** *L* **36** # i-95

Dawe, Piers J G — Mellanox Technologie

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

such that from the output of the pattern generator to TP1a comprises the mated HCB/MCB pair...

SuggestedRemedy

such that the connection from the output of the pattern generator to TP1a comprises the mated HCB/MCB pair...

Proposed Response *Response Status* **O**

Cl **95** *SC* **95.8.8** *P* **555** *L* **20** # i-96

Dawe, Piers J G — Mellanox Technologie

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

*** Comment submitted with the file 85554300003-802.3bxD3.0_95.8.8stressedReceiverSensitivityEditorials.pdf attached ***

File supporting another comment.

SuggestedRemedy

Implement deletions and insertions as in attachment

Proposed Response *Response Status* **O**

Cl **00** *SC* **0** *P* *L* # i-97

Perry, Lisa

Comment Type **GR** *Comment Status* **X**

[Entering this comment on behalf of Angela Thomas]
All references to "Company Identifier" should be replaced with "Company ID" throughout the document.

SuggestedRemedy

Proposed Response *Response Status* **O**

Cl **28** *SC* **28.5.4.10** *P* **329** *L* **31** # i-98

Perry, Lisa

Comment Type **GR** *Comment Status* **X**

[Entering this comment on behalf of Angela Thomas]
The RAC thanks the WG for its efforts to update the standard to use current RA terminology and to include the CID where appropriate. It looks like the referenced PICs item was not updated to be consistent with the updates made to Annex 28.C.6.

SuggestedRemedy

Please update the Value/Comment text to state OUI or CID (multiple occurrences).

Proposed Response *Response Status* **O**

Cl **30** *SC* **30.3.6.1.16** *P* **405** *L* **26** # i-99

Perry, Lisa

Comment Type **GR** *Comment Status* **X**

[Entering this comment on behalf of Angela Thomas]
Under "BEHAVIOUR DEFINED AS", the first sentence of the text reads: "The value of the OUI variable in the Vendor Identifier field (see Table 57-11) of the most recently received Information OAMPDU". The RAC is unable to determine if the BEHAVIOUR should include OUI or a CID. It is possible that references between Clause 30 and Clause 57 specifications have become disconnected.

a) We cannot find a use of "Vendor Identifier field" in Section 5. Table 57-11 is entitled "Vendor Specific Information field", and has one entry, an unstructured 32-bit identifier that may be used to differentiate a vendor's product models/versions. There is no indication that an OUI is part of that field. Rather, Table 57-10 is OUI field, which may include either an OUI or CID.

b) The attribute referencing Table 57-10 is 30.3.6.1.12. But, rather than describing anything related to OUI, it refers to the Revision field of the Local Information TLV, which seems to not be in Table 57-10 but is in the Table in section 57.7.3.4.

SuggestedRemedy

If the correct reference for this attribute is Table-10, OUI field, then the attribute should indicate OUI or CID.

Though not a RAC Mandatory Coordination issue, we recommend that the WG review attributes supporting Clause 57 to verify that correct field names are used, and that Table references are correct in pointing at Clause 57 content. (It is possible that FrameMaker cross references were not used in Clause 30 to ease validation of Clause 30 specifications with MIB tools. If so, both Table and sub clause numbers could have drifted apart as additions have been made to Clause 57.)

Proposed Response *Response Status* **O**

Cl **00** *SC* **0** *P* **0** *L* **0** # i-100

Turner, Michelle

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

This draft meets all editorial requirements.

SuggestedRemedy

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.1.65.1** *P* **111** *L* **29** # i-101
Mcclellan, Brett Marvell Semiconducto

Comment Type **TR** *Comment Status* **X**
reference to Table 55-1 should be Table 55-12

SuggestedRemedy
change Table 55-1 to Table 55-12

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.3.1.2** *P* **177** *L* **50** # i-102
Mcclellan, Brett Marvell Semiconducto

Comment Type **TR** *Comment Status* **X**
reference to 55.3.6.3 is incorrect, it should be 55.3.7.3

SuggestedRemedy
change 55.3.6.3 to 55.3.7.3

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.7.13** *P* **260** *L* **12** # i-103
Mcclellan, Brett Marvell Semiconducto

Comment Type **TR** *Comment Status* **X**
28.2.3.4.1 does not describe how EEE is advertised and 55.6.1 is the wrong reference

SuggestedRemedy
line 12 change:"28.2.3.4.1; U3 / 55.6.1; U24"
to: "Table 40-4; U3 / 55.6.2; U24"
line 16 change:"28.2.3.4.1; U2 / 55.6.1; U23"
to: "Table 40-4; U2 / 55.6.2; U23"
line 20 change:"28.2.3.4.1; U1 / 55.6.1; U22"
to: "Table 40-4; U1 / 55.6.2; U22"
page 263 line 8 change:"28.2.3.4.1; U3 / 55.6.1; U24"
to: "Table 40-4; U3 / 55.6.2; U24"
line 12 change:"28.2.3.4.1; U2 / 55.6.1; U23"
to: "Table 40-4; U2 / 55.6.2; U23"
line 16 change:"28.2.3.4.1; U1 / 55.6.1; U23"
to: "Table 40-4; U1 / 55.6.2; U22"

Proposed Response *Response Status* **O**

Cl **55** *SC* **55.3.6** *P* **641** *L* **27** # i-104
Mcclellan, Brett Marvell Semiconducto

Comment Type **TR** *Comment Status* **X**
E' entrance to TX_E should have been deleted by the editor between draft 2.1 and 2.2 of 802.3az.

SuggestedRemedy
delete 'E' from the entrance of TX_E

Proposed Response *Response Status* **O**

Cl **48** *SC* **48.2.5** *P* **264** *L* **40** # i-105
Mcclellan, Brett Marvell Semiconducto

Comment Type **T** *Comment Status* **X**
Using the Receive local fault bit (4.8.10) to report the alignment status is inconsistent with the use of the terms 'transmit' and receive in Clause 45.2.4 (PHY XS registers). In subclause 45.2.4.8 the term 'transmit' is applied in the direction toward the PHY, and 'receive' is applied in the direction toward the RS. Lane alignment is performed in the transmit path of the PHY XS.

SuggestedRemedy
Change "4.8.10 Receive local fault" to "4.8.11 Transmit local fault".

Proposed Response *Response Status* **O**