Cl **00** *SC* *P* *L* # 172

Grow, Robert — Intel

Comment Type **TR** *Comment Status* **A**

There is no 12-bit Manufacturer ID in the list of registries. (There is a 14-bit Manufacturer ID for IEEE 1451.4 which makes the confusion of this text and its footnote even worse.) Though the clause is deprecated, the footnote is wrong because it provides no useful information on a 12-bit Manufacturer ID.

SuggestedRemedy

Either delete the footnote or change by inserting a sentence at the beginning of the footnote: 35 The Manufacturer ID specified here is not an active registry.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

The location is in 16.3.1.1.3 Unique word, footnote 35. The suggested remedy of deleting the footnote altogether is prefered.

Cl **00** *SC* **0** *P* *L* # 374

Anslow, Peter — Ciena

Comment Type **T** *Comment Status* **A** *Safety References*

There are two entries for IEC 60950 in subclause 1.3:

IEC 60950:1991, Safety of information technology equipment.
IEC 60950-1:2001, Information technology equipment—Safety—Part 1: General requirements.

However, since 2001 IEC 60950-1 has been updated with Edition 2.0 in 2005

There are 111 references to IEC 60950. These can be divided into those under the heading "General safety" and those for isolation requirements.

SuggestedRemedy

If there are differences in the isolation requirements between the 1991, 2001 and 2005 versions, then leave the isolation references as they are. If the requirements are the same then update the isolation requirements to be the 2005 edition.

For the "General safety" clauses (and their associated PICS) change the reference to be "IEC 60950-1:2005" and add an entry in 1.3 for this version.
This applies to at least:
8.7.1, 14.7.1, 23.9.1, 27.5.1, 32.10.1, 33.7.1, 52.10.1, 53.10.1, 55.9.1, 58.8.1, 59.8.1, 60.8.1, 68.10.3.5, 70.9.1, 71.9.1, 72.9.1, 75.8.1, 84.10.1, 86.9.1, 87.9.1, 88.9.1, 89.8.1, 83A.6.1, 83B.3.1, 86A.7.1
and their associated PICS item.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

For the "General safety" clauses (and their associated PICS) change the reference to be "IEC 60950-1" and add an undated entry in 1.3 for this standard.
Do not change in deprecated clauses.
Leave isolation references as they are.

Cl **00** *SC* **0** *P* *L* # 370

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A** *BER*

In 1.5 the abbreviation "BER" is expanded to "bit error ratio" and "BERT" is "bit error ratio tester"

A search of the entire D2.0 gives 143 instances of "error ratio" and 29 instances of "error rate"

Since a number like 10 to the power -12 is not a rate but a ratio, change the 29 instances to be "error ratio"

SuggestedRemedy

In section 1 change 2 instances of "error rate" to "error ratio"
In section 2 change 2 instances of "error rate" to "error ratio"
In section 3 change 3 instances of "error rate" to "error ratio"
In section 4 change 19 instances of "error rate" to "error ratio"
In section 5 change 3 instances of "error rate" to "error ratio"

Response *Response Status* **C**

ACCEPT.

Cl **00** *SC* **0** *P* *L* # 333

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

Some of the text inserted by the various amendments is still underlined when this was done only to mark the insertion.

SuggestedRemedy

Remove the underline.
This is needed at least in:
The heading of 48.2.4.2
48.2.6.1.3
49.2.13.2.3
51.2

Response *Response Status* **C**

ACCEPT.

Cl **00** *SC* **0** *P* *L* # 171

Grow, Robert Intel

Comment Type **TR** *Comment Status* **A** *8802*

We need to decide what to do with the 8802 references in the document.

SuggestedRemedy

I recommend all self references to be converted to non-specific references where possible (delete the self reference, change to Ethernet, etc.) as follows:

1.1.3.2, p.4, l.3 - "communication by way of the ISO/IEC 8802-3 [IEEE Std 802.3] Local Area Network" becomes "communication in an Ethernet Local Area Network"

4.2.2.4, p.66, l.33 - Strike "beyond that provided in ISO/IEC 8802-3:1990", (keep consistent with 4A.2.2.4, p.591, l.2, separate instruction follows)

4.2.2.4, p.66, l.40 - Strike "of ISO/IEC 8802-3:1990"

5.2.1, p.100, l.24 - Replace "the ISO/IEC 8802-3 CSMA/CD" with "the Ethernet"

10.1.1, p.227, l.11 - Replace "entire ISO/IEC 8802-3 CSMA/CD LAN International Standard is shown" with "OSI Reference Model is shown"

15.1.1, p.373, l.20 - Replace "entire ISO/IEC 8802-3 CSMA/CD LAN International Standard is shown" with "OSI Reference Model is shown"

16.1.1, p.397, l.12 - Replace "entire ISO/IEC 8802-3 CSMA/CD LAN International Standard is shown" with "OSI Reference Model is shown"

16.3.1.1.3, p.401, l.53 - Strike "for ISO/IEC 8802-3"

17.1.1, p.435, l.10 - Replace "entire ISO/IEC 8802-3 CSMA/CD LAN International Standard is shown" with "sublayers used within this standard is shown"

18.1.1, p.461, l.10 - Replace "entire ISO/IEC 8802-3 CSMA/CD LAN International Standard is shown" with "OSI Reference Model is shown"

18.1.1.1, p.461, l.23 - Strike: "defined in ISO/IEC 8802-3"

19.1.1, p.491, l.13 - Replace "ISO/IEC 8802-3" with "Ethernet"
D.1, p.543, l.12 - Replace "on what particular clauses of the ISO/IEC 8802-3 International Standard might be considered useful for different application environments" with "on the particular clauses of this standard considered useful for different 10 Mb/s application environments"

4A.2.2.4, p.591, l.2 - Strike "beyond that provided in ISO/IEC 8802-3:1990", (keep consistent with 4.2.2.4, p.66, l.33, separate instruction preceeded)

27.1.1, p.211, l.10 - Replace "entire ISO/IEC 8802-3 CSMA/CD LAN International Standard

is shown" with "OSI Reference Model is shown"

28.1.3, p.248, l.43 - Change title to: "Relationship to architectural layering"

30.1, p.311, l.46 - Replace "a network specified by ISO/IEC 8802-3" with "an Ethernet network"

34.1p.1, l.31Replace "ISO/IEC 8802-3" with "Ethernet", also l.32, l.35, l.39
Table 34-1, p.4, l.12, Delete "8802-3:" (two occurrences), do the same thing in Table 34-2

Table 34-2, p.4, l.39, Replace "8802-3 with 1000BASE-T

37.1.3, p.92, l.3 - Change title to: "Relationship to architectural layering"

41.1.1, p.279, l.10 - Replace "ISO/IEC 8802-3" with "Ethernet", also l.11

41.1.1, p.279, l.12 - Replace "entire ISO/IEC 8802-3 CSMA/CD LAN International Standard is shown" with "OSI Reference Model is shown"

Response *Response Status* **C**

ACCEPT.

Cl **00** *SC* **0** *P* *L* # 163

Grow, Robert Intel

Comment Type **TR** *Comment Status* **A** *URL*

Inconsistent URLs for downloads. We shouldn't have three download sites, staff has promised a site with sufficient structure, but I've yet to see it meet requirements. The site must support revisions (e.g., the current file needs to be distinguished from a superseded file). The first URL given to us is now a broken link, that makes one question the durability of the current downloads link.

We have a Style Manual detailing all sorts of stuff, but there is no guidance on important topics that should have equal rigor and consistency across IEEE standards. For example, does one name the file for the parent standard or the amendment? Is the year included to cover superseded files? If an amendment is superseded does one keep the same file name? Should the references be to file lists or to specific files?

SuggestedRemedy

Fix with consistent file naming conventions, the following URLs.

40.1.3.5, NOTE on p. 185, l. 51 is broken, footnote on next page is to http://standards.ieee.org/reading/ieee/std/downloads/index.html. Unfortunately this redirects to Xplore.

76A.1, footnote on p. 803, l. 54 is to a list at http://www.ieee802.org/3/av/online_resources/.

40.6.1.3, NOTE on p. 236, l. 1 has same problems as above.

40.6.1.2.4, NOTE on p. 241, l. 11 is broken

55A.2, footnote 29 on p. 593, l. 54 does link to a zip file, its parent http://standards.ieee.org/downloads/802/ takes one to a flat list for all 802 (not very forward looking if IEEE-SA ever enters the electronic age with gusto).

68.6.6.2, footnote 24, p. 367, l. 54 takes one to the file, but unlike the clause 55 matrices, the file name includes project identification.

Response *Response Status* **U**

ACCEPT IN PRINCIPLE.
Issue currently being worked on with IEEE staff

Cl **00** *SC* **0** *P* *L* # 162

Grow, Robert Intel

Comment Type **ER** *Comment Status* **A** *URL*

We use inconsistent URL references to the Registration Authority (SA home page or RegAuth home page).

SuggestedRemedy

Make all references to the Registration Authority home page (assuming it will be a durable URL. Page 36, line 37 (1.4.289) redirects to http://standards.ieee.org/develop/regauth/. Either change all to this URL or to the one currently in this NOTE. Also:
footnote 20 on page 57 (3.2.4)
footnote 21 on page 58 (3.2.6)
footnote 35 on page 401 (16.3.1.1.3)
footnote 25 on page 721 (31C.2)
footnote 4 on page 43 (57.4.3.6), this footnote should also be rewritten for consistency with other OUI references.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change all to http://standards.ieee.org/develop/regauth/

Change footnote 4 on page 43 (57.4.3.6) to match other footnotes

Cl **00** *SC* **0** *P* *L* # 159

Grow, Robert Intel

Comment Type **E** *Comment Status* **A** *Pub*

Inconsistent capitalization and hyphenation of vendor specific. In general it should be vendor specific (though I'd be happy to get advice from our publication editor). Multiple uses though require sentence case. Vendor Specific Information Field is used as a proper name, yet we don't do the same for Vendor specific MMD uses.

SuggestedRemedy

Make consistent (109 hits on search) with the exception of proper names and sentence case.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change to "vendor specific" unless used as an adjective where use "vendor-specific"
Don't change "Vendor specific MMD"

Cl **00** *SC* **0** *P* *L* # 158

Grow, Robert Intel

Comment Type **E** *Comment Status* **A** *PICS*

Major Capabilities/Options (various PICS title capitalizations)

SuggestedRemedy

Pick one, search and replace.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Refer to #261

Cl **00** *SC* **0** *P* *L* # 156

Grow, Robert Intel

Comment Type **E** *Comment Status* **A** *CAPS*

Inconsistent capitalization for next page and base page, e.g., Next Page, next page, or Next page.

SuggestedRemedy

Pick one, search and replace to make consistent. Next page and base page capitalization should be consistent.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Use "Next Page" and "Base Page"

Cl **00** *SC* **0** *P* *L* # 154

Grow, Robert Intel

Comment Type **E** *Comment Status* **A** *CAPS*

Inconsistent use terms for interpacket gap:
Inter-Packet Gap 8 (various capitalization)
interpacket gap 44
interpacket-gap 1

SuggestedRemedy

Search and replace with interpacket gap. Where the reference is to the Pascal variable interPacketGap, there should be no change.

Add to 802.3 compound words

Response *Response Status* **C**

ACCEPT.

Cl **00** *SC* **0** *P* *L* # 328

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A** *PICS*

Several clauses have had PICS items added using letter subscripts to avoid re-numbering the PICS items.
e.g. in Clause 45 we have MM19, MM19a, MM19b, .. MM19d, MM20 and no MM14

SuggestedRemedy

Re-number the PICs items
This is needed in at least:
Clause 45
Clause 55
Clause 70
Clause 71
Clause 72
Clause 74

Response *Response Status* **C**

ACCEPT.

Cl **00** *SC* **0** *P* *L* # 304

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A** *PICS*

For all of the PICS "Protocol summary" subclauses there are two places that refer to the clause and the standard.

For example in 45.5.2.2 is:
"Identification of protocol standard" "IEEE P802.3/D1.0, Clause 45, ..."
"... the implementation does not conform to IEEE P802.3/D1.0"

Other PICS clauses have different formats.
For consistency, ease of updating through the various versions and ease of converting to a published standard it would be useful to change all instances in all PICS proforma to "IEEE Std 802.3-201x"

SuggestedRemedy

Change all instances in all PICS proforma to "IEEE Std 802.3-201x"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Refer to #261

Cl **00** *SC* **0** *P* *L* # 329

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

The draft has a number of references to:
Annex 30A (16 instances in Sections 1, 2 and 5)
e.g. "... as defined by the NAMEBINDINGs in 30A.10.1 ..."
Annex 30C (2 instances in Section 2)
"see 30C.4.2" and "see 30C.4.4"

But Annex 30A has been moved to IEEE Std 802.3.1
Annex 30C has been moved to IEEE Std 802.1AX

SuggestedRemedy

Replace all references with appropriate references to where the material went.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Delete both notes referencing 30C

Delete Annex H
Remove sentence from 5.1 containing reference to Annex H
Fix frontmatter description of section 1
In 19.1.5 delete words "in Annex H"

Delete the Note in line 20, page (PDF) 331 and the sentence immediately before it in 30.1.

See also response to #237, #238, #239.

Editor has upgraded this to a T.

Cl **00** *SC* **0** *P* *L* # 157

Grow, Robert Intel

Comment Type **E** *Comment Status* **A** *CAPS*

Inconsistent capitalization for physical layer.

SuggestedRemedy

Pick one, search and replace. My preference is Physical Layer.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change to Physical Layer

Cl **00** *SC* **0** *P* *L* # 284

Anslow, Peter
Ciena

Comment Type **E** *Comment Status* **A**

In several clauses the amendments have inserted subclauses, tables and figures without renumbering the existing elements, or they have caused numbering issues elsewhere in the clause.

For example, in Clause 55 there is a Table 55-1a, Figure 55-13a etc.
Clause 45 has two figures numbered Figure 45-1

Rationalise Subclause, Table and Figure numbering for all amended clauses where this has not been done.

SuggestedRemedy

Rationalise Subclause, Table and Figure numbering in all amended clauses where this has not already been done.

Includes at least Clauses 36, 40, 55, 72, 79

Response *Response Status* **C**

ACCEPT.

The editorial team will go through the document and rationalize such outstanding items.

Cl **00** *SC* **0** *P* **00** *L* **0** # 261

Hajduczenia, Marek
ZTE Corporation

Comment Type **ER** *Comment Status* **A** *PICS*

We have apparently different ways of filling in the "Protocol summary" table. For example.
In 77.5.2.2, field "Identification of protocol standard" says "IEEE Std 802.3av-2009, Clause 77, Multipoint MAC Control", listing ammendment reference, Clause and title.
In 71.10.2.2, field "Identification of protocol standard" says "IEEE Std 802.3-2008, Clause 71, Physical Medium Dependent (PMD) sublayer and baseband medium type 10GBASE-KX4", listing standard reference, Clause and title.
In 65.4.2.2, field "Identification of protocol standard" says " IEEE Std 802.3-2008, Extensions of the Reconciliation Sublayer (RS) and Physical Coding Sublayer (PCS) / Physical Media Attachment (PMA) for 1000BASE-X for multipoint links and forward error correction", listing standard and title, without clause number.
In some cases, instead of "Identification of protocol standard", text "Identification of protocol specification" is used (in Annex 57A and 57B) - any reason for that?

SuggestedRemedy

Align the description format for the "Identification of protocol standard" in PICS to have the following format "IEEE Std 802.3-2008, Clause X, title"
Need to change any instances of "Identification of protocol specification", to "Identification of protocol standard" is used.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Make the "Identification of protocol standard" have the format "IEEE Std 802.3-201x, Clause Y, Title".

Change any instances of ""Identification of protocol specification" to ""Identification of protocol standard"

After "(See Clause 21; the answer Yes means that the implementation does not conform to" change to "IEEE Std 802.3-201x"

See if we can implement the year as a variable so that this is automatic on the next revision.

For the title case for major capabilities/options use: "Major capabilities/options"

In any PICS introduction subclause that contains "IEEE Std 802.3-2008", remove it.

Cl **00** *SC* **0** *P* **1** *L* **1** # 197

Booth, Brad — Dell

Comment Type **E** *Comment Status* **A** *MR 1198*

Could not find any reference to maintenance item 1198 in the draft.

SuggestedRemedy

Either delete from the ballot or highlight in the draft.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

The actual agreed upon resolution for the MR was to incorporate in the .3 style guide (see http://www.ieee802.org/3/maint/requests/revision_history.html#REQ1198 and http://www.ieee802.org/3/maint/public/minutes_0908.pdf#Page=3).

There are a number of comments included on caps.

Cl **01** *SC* *P* **vi** *L* **45** # 97

Dawe, Piers — IPtronics

Comment Type **E** *Comment Status* **A**

Some URLs are blue and underlined, some just blue. In 1.3 Normative references several are neither.

SuggestedRemedy

Please underline all web links.

Response *Response Status* **C**

ACCEPT.

The Editor changed this comment from 99 to 01 as the commenter is talking about section 1.3

Cl **01** *SC* **1** *P* **1** *L* # 3

Dawe, Piers — IPtronics

Comment Type **E** *Comment Status* **A**

pdf page number does not match printed page number.

SuggestedRemedy

Please make the pdf page numbers match the printed page numbers (or vice versa, for a draft).

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.1** *P* **1** *L* # 5

Dawe, Piers — IPtronics

Comment Type **E** *Comment Status* **A**

"and in 4.4.2.": not a clickable link.

SuggestedRemedy

Make 4.4.2 a link.

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.1.3** *P* **3** *L* **1** # 11

Dawe, Piers — IPtronics

Comment Type **ER** *Comment Status* **R** *Reference Feature*

While the informative references e.g. [B22] are clickable, the more numerous and important normative references are not.

SuggestedRemedy

Please set up the Frame template so that normative references clickable: e.g. clicking on "ISO/IEC 7498-1:1994" here would take one to the entry for ISO/IEC 7498-1:1994 in 1.3 Normative references. As the standard is revised or extended, use clickable references within new or changed material.

Response *Response Status* **C**

REJECT.

This seems like a lot of work for little value that also introduces a significant maintenance burden.

Cl **01** *SC* **1.1.3** *P* **3** *L* **4** # 59

Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **R** *MR 1198*

Maintenance request 1198 quotes the IEEE Standards Style Manual:
"All capital letters or mixed uppercase and lowercase letters may be used, depending on the amount of text, as long as the presentation is consistent throughout the document." but contradicts that with an assertion that "Figures should use all CAPS for text that is in reference to sublayer or
interface." Consistent throughout the document means what it says, not consistent except when we feel like disobeying the rule. It seems that back in the day, the first clauses of 802.3 were written with the ALL CAPS style of figures. Along the way, it has changed except for some figures that get copied from project to project. The huge majority of figures are mixed case now, there is no turning back. So, to be consistent, we should fix the minority. As to layer diagrams: look at ISO/IEC 7498-1 Figure 11. The layers are Proper Nouns but not ALL-CAPITAL items like states in a state machine. Words like "optional" aren't even proper nouns. In a mixed-case-figures document like this one, the same rules apply in figures as elsewhere.

SuggestedRemedy

Bring Figure 1-1 in line with the mixed-case presentation of 802.3. Plan to correct the other diagrams in the maintained clauses at some stage. Luckily, the vocabulary in these diagrams is very restricted, so that a search for e.g. MAC CONTROL (in caps) will bring an editor very quickly to the other instances that need changing.

Response *Response Status* **C**

REJECT.

The topic of capitalisation in Layer Diagrams was discussed in the Maintenance meeting in September 2008 in connection with Maintenance request 1198. This resulted in guidelines being placed on the 802.3 Tools web page (http://www.ieee802.org/3/WG_tools/editorial/requirements/words.html) which includes:
Layer diagram guidelines
1) All capitals will be used in these diagrams - the only exception will be text in brackets such as '(Optional)'

Cl **01** *SC* **1.1.4** *P* **6** *L* **17** # 6

Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A** *Global link change*

Cross-reference doesn't work.

SuggestedRemedy

Please ensure that the cross-references between sections work. If that is not feasible, produce a pdf with the whole standard in one section.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Make cross-references between sections work provided the section files are not re-named and all reside in the same directory.

Cl **01** *SC* **1.14.151** *P* **27** *L* **48** # 275

Trowbridge, Steve Alcatel-Lucent

Comment Type **T** *Comment Status* **A** *HIS*

ATIS references are outdated

SuggestedRemedy

Update references to ATIS-0900105.2008 and ATIS-0600417.2003

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.14.29** *P* **19** *L* **33** # 264

Trowbridge, Steve Alcatel-Lucent

Comment Type **E** *Comment Status* **A**

10BROAD36 should be alphebetized between other 10M PMDs and not between gigabit and 10 Gigabit PMDs.

SuggestedRemedy

Realphebetize so that 10M PMDs are together. Same for 10PASS-TS, clause 1.4.59

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.14.303** *P* **37** *L* **31** # 265

Trowbridge, Steve — Alcatel-Lucent

Comment Type **E** *Comment Status* **R**

PDV is used today to mean "Packet Delay Variation". I suspect that "Packet Delay Value" is a much older term.

SuggestedRemedy

Assuming that PDV is used only in a few places in the text, consider spelling it out where it means "Packet Delay Value" rather than using an acronym which is usually understood to have a different meaning.

Response *Response Status* **C**

REJECT.

PDV is used in 13.4.1, B.1.5.2, 29.3.1, 42.3.1. In all cases, the term is introduced as “path delay value (PDV)”

So there is little room for confusion and using the full term everywhere (34 matches to PDV) does not seem appropriate.

Cl **01** *SC* **1.2.1** *P* **6** *L* **30** # 177

Thaler, Patricia — Broadcom

Comment Type **E** *Comment Status* **R**

This contains only a small part of the state diagram conventions used in most of IEEE 802.3.

Most (probably all) Clauses after 14 that use timers reference the state diagram timer conventions of 14.2.3.2. I think that all Clauses after 21 reference the state diagram conventions of 21.5. Or in some cases such as 31B, they don't have the explicit statement but should have made it because they are designed for that notation.

It is inconvient to have the conventions scattered in 3 places.

SuggestedRemedy

Consider moving 14.2.3.2 and 21.5 up to subclauses of 1.2 or 1.2.1 with statements indicating that the early Clauses to which they don't apply.

Response *Response Status* **C**

REJECT.

This would be a significant change that does not change functionality with a risk of introducing unintended errors in the draft

---

Cl **01** *SC* **1.2.6** *P* **9** *L* **18** # 198

Booth, Brad — Dell

Comment Type **T** *Comment Status* **R** *MR 1204*

The "unless otherwise stated" creates too many issues for having to valid the truth in the rest of the statement.

SuggestedRemedy

Change to read:
Unless significant digits or trailing zeros are stated, numerical values are to be taken as exact.

Response *Response Status* **C**

REJECT.

The current wording “Unless otherwise stated, numerical limits in this standard are to be taken as exact, with the number of significant digits and trailing zeros having no significance.” is easily understood and clear.

The re-wording adds some ambiguity and moves away from the consensus text developed in November of 2009 for this MR.

Cl **01** *SC* **1.2.6** *P* **9** *L* **18** # 192

Booth, Brad — Dell

Comment Type **E** *Comment Status* **A** *Editor Note*

Reference or links in editor's notes need to be checked.

SuggestedRemedy

Maintenance item 1204 shows 1202 in editor's note.

Links for 1212, 1218, 1225, 1229 and 1230 point to 1199.

URL link to 1226 needs to be corrected (.pdf instead of .pdfIEEE).

Link for 1233 is not there.

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.2.6** *P* **9** *L* **23** # 376

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

Says "inserted based on maintenance request 1202" but it should be request 1204 (URL is correct)

SuggestedRemedy

Change 1202 to 1204

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.3** *P* **10** *L* **12** # 434

Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A** *TIA-568-B*

The contents of this Standard have been superseded by '568-C.2. Comments to apply this change to other applicable sections of the document have been made individually.

SuggestedRemedy

Delete:
"ANSI/TIA-568-B.2-10-2008; Transmission Performance Specifications for 4-pair 100W Augmented Category 6 Cabling."

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.3** *P* **10** *L* **15** # 440

Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A** *TIA-568-C.0*

Missing publication date.

SuggestedRemedy

Replace:
"ANSI/TIA-568-C.0-Generic Telecommunications Cabling."

with:
"ANSI/TIA-568-C.0-2010-Generic Telecommunications Cabling."

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.3** *P* **10** *L* **17** # 441

Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A** *TIA-568-C.2*

Missing publication date.

SuggestedRemedy

Replace:
"ANSI/TIA-568-C.2-Copper Cabling Components."

with:
"ANSI/TIA-568-C.2-2010-Copper Cabling Components.

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.3** *P* **10** *L* **29** # 429

Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A** *TIA/EIA-568-A*

Missing publication date

SuggestedRemedy

Replace:
"ANSI/TIA/EIA-568-A, Commercial Building Telecommunications Cabling Standard."

with:
"ANSI/TIA/EIA-568-A-1995-Commercial Building Telecommunications Cabling Standard."

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.3** *P* **10** *L* **31** # 445

Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A** *TIA-568-B*

This Standard is not referenced in the document.

SuggestedRemedy

Delete:
"ANSI/TIA/EIA-568-B:2001, Commercial Building Telecommunications Cabling Standard."

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.3** *P* **10** *L* **33** # 453

Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A** *TIA-568-C*

Update Standards reference. Comments to apply this change to other applicable sections of the document have been made individually.

SuggestedRemedy

Replace:
"ANSI/TIA/EIA-568-B.3-2000; Optical Fiber Cabling Components Standard."

with:
"ANSI/TIA/-568-C.3-2008; Optical Fiber Cabling Components Standard."

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change to, "ANSI/TIA-568-C.3-2008; Optical Fiber Cabling Components Standard." (delete extra "/")

Cl **01** *SC* **1.3** *P* **10** *L* **40** # 221

Law, David HP

Comment Type **E** *Comment Status* **A** *Standards reference change*

Shouldn't 'ETSI TS1 101 270-1' be 'ETSI TS 101 270-1' (See http://www.etsi.org/deliver/etsi_ts/101200_101299/10127001/01.02.01_60/ts_10127001v010201p.pdf).

SuggestedRemedy

Correct if required.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Clause Editor will implement proposed remedy by verifing the title and implementing if necessary.

Cl **01** *SC* **1.3** *P* **10** *L* **40** # 220

Law, David HP

Comment Type **E** *Comment Status* **A**

The is no footnote as to where ETSI standards can be obtained.

SuggestedRemedy

Add a footnote as to where ETSI standards can be obtained, I understand they are available free of charge from <http://pda.etsi.org/pda/queryform.asp>.

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.3** *P* **10** *L* **43** # 222

Law, David HP

Comment Type **E** *Comment Status* **A** *Standards reference change*

Shouldn't 'ETSI TS 270-2' be 'ETSI TS 101 270-2' (see http://www.etsi.org/deliver/etsi_ts/101200_101299/10127002/01.01.01_60/ts_10127002v010101p.pdf).

SuggestedRemedy

Correct if required.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Clause Editor will implement proposed remedy by verifing the title and implementing if necessary.

Cl **01** *SC* **1.3** *P* **10** *L* **49** # 411

Maguire, Valerie Siemon

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

CISPR documents are available for purchase from IHS.

SuggestedRemedy

Replace:
"CISPR documents are available from the International Electrotechnical Commission, 3 rue de Varembé, Case Postale 131, CH 1211, Genève 20, Switzerland/Suisse (http://www.iec.ch/). CISPR documents are also available in the United States from the American National Standards Institute."

with:
"CISPR documents are available from The IHS Standards Store (http://global.ihs.com/)"

Apply changes to other locations as applicable.

Proposed Response *Response Status* **Z**

REJECT.

This comment was WITHDRAWN by the commenter.

Cl **01** *SC* **1.3** *P* **10** *L* **51** # 410

Maguire, Valerie Siemon

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

EIA and JEDEC ocuments are available for purchase from IHS.

SuggestedRemedy

Replace:
"EIA publications are available from Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado 80112, USA (http://global.ihs.com/). JEDEC publications are available from JEDEC, 2001 I Street NW, Washington, DC 20006, USA."

with:
"EIA and JEDEC publications are available from The IHS Standards Store (http://global.ihs.com/)"

Apply changes to other locations as applicable.

Proposed Response *Response Status* **Z**

REJECT.

This comment was WITHDRAWN by the commenter.

Cl **01** *SC* **1.3** *P* **10** *L* **53** # 412

Maguire, Valerie Siemon

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

IEC documents are available for purchase from IHS.

SuggestedRemedy

Replace:
"IEC publications are available from IEC Sales Department, Case Postale 131, 3 rue de Varembé, CH-1211, Genève 20, Switzerland/Suisse (http://www.iec.ch/). IEC publications are also available in the United States from the American National Standards Institute."

with:
"IEC publications are available from The IHS Standards Store (http://global.ihs.com/)"

Apply changes to other locations as applicable.

Proposed Response *Response Status* **Z**

REJECT.

This comment was WITHDRAWN by the commenter.

Cl **01** *SC* **1.3** *P* **11** *L* **22** # 9

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

Par 1-48

SuggestedRemedy

Part 1-48? Also change dispersions to dispersion

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Clause Editor to change "dispersions" to "dispersion" and "Par 1- 48" to "Part 1-48".

Cl **01** *SC* **1.3** *P* **11** *L* **51** # 375

Anslow, Peter — Ciena

Comment Type **TR** *Comment Status* **A** *Standards reference change*

See http://www.ieee802.org//3/maint/public/anslow_2_0711.pdf for the justification for this change.

SuggestedRemedy

Change:
"IEC 60825-1:2001, Edition 1.2, Consolidated Edition; Safety of Laser Products-Part 1: Equipment classification, requirements and user's guide" to:
"IEC 60825-1, Safety of laser products-Part 1: Equipment classification and requirements"

On line 54, change:
"IEC 60825-2:1993, Safety of laser products-Part 2: Safety of optical fibre communication systems" to:
"IEC 60825-2, Safety of laser products-Part 2: Safety of optical fibre communication systems (OFCS)"

In subclause 9.9.7.1.2 in Section 1, Page 224, Line 13, change:
"of IEC 60825: 1993, if" to:
"of IEC 60825-1 and IEC 60825-2, if"

In subclause 52.10.2 in Section 4, Page 453, Line 14, change:
"in the IEC 60825-1:2001, under" to:
"in IEC 60825-1, under"

In subclause 52.15.3.11 in Section 4, Page 464, Line 8, change:
"in the IEC 60825-1" to:
"in IEC 60825-1"

In subclause 53.10.2 in Section 4, Page 490, Line 41, change:
"to the IEC 60825-1, which has been updated by Amendment 2 (2001-01)." to:
"to IEC 60825-1."

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.3** *P* **12** *L* **21** # 10

Dawe, Piers — IPtronics

Comment Type **T** *Comment Status* **R** *Standards reference change*

IEC 61076-3-113 not found at IEC webstore (not even Replaced / Withdrawn), although it's available from BSI (Expiry Date31 July 2004).

SuggestedRemedy

Replace with a valid current reference, perhaps an SFF one.

Response *Response Status* **C**

REJECT.

Although the commenter is correct, we do not have a reference to change it to. The commenter is invited to produce the right reference.

Deleted from Programme of work according to decision taken at Berlin meeting 2006-09-22 (see 48B/1732/RM). It is not clear what reference to replace this with and/or if any portion of the document that relies on this reference would need to be changed.

Cl **01** *SC* **1.3** *P* **13** *L* **33** # 240

Frazier, Howard — Broadcom Corporation

Comment Type **TR** *Comment Status* **A** *Standards reference change*

Need to add IEEE Std 802.3.1 to the list of normative references.

SuggestedRemedy

Add "IEEE Std 802.3.1-2011 IEEE Standard for Management Information Base (MIB) Module Definitions for Ethernet." to the list of normative references.

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.3** *P* **13** *L* **34** # 155

Grow, Robert Intel

Comment Type **T** *Comment Status* **A**

We use EtherType and 802 uses Ethertype as evidenced in the normative reference to 802a.

SuggestedRemedy

Recommend replacing reference to 802 with an undated reference and deleting 802a. Doing so will require rewrite of NOTE in 3.2.6 also. I believe the common use is EtherType, and comment on P802 would be appropriate if we agree.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Implement per suggested remedy.

"NOTE—Clause 2 of IEEE Std 802a-2003 (an amendment to IEEE Std 802) defines a set of Type values and associated mechanisms for use in prototype and vendor-specific protocol development." change to "NOTE—Clause 2 of IEEE Std 802 defines a set of Type values and associated mechanisms for use in prototype and vendor-specific protocol development."

Cl **01** *SC* **1.3** *P* **13** *L* **52** # 164

Grow, Robert Intel

Comment Type **E** *Comment Status* **A** *Refer to staff*

We are pointing to the SA home page (not bad with the current web site design), but the front matter points to Xplore.

SuggestedRemedy

We should be consistent.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Point to the SA homepage throughout. Refer to staff on FM.

Cl **01** *SC* **1.3** *P* **14** *L* **41** # 8

Dawe, Piers IPtronics

Comment Type **T** *Comment Status* **A** *FC*

Is INCITS-TR-25:1999-Fibre Channel Methodologies for Jitter Specification still in force? Where is it referenced in 802.3? I found "NCITS TR-25:1999, "Methodology of Jitter Specification"." in a NOTE in 48A.4.

SuggestedRemedy

Consider if this should be removed, moved to the bibliography and/or replaced by FC-MJSQ or FC-MSQS. Use the same name each time.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Move to Annex A. Insert a reference to this new entry in locations where it is currently used.

Cl **01** *SC* **1.3** *P* **15** *L* **1** # 359

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A** *Standards reference change*

In 802.3 there are numerous references to LLC as well as three references to ISO/IEC 8802-2 but it does not appear in the list of references

SuggestedRemedy

Add a reference in subclause 1.3:
"ISO/IEC 8802-2:1998, Information technology-Telecommunications and information exchange between systems-Local and metropolitan area networks-Specific requirements-Part 2: Logical link control"

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.3** *P* **16** *L* **10** # 352

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A** *Standard reference change*

See slide 4 of http://www.ieee802.org//3/maint/public/anslow_1_0711.pdf for the justification for this change.

SuggestedRemedy

Change:
"ITU-T Recommendation G.652, 2005-Characteristics of a single-mode optical fibre cable"
to:
"ITU-T Recommendation G.652, 2009-Characteristics of a single-mode optical fibre and cable"

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.3** *P* **16** *L* **12** # 353

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A** *al Standard reference change*

See slide 5 of http://www.ieee802.org//3/maint/public/anslow_1_0711.pdf for the justification for this change.

SuggestedRemedy

Change:
"ITU-T Recommendation G.657, 2006-Characteristics of a bending loss insensitive single mode optical fibre and cable for the access network" to:
"ITU-T Recommendation G.657, 2009-Characteristics of a bending-loss insensitive single-mode optical fibre and cable for the access network"

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.3** *P* **16** *L* **15** # 354

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A** *al Standard reference change*

See slide 6 of http://www.ieee802.org//3/maint/public/anslow_1_0711.pdf for the justification for this change.

SuggestedRemedy

Change:
"ITU-T Recommendation G.671 am 1, 2006-Transmission characteristics of optical components and subsystems, Amendment 1" to:
"ITU-T Recommendation G.671, 2009-Transmission characteristics of optical components and subsystems"

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.3** *P* **16** *L* **18** # 301

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A** *Global reference change*

See slide 12 of http://www.ieee802.org//3/maint/public/anslow_1_0711.pdf for the justification for this change.

SuggestedRemedy

Change:
"ITU-T Recommendation G.691, 2006-Optical interfaces for single-channel ..." to:
"ITU-T Recommendation G.691, 2006-Optical interfaces for single channel ..."

Also, on line 29, delete " (SDH)" from the end of the title for G.957

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.3** *P* **16** *L* **25** # 355

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A** *al Standard reference change*

See slide 7 of http://www.ieee802.org//3/maint/public/anslow_1_0711.pdf for the justification for this change.

SuggestedRemedy

Change:
"ITU-T Recommendation G.695, 2006-Optical ..." to:
"ITU-T Recommendation G.695, 2010-Optical ..."

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.3** *P* **16** *L* **31** # 356

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A** *al Standard reference change*

See slide 8 of http://www.ieee802.org//3/maint/public/anslow_1_0711.pdf for the justification for this change.

SuggestedRemedy

Change:
"ITU-T Recommendation G.959.1, 2008-Optical ..." to:
"ITU-T Recommendation G.959.1, 2009-Optical ..."

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.3** *P* **16** *L* **35** # 357

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A** *MR 1228*

See slide 9 of http://www.ieee802.org//3/maint/public/anslow_1_0711.pdf for the justification for this change.

SuggestedRemedy

Show references:
"ITU-T Recommendation G.983.1, 2005-Broadband optical access systems based on Passive Optical Networks (PON).
ITU-T Recommendation G.984.3, 2008-Gigabit-capable Passive Optical Networks (G-PON): Transmission convergence layer specification."
in red strikethrough font and add an editor's note:
"Editor's Note (to be removed prior to publication): deleted based on maintenance request 1228.
See http://www.ieee802.org/3/maint/requests/maint_1228.pdf"

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.3** *P* **16** *L* **48** # 300

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A** *al Standard reference change*

See slide 11 of http://www.ieee802.org//3/maint/public/anslow_1_0711.pdf for the justification for this change.

SuggestedRemedy

Change:
"ITU-T Recommendation G.993.1, 2001-Very high-speed digital ..." to:
"ITU-T Recommendation G.993.1, 2001-Very high speed digital ..."

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.3** *P* **16** *L* **8** # 351

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A** *al Standard reference change*

See slide 3 of http://www.ieee802.org//3/maint/public/anslow_1_0711.pdf for the justification for this change.
A comment was made during the maintenance meeting in San Francisco that it would be better to remove the "(2010)" from 75.9.3

SuggestedRemedy

Change:
"ITU-T Recommendation G.650.1, 2004-Transmission media characteristics-Optical fibre cables" to:
"ITU-T Recommendation G.650.1, 2010-Definitions and test methods for linear, deterministic attributes of single-mode fibre and cable"

Also, in Section 5, subclause 75.9.3, Table 75-14 footnote d on Page 560 Line 19, change:
"in G.650.1 (06/2004)" to:
"in G.650.1"

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.3** *P* **16** *L* **8** # 4

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **R**

Some SDOs are now making their standards freely available at stable URLs. ITU-T is a good example: the URL for G.650.1 is http://www.itu.int/rec/T-REC-G.650.1/en and remains so even if the standard is revised.

SuggestedRemedy

Please consider using web links to these stable URLs in the list of references.

Response *Response Status* **C**

REJECT.

The large amount of work required to implement the change, and let alone maintan it once changed, is not worth the small resulting benefit.

Cl **01** *SC* **1.3** *P* **17** *L* **14** # 58

Dawe, Piers IPtronics

Comment Type **T** *Comment Status* **A** *al Standard reference change*

SFF-8436, Rev 3.4, Nov. 12, 2009-Specification for QSFP+ Copper And Optical Modules.
SFF-8642, Rev 2.4, Nov. 16, 2009-Specification for Mini Multilane Series: Shielded Integrated Connector.

SuggestedRemedy

SFF-8436, Rev 4.1, Aug 24, 2011 Specification for QSFP+ 10 Gbs 4X Pluggable Transceiver
SFF-8642, Rev 2.7, February 26, 2010 Specification for Mini Multilane 12 Gbs 12X Shielded Connector, has been replaced by an EIA specification.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

SFF-8436, Rev 4.1, Aug 24, 2011 Specification for QSFP+ 10 Gbs 4X Pluggable Transceiver
SFF-8642, Rev 2.7, February 26, 2010 Specification for Mini Multilane 12 Gbs 12X Shielded Connector.

Cl **01** *SC* **1.3** *P* **17** *L* **20** # 12

Dawe, Piers IPtronics

Comment Type **TR** *Comment Status* **A** *al Standard reference change*

These two TIA references were included in 802.3ae and 802.3ba respectively because the equivalent international references were not available in time. Now they are. See text at line 30:
"NOTE--Local and national standards such as those supported by ANSI, EIA, MIL, NFPA, and UL are not a formal part of this standard except where no international standard equivalent exists."

SuggestedRemedy

Change
TIA-492AAAC-2002; Detail Specification for 850-nm Laser-Optimized, 50-um core diameter/125-um cladding diameter class Ia graded-index multimode optical fibers.
and
TIA-492AAAD, Detail Specification for 850-nm Laser-Optimized, 50-um core diameter/125-um cladding diameter class Ia graded-index multimode optical fibers suitable for manufacturing OM4 cabled optical fiber.
to the appropriate IEC reference. Note that the IEC document contains several fibre types in one document, so be careful to name the fibre type when updating the places that use these references. For preference, give both "A1a.1" and "OM2" style names, perhaps using a correspondence table.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Delete the references to TIA-492AAAC and TIA-492AAAD

See response to comment #45

Cl **01** *SC* **1.3** *P* **17** *L* **27** # 413

Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A** *al Standard reference change*

Revise to most current edition of the Standard. Comments to apply this change to other applicable sections of the document have been made individually.

SuggestedRemedy

Replace:
"TIA TSB-155; Guidelines for the Assessment and Mitigation of Installed Category 6 Cabling to Support 10GBASE-T, March 2007"

with:
"TIA TSB-155-A-2010-Guidelines for the Assessment and Mitigation of Installed Category 6 Cabling to Support 10GBASE-T"

Response *Response Status* **C**

ACCEPT.

There was no substantive change made in the revision of TIA TSB-155 to TIA TSB-155-A

Cl **01** *SC* **1.3** *P* **17** *L* **9** # 358

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A** *al Standard reference change*

See slide 10 of http://www.ieee802.org//3/maint/public/anslow_1_0711.pdf for the justification for this change.

SuggestedRemedy

Change:
"ITU-T Recommendation O.172, 1999-Jitter ..." to:
"ITU-T Recommendation O.172, 2005-Jitter ..."

Also, in Section 4, subclause 50.3.8.3.1, Note on Page 386 line 52, change:
"in ITU-T Recommendation O.172, 1999" to:
"in ITU-T Recommendation O.172"

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.3** *P* **9** *L* **35** # 432

Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A**

There is no reference to this Standard in the document text.

SuggestedRemedy

Delete:
"ANSI/EIA-455-95A-2000, Absolute Optical Power Test for Optical Fibers and Cables."

Move the superscript, "2" to the next Normative ANSI Standard

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.3** *P* **9** *L* **37** # 7

Dawe, Piers IPtronics

Comment Type **TR** *Comment Status* **R** *Standards reference change*

This reference:
ANSI/EIA/TIA-455-127-1991, FOTP-127-Spectral Characterization of Multimode Laser Diodes
is very old. There is now TIA-455-127-A FOTP-127-A Basic Spectral Characterization of Laser Diodes Publication Date: Nov 1, 2006 (note no ANSI - and is this the same content or not?). But there is an even newer, and international,
IEC 61280-1-3 ed2.0 Fibre optic communication subsystem test procedures - Part 1-3: General communication subsystems - Central wavelength and spectral width measurement, Publication date 2010-03-18
http://webstore.iec.ch/Webstore/webstore.nsf/Artnum_PK/43879
1.3 Normative references also lists IEC 61280-1-3:1998.

SuggestedRemedy

Consider if the references to ANSI/EIA/TIA-455-127-1991, FOTP-127 and the references to IEC 61280-1-3:1998 should be updated to IEC 61280-1-3 ed2.0. If so, remove ANSI/EIA/TIA-455-127-1991, FOTP-127 from the list of normative references but consider adding TIA-455-127-A FOTP-127-A to the bibliography. Update 1.4.350 RMS spectral width.
Consider doing the same for other old or non-international references, unless used by the non-maintained clauses or where we refer to an old version for a reason.

Response *Response Status* **U**

REJECT.

The historical references are appropriate in this case, and there is no consensus to make this change.

Cl **01** *SC* **1.3** *P* **9** *L* **37** # 430

Maguire, Valerie — Siemon

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

There is no reference to this Standard in the document text.

SuggestedRemedy

Delete:
"ANSI/EIA/TIA-455-127-1991, FOTP-127-Spectral Characterization of Multimode Laser Diodes."

Proposed Response *Response Status* **Z**

REJECT.

This comment was WITHDRAWN by the commenter.

Cl **01** *SC* **1.3** *P* **9** *L* **54** # 433

Maguire, Valerie — Siemon

Comment Type **E** *Comment Status* **A** *HIS*

Standards are available through IHS.

SuggestedRemedy

Replace:
"ANSI publications are available from the Sales Department, American National Standards Institute, 11 West 42nd Street, 13th Floor, New York, NY 10036, USA (http://www.ansi.org/)."

with:
"ANSI publications are available from The IHS Standards Store (http://global.ihs.com/)

Apply changes to other locations as applicable.

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.4** *P* **17** *L* **39** # 1

Dawe, Piers — IPtronics

Comment Type **ER** *Comment Status* **R**

The Definitions section is 27 pages long. Although it is finely subdivided, the subheadings do not appear in the bookmarks, so it is hard to navigate quickly to a particular definition.

SuggestedRemedy

Please introduce bookmarked subheadings e.g. 1 to 9, A to E, F to O, P to Z. The current subheadings can become fourth-level non-bookmarked subheadings.

Response *Response Status* **U**

REJECT.

There was no agreement that this change improves the document.

Cl **01** *SC* **1.4** *P* **17** *L* **54** # 13

Dawe, Piers — IPtronics

Comment Type **T** *Comment Status* **R**

Blue text but no link. Anyway, outsourcing our meanings to an expensive "closed book" that might contradict us would be bad. WE should say what we mean, using English words and specific references if necessary.

SuggestedRemedy

Delete mention of IEEE Standards Dictionary: Glossary of Terms & Definitions.

Response *Response Status* **C**

REJECT.

This reference is routinely included in IEEE standards.

Cl **01** *SC* **1.4** *P* **35** *L* **3** # 234

Frazier, Howard — Broadcom Corporation

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

Other comments submitted with this ballot will require a definition for the term "multicast LLID".

SuggestedRemedy

Add the following definition to 1.4:
1.4.XXX multicast LLID (mLLID): An LLID bound to one or more ONU DTEs.

Proposed Response *Response Status* **Z**

REJECT.

This comment was WITHDRAWN by the commenter.

Cl **01** *SC* **1.4** *P* **43** *L* **46** # 417

Maguire, Valerie Siemon

Comment Type **T** *Comment Status* **A** *UTP*

Improve the definition of "twisted-pair cable"

SuggestedRemedy

Replace:
"twisted-pair cable: A bundle of multiple twisted pairs within a single protective sheath. (From ISO/IEC 11801:1995.)"

with:
"twisted-pair cable: A bundle of multiple twisted pairs within a single protective sheath. The bundle may be unshielded or enclosed by an overall shield."

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.4** *P* **44** *L* **36** # 418

Maguire, Valerie Siemon

Comment Type **T** *Comment Status* **A** *UTP*

This definition is not necessary if Siemon-36 is accepted. If Siemon-36 is not accepted, then a definition for shielded twisted-pair cable should be added.

SuggestedRemedy

Delete:
"1.4.407 unshielded twisted-pair cable (UTP): An electrically conducting cable, comprising one or more pairs, none of which is shielded. There may be an overall shield, in which case the cable is referred to as unshielded twisted-pair with overall shield. (From ISO/IEC 11801:1995.)"

Re-number accordingly.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change the definition to read:
"1.4.407 unshielded twisted-pair cable (UTP): An electrically conducting cable, comprising one or more pairs, none of which is shielded."

Cl **01** *SC* **1.4.222** *P* **32** *L* **31** # 165

Grow, Robert Intel

Comment Type **T** *Comment Status* **A**

Definition for IPG is dated. It does not identify that the numbers are only for transmitted IPG and that the length can change for various reasons.

SuggestedRemedy

1.4.222 inter packet gap (IPG): A MAC delay or time gap between Ethernet packets intended to provide interframe recovery time for other Ethernet sublayers and for the Physical Medium. (See IEEE Std 802.3,
4.2.3.2.1 and 4.2.3.2.2.) For example, for 10BASE-T, the MAC generated IPG is 9.6 us (96 bit times); for 100BASE-T, the IPG is 0.96 us (96 bit times). The minimum length of IPG is enforced by the MAC parameter interPacketGap, the actual interpacket gap may change between transmitting MAC and receiving MAC.

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.4.309** *P* **38** *L* **2** # 276

Trowbridge, Steve Alcatel-Lucent

Comment Type **T** *Comment Status* **A**

Clause 82 is missing from the list of clauses defining PCS sublayers

SuggestedRemedy

Add clause 82 to the list of clauses defining PCS sublayers

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.4.310** *P* **38** *L* **11** # 277

Trowbridge, Steve Alcatel-Lucent

Comment Type **T** *Comment Status* **A**

The clauses for 40 and 100 Gigabit PHYs are missing from the list of clauses defining PHYs

SuggestedRemedy

Add clauses 82-89 to the list of clauses which define PHYs

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.4.311** *P* **38** *L* **16** # 278

Trowbridge, Steve — Alcatel-Lucent

Comment Type **T** *Comment Status* **A**

The 40 and 100 Gigabit PMA is missing from the clauses referenced in the definition of PMA

SuggestedRemedy

Add clause 83 to the list of clauses defining PMAs

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.4.312** *P* **38** *L* **21** # 279

Trowbridge, Steve — Alcatel-Lucent

Comment Type **T** *Comment Status* **A**

40 and 100 Gigabit PMD clauses are missing from the list of clauses defining PMDs

SuggestedRemedy

Add clauses 84-89 to the list of clauses defining PMDs

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.4.324** *P* **39** *L* **4** # 120

Ganga, Ilango — Intel

Comment Type **E** *Comment Status* **A**

As per 802.3bd, add reference at the end of this definition: "(See IEEE Std 802.1Q.)"

SuggestedRemedy

As per comment

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.4.337** *P* **39** *L* **48** # 244

Hajduczenia, Marek — ZTE Corporation

Comment Type **T** *Comment Status* **A**

Current definition of the term Errored symbol period, as defined in IEEE Std 802.3, 57.5.3.1, speaks of the ".the number of symbol errors that occurred during the specified period.". However, the definition of the term 'symbol' in 1.4.337 is not clear in respect to 1G-PON and 10G-EPON PMDs.
Clarification is needed, preferably by extending the definition of the term 'symbol' in 57.5.3.1.

SuggestedRemedy

Modify the definition of the term "symbol" in 1.4.337 to read as follows:
1.4.337 symbol: Within IEEE 802.3, the smallest unit of data transmission on the medium. Symbols are unique to the coding system employed. For example, 100BASE-T4 uses ternary symbols; 10BASE-T uses Manchester symbols; 100BASE-X uses binary symbols or code bits; 100BASE-T2 and 1000BASE-T uses quinary symbols. For 1000BASE-PX, and 10GBASE-PRX PMDs operating at 1.25 GBd, a symbol corresponds to a code bit after the 8B/10B encoding operation i.e. has the duration of 0.8 ns. For 10GBASE-PR and 10GBASE-PRX PMDs operating at 10.3125 GBd, a symbol corresponds to a code bit after the 64B/66B encoding operation i.e. has the duration of approx. 0.097 ns.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Modify the definition of the term "symbol" in 1.4.376 to read as follows:
1.4.376 symbol: Within IEEE 802.3, the smallest unit of data transmission on the medium. Symbols are unique to the coding system employed. For example, 100BASE-T4 uses ternary symbols; 10BASE-T uses Manchester symbols; 100BASE-X uses binary symbols or code-bits; 100BASE-T2 and 1000BASE-T uses quinary symbols. For 1000BASE-X PMDs operating at 1.25 GBd, a symbol corresponds to a code-bit after the 8B/10B encoding operation i.e. has the duration of 0.8 ns. For 10GBASE-R PMDs operating at 10.3125 GBd, a symbol corresponds to a code-bit after the 64B/66B encoding operation i.e. has the duration of approx. 0.097 ns.

Cl **01** *SC* **1.4.337** *P* **39** *L* **50** # 266

Trowbridge, Steve — Alcatel-Lucent

Comment Type **E** *Comment Status* **A**

The list of RS clauses is inconsistent with what is done for PCS, PMA, PHY, and PMD by providing only one example instead of an exhaustive list of clauses

SuggestedRemedy

Make RS definition consistent with the others, referencing clauses 46, 81

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

1.4.337 Reconciliation Sublayer (RS): A mapping function that reconciles the signals at the Media Independent Interface (MII) to the Media Access Control (MAC)-Physical Signaling Sublayer (PLS) service definitions. (E.g., IEEE Std 802.3, Clause 22.)

Cl **01** *SC* **1.5** *P* **45** *L* **13** # 2

Dawe, Piers — IPtronics

Comment Type **ER** *Comment Status* **R**

The Abbreviations section is 5 pages long with no subdivisions. It is hard to navigate quickly to a particular abbreviation.

SuggestedRemedy

Please consider introducing bookmarked subheadings e.g. 1 to L, M to Z.

Response *Response Status* **U**

REJECT.

There was no agreement that this change improves the document.

Cl **01** *SC* **1.5** *P* **47** *L* **1** # 267

Trowbridge, Steve — Alcatel-Lucent

Comment Type **E** *Comment Status* **A**

The acronyms LACP, LACPDU, LAG, and LAG ID may not be used anymore since the specification for LAG has been moved to 802.1.

SuggestedRemedy

Check that the acronyms are not used in the draft, and assuming not, remove these from the acronym list. 802.1 should have the normative explanation for these acronyms.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

The only one in the list that is no longer used is LAG. The rest are being used. Implement the removal LAG.

Cl **04** *SC* **4.3.2.1.1** *P* **93** *L* **13** # 173

Thaler, Patricia — Broadcom

Comment Type **E** *Comment Status* **A** *MR 1196*

The change here seems to be related to the change requested in 1196, but 1196 doesn't bare directly on it. Is there another maintenance request that should have been cited?

SuggestedRemedy

If the change number is wrong, please correct it. If not, please modify the text to more clearly indicate the relationship of this change to 1196 (e.g. during discussion of 1196, a problem was noticed with this state machine behavior).

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

See comment #182

Cl **04** *SC* **4.3.2.1.1** *P* **93** *L* **8** # 179

Thaler, Patricia — Broadcom

Comment Type **TR** *Comment Status* **A** *MR 1196*

This becomes true by its definition when the TransmitFrame fucntion has finished all of its processing, but nothing ever sets it false.

SuggestedRemedy

I'd prefer a resolution that explicitly set TransmitFrameCompleted = false when GENERATE_TRANSMIT_FRAME is entered before calling TransmitFrame and explicitly set it true in function TransmitFrame just before end:{TransmitFrame}

The other alternative is to make setting it false part of the definition as setting it true already is by inserting "and becomes false when the GENERATE_TRANSMIT_FRAME state is entered" in the definition.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

See comment #182

Cl **04** *SC* **4.4.2** *P* **97** *L* **38** # 166

Grow, Robert Intel

Comment Type **TR** *Comment Status* **A** *interPacketGap*

I think the use of interPacketGap is incorrect here. interPacketGap is a MAC variable specifying a minimum, interpacket gap on the other hand is the actual gap that can be larger or shrink to be smaller than that initial minimum gap.

SuggestedRemedy

Change interPacketGap in NOTEs 1, 3, 4, and 7 to be interpacket gap. Make parallel changes to 4A.

Response *Response Status* **C**

ACCEPT.

Cl **07** *SC* **7.4.3.6** *P* **147** *L* **15** # 241

Frazier, Howard Broadcom Corporation

Comment Type **TR** *Comment Status* **A**

What is the meaning of this note? It looks like an artifact of some long ago dream to run Ethernet at 20 Mb/s. As far as I know, the standard never specified the AUI to run at 20 Mb/s. There is no other reference to "20 Mb/s" that I can find. This note should go. It doesn't say anything significant anyway.

SuggestedRemedy

Delete the note.

Response *Response Status* **C**

ACCEPT.

Cl **07** *SC* **7.4.3.6** *P* **147** *L* **6** # 233

Frazier, Howard Broadcom Corporation

Comment Type **E** *Comment Status* **A**

There appears to be an extra space at the begining of the heading "Timing jitter".

SuggestedRemedy

remove extra space.

Response *Response Status* **C**

ACCEPT.

Cl **08** *SC* *P* **151** *L* **5** # 167

Grow, Robert Intel

Comment Type **ER** *Comment Status* **A**

It looks like text was pasted in error.

SuggestedRemedy

Delete "See Section Six for this clause."

Response *Response Status* **C**

ACCEPT.

Cl **08** *SC* **8** *P* **153** *L* **5** # 242

Frazier, Howard Broadcom Corporation

Comment Type **TR** *Comment Status* **A**

I understand all of the note except for the last sentence. What is there in Section Six (which I take to mean section six of the standard, i.e. Clauses 78-90) that has anything to do with 10BASE5?

SuggestedRemedy

Delete the last sentence of the note.

Response *Response Status* **C**

ACCEPT.

See #167

Cl **10** *SC* *P* **227** *L* **3** # 168

Grow, Robert Intel

Comment Type **TR** *Comment Status* **A** *Deprecate*

We should reconsider what PHY types to deprecate. I thought 10BASE2 was not recommended for new installations, if not it should be. Consider what other PHY types are similarly obsolete.

SuggestedRemedy

Insert not recommended for new installations note in all PHY types now obsolete.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Clause 10
Clause 17
Clause 9
Clause 27
Clause 41

Cl **14** *SC* **14.1.1.3** *P* **322** *L* **37** # 446

Maguire, Valerie Siemon

Comment Type **T** *Comment Status* **A**

Incorrect Standards Reference

SuggestedRemedy

Replace:
"These channel requirements can also be met by the Category 5 channel specified by ANSI/TIA/EIA-568-B:2001."

with:
"These channel requirements can also be met by the Category 5 channel specified by ANSI/TIA/EIA-568-A."

Response *Response Status* **C**

ACCEPT.

Editor has changed this from an E to a T

Cl **14** *SC* **14.1.1.3** *P* **322** *L* **40** # 60

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **R**

media that exceeds

SuggestedRemedy

media that exceed

Response *Response Status* **C**

REJECT.

It is the specification that exceeds the requirements and this is singular, so "exceeds" is correct.

Cl **14** *SC* **14.3.1.2.5** *P* **342** *L* **46** # 61

Dawe, Piers IPtronics

Comment Type **T** *Comment Status* **A** *MR 1202*

I don't think "total common-mode output voltage" can sensibly be measured at a single frequency as stated here.

SuggestedRemedy

I think this should say something like "50 mV peak after a 1 MHz high-pass filter". Defining the filter type would be advisable, e.g. "50 mV peak after a 1 MHz first-order high-pass filter". There should be an upper measurement limit also.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change the text "shall be less than 50 mV peak. The frequency of the measurement shall be above 1 MHz" to read "shall be less than 50 mV peak at frequencies above 1 MHz"

Cl **14** *SC* **14.4.1** *P* **347** *L* **16** # 447

Maguire, Valerie Siemon

Comment Type **T** *Comment Status* **A**

Incorrect Standards reference

SuggestedRemedy

Replace:
"This requirement can also be met by Category 5 cable and components as specified in ANSI/TIA/EIA-568-B:2001."

with:
"This requirement can also be met by Category 5 cable and components as specified in ANSI/TIA/EIA-568-A."

Response *Response Status* **C**

ACCEPT.

Editor has upgraded the comment from an E to a T.

Cl **15** *SC* **15.3.1.1** *P* **386** *L* **13** # 456

Koussalya Balasubramanian Cisco

Comment Type **E** *Comment Status* **A**

Existing Text as shown below is not punctuated properly.
"This standard was developed on the basis of cabled optical fiber an attenuation value of less than or equal to 3.75 dB/km, when measured at a wavelength of 850 nm."

SuggestedRemedy

This standard was developed on the basis of cabled optical fiber. An attenuation value of less than or equal to 3.75 dB/km, when measured at a wavelength of 850 nm should be met.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

OBE #193

Cl **15** *SC* **15.3.1.1** *P* **386** *L* **33** # 377

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

In the added text, "of" should not be in blue underlined (it has not been added)

SuggestedRemedy

show "of" in normal font

Response *Response Status* **C**

ACCEPT.

Cl **15** *SC* **15.3.1.1** *P* **386** *L* **33** # 193

Booth, Brad Dell

Comment Type **E** *Comment Status* **A**

Correction to text doesn't read properly.

SuggestedRemedy

Change to read "of cabled optical fiber with an attenuation".

Response *Response Status* **C**

ACCEPT.

Cl **15** *SC* **15.3.1.1** *P* **386** *L* **34** # 62

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

This sentence is garbled: "This standard was developed on the basis of cabled optical fiber an attenuation value ..."

SuggestedRemedy

Should this be "on the basis of a cabled optical fiber attenuation value"?

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

OBE #193

Cl **15** *SC* **15.8.6.1** *P* **395** *L* **40** # 340

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

The hypertext link for http://www.ieee802.org/3/maint/requests/maint_1213.pdf is associated with the black text rather than the blue text

SuggestedRemedy

Move the hypertext marker in to the blue text

Response *Response Status* **C**

ACCEPT.

Cl **19** *SC* **19.1** *P* **491** *L* **10** # 218

Law, David HP

Comment Type **E** *Comment Status* **A**

While this is a deprecated clause there is a broken cross reference, '.. to Clause 9' should be to '.. to Clause 19'.

SuggestedRemedy

Fix the cross reference.

Response *Response Status* **C**

ACCEPT.

Cl **21** *SC* **21.7** *P* **7** *L* **11** # 153

Grow, Robert Intel

Comment Type **TR** *Comment Status* **A** *8802*

Should the 8802-3 references in this subclause be retained?

SuggestedRemedy

Review with experts and either rewrite or update. Do the same thing in 34.4.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Delete subclauses 21.7, 34.4 and 44.5

Cl **24** *SC* **24.2.2.1.1** *P* **150** *L* **30** # 174

Thaler, Patricia Broadcom

Comment Type **E** *Comment Status* **A**

The table is split awkwardly and looks like it could fit on one page.

SuggestedRemedy

Float the table so that it is on one page. If that isn't possible, at least make a cleaner break in the table including finishing the bracket for DATA on the same page as the data values and putting a bottom line on.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Will look to improve table appearance

Cl **25** *SC* **25.3** *P* **189** *L* **52** # 379

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

Link to maintenance request shows maint_1212.pdf but goes to maint_1199.pdf
Also, text changes could be shown more clearly

SuggestedRemedy

Change link to go to maint_1212.pdf
In Table 25-1 show text as "3062" in red strikethrough font, "4018" in dark blue underlined font and "code-groups" in normal font.
In Editor's note change "inserted based on" to "change based on"

Response *Response Status* **C**

ACCEPT.

Cl **25** *SC* **25.4.3** *P* **191** *L* **10** # 420

Maguire, Valerie Siemon

Comment Type **T** *Comment Status* **A** *UTP*

100BASE-TX oerates over shielded twisted-pair cabling.

SuggestedRemedy

Replace:
"25.4.3 Change to Table 8-1, “Contact assignments for unshielded twisted pair”

100BASE-TX for unshielded twisted pair adopts the contact assignments of 10BASE-T. Therefore, the contact assignments shown in TP-PMD Table 8-1 shall instead be as depicted in Table 25–2.

Table 25–2—UTP MDI contact assignments"

with:
"5.4.3 Change to Table 8-1, “Contact assignments for twisted pair”

100BASE-TX for twisted pair adopts the contact assignments of 10BASE-T. Therefore, the contact assignments shown in TP-PMD Table 8-1 shall instead be as depicted in Table 25–2.

Table 25–2—Twisted-pair MDI contact assignments"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Accept the suggested remedy with the modification that the clause number stays the same. The commenter seems to have inadvertantly deleted the 2 from 25.4.3

Cl **25** *SC* **25.4.5** *P* **191** *L* **42** # 186

Tracy, Nathan TE Connectivity

Comment Type **TR** *Comment Status* **A** *OCL*

Background: IEEE Std 802.3at (POE+) allowed an alternate droop test (Sub-Clause 25.4.5) to be applied to Type 2 100BASE-TX. Type 2 Transmitters are allowed to meet this requirement or the previous 350uH Open Circuit Inductance requirement.

This comment proposes to allow this same alternate droop test to be available to all 100BASE-TX transmitters. The specification modification will increase design flexibility by supporting the use of advanced manufacturing techniques and processes in magnetics which will provide cost avoidance, improved consistency, improved DPPM, improved EMI and potentially simpler PHY design.

To incorporate this change, comments have been submitted against the following sub clauses:
25.4.5, 25.4.5.1 Figure 25-1 and Figure 25-2, 25.4.7, 25.6.3.1, 25.6.4.2, and 25.6.4.4

SuggestedRemedy

This comment removes the special treatment of Type 2 transmitters since now all transmitters will have the same requirement

From: A receiver in a Type 2 Endpoint PSE or Type 2 PD (see Clause 33) shall meet the requirements of 25.4.7. A transmitter in a Type 2 Endpoint PSE or Type 2 PD delivering or accepting more than 13.0 W average power shall meet either the Open Circuit Inductance (OCL) requirement in 9.1.7 of TP-PMD, or meet the requirements of 25.4.5.1.

To: Transmitters shall meet either the Open Circuit Inductance (OCL) requirement in 9.1.7 of TP-PMD, or meet the requirements of 25.4.5.1.

Response *Response Status* **C**

ACCEPT.

Cl **25** *SC* **25.4.5.1** *P* **192** *L* **8** # 191

Tracy, Nathan TE Connectivity

Comment Type **TR** *Comment Status* **A** *OCL*

Table 25-1 and Table 25-2
Background: IEEE Std 802.3at (POE+) allowed an alternate droop test (Sub-Clause 25.4.5) to be applied to Type 2 100BASE-TX. Type 2 Transmitters are allowed to meet this requirement or the previous 350uH Open Circuit Inductance requirement.

This comment proposes to allow this same alternate droop test to be available to all 100BASE-TX transmitters. The specification modification will increase design flexibility by supporting the use of advanced manufacturing techniques and processes in magnetics which will provide cost avoidance, improved consistency, improved DPPM, improved EMI and potentially simpler PHY design.

To incorporate this change, comments have been submitted against the following sub clauses:
25.4.5, 25.4.5.1 Figure 25-1 and Figure 25-2, 25.4.7, 25.6.3.1, 25.6.4.2, and 25.6.4.4

SuggestedRemedy

25.4.5.1 Figure 25-1 and Figure 25-2
Delete the word "Type 2" from the title of both Figure 25-1 and Figure 25-2

Change the "Note" in Figure 25-1
From: NOTE- IBIAS is the current Iunb / 2 defined in Clause 33.

To: NOTE-For transmitters in a Type 1 or Type 2 PSE or PD, IBIAS is the current Iunb / 2 defined in Clause 33. For transmitters not in a Type 1 or Type 2 PSE or PD, IBIAS is not required.

Response *Response Status* **C**

ACCEPT.

Cl **25** *SC* **25.4.7** *P* **193** *L* **42** # 187

Tracy, Nathan TE Connectivity

Comment Type **TR** *Comment Status* **A** *OCL*

Background: IEEE Std 802.3at (POE+) allowed an alternate droop test (Sub-Clause 25.4.5) to be applied to Type 2 100BASE-TX. Type 2 Transmitters are allowed to meet this requirement or the previous 350uH Open Circuit Inductance requirement.

This comment proposes to allow this same alternate droop test to be available to all 100BASE-TX transmitters. The specification modification will increase design flexibility by supporting the use of advanced manufacturing techniques and processes in magnetics which will provide cost avoidance, improved consistency, improved DPPM, improved EMI and potentially simpler PHY design.

To incorporate this change, comments have been submitted against the following sub clauses:
25.4.5, 25.4.5.1 Figure 25-1 and Figure 25-2, 25.4.7, 25.6.3.1, 25.6.4.2, and 25.6.4.4

SuggestedRemedy

This comment removes the special treatment of Type 2 end points since now all endpoints will have the same requirement.

From: Differential voltage signals generated by a remote transmitter that meets the specifications of Clause 25; passed through a link specified in 25.4.8; and received at the MDI of a 100BASE-TX PMD in a Type 2 Endpoint PSE or a Type 2 PD shall be translated into one of the PMD_UNITDATA.indicate messages with a bit error ratio less than 10-9 after link reset completion.

To: Differential voltage signals generated by a remote transmitter that meets the specifications of Clause 25; passed through a link specified in 25.4.8; and received at the MDI of a 100BASE-TX PMD shall be translated into one of the PMD_UNITDATA.indicate messages with a bit error ratio less than 10-9 after link reset completion.

Response *Response Status* **C**

ACCEPT.

Cl **25** *SC* **25.6.3.1** *P* **202** *L* **13** # 188

Tracy, Nathan TE Connectivity

Comment Type **TR** *Comment Status* **A** *OCL*

Background: IEEE Std 802.3at (POE+) allowed an alternate droop test (Sub-Clause 25.4.5) to be applied to Type 2 100BASE-TX. Type 2 Transmitters are allowed to meet this requirement or the previous 350uH Open Circuit Inductance requirement.

This comment proposes to allow this same alternate droop test to be available to all 100BASE-TX transmitters. The specification modification will increase design flexibility by supporting the use of advanced manufacturing techniques and processes in magnetics which will provide cost avoidance, improved consistency, improved DPPM, improved EMI and potentially simpler PHY design.

To incorporate this change, comments have been submitted against the following sub clauses:
25.4.5, 25.4.5.1 Figure 25-1 and Figure 25-2, 25.4.7, 25.6.3.1, 25.6.4.2, and 25.6.4.4

SuggestedRemedy

Delete in its entirety since "DTE Power via MDI" is now treated the same as all other 100BASE-TX

Response *Response Status* **C**

ACCEPT.

Cl **25** *SC* **25.6.4.2** *P* **203** *L* **13** # 190

Tracy, Nathan TE Connectivity

Comment Type **TR** *Comment Status* **A** *OCL*

Background: IEEE Std 802.3at (POE+) allowed an alternate droop test (Sub-Clause 25.4.5) to be applied to Type 2 100BASE-TX. Type 2 Transmitters are allowed to meet this requirement or the previous 350uH Open Circuit Inductance requirement.

This comment proposes to allow this same alternate droop test to be available to all 100BASE-TX transmitters. The specification modification will increase design flexibility by supporting the use of advanced manufacturing techniques and processes in magnetics which will provide cost avoidance, improved consistency, improved DPPM, improved EMI and potentially simpler PHY design.

To incorporate this change, comments have been submitted against the following sub clauses:
25.4.5, 25.4.5.1 Figure 25-1 and Figure 25-2, 25.4.7, 25.6.3.1, 25.6.4.2, and 25.6.4.4

SuggestedRemedy

Add additional rows to the table as shown in MS Word file name:
"Comment to Clause 25_6_4_2 Table file.doc"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Use tracy_2_0911.pdf for reference.

Cl **25** *SC* **25.6.4.4** *P* **204** *L* **16** # 189

Tracy, Nathan TE Connectivity

Comment Type **TR** *Comment Status* **A** *OCL*

Background: IEEE Std 802.3at (POE+) allowed an alternate droop test (Sub-Clause 25.4.5) to be applied to Type 2 100BASE-TX. Type 2 Transmitters are allowed to meet this requirement or the previous 350uH Open Circuit Inductance requirement.

This comment proposes to allow this same alternate droop test to be available to all 100BASE-TX transmitters. The specification modification will increase design flexibility by supporting the use of advanced manufacturing techniques and processes in magnetics which will provide cost avoidance, improved consistency, improved DPPM, improved EMI and potentially simpler PHY design.

To incorporate this change, comments have been submitted against the following sub clauses:
25.4.5, 25.4.5.1 Figure 25-1 and Figure 25-2, 25.4.7, 25.6.3.1, 25.6.4.2, and 25.6.4.4

SuggestedRemedy

Delete in its entirety since "DTE Power via MDI" is now treated the same as all other 100BASE-TX

Response *Response Status* **C**

ACCEPT.

Cl **26** *SC* **26.3** *P* **189** *L* **52** # 380

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

Link to maintenance request shows maint_1212.pdf but goes to maint_1199.pdf
Also, text changes could be shown more clearly

SuggestedRemedy

Change link to go to maint_1212.pdf
In Table 26-1 show text as "maximum stream size =" in normal font, "3062" in red strikethrough font, "4018" in dark blue underlined font" and "code-groups" in normal font.
In Editor's note change "inserted based on" to "change based on"

Response *Response Status* **C**

ACCEPT.

Cl **28** *SC* **28.3.4** *P* **282** *L* **5** # 64
Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A** *Figure Fonts*

Font too small in Figure 28–16. Minimum per style guide is 8 point, this is 6 point. There is plenty of room to do it right.

SuggestedRemedy

Change the 6 point text to 8 point, adjust layout as necessary.

Response *Response Status* **C**

ACCEPT.

Cl **28** *SC* **28.3.4** *P* **282** *L* **5** # 66
Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A** *Figure Fonts*

Font too small in Figure 28–19. Minimum per style guide is 8 point, this is 6 point. There is plenty of room to do it right.

SuggestedRemedy

Change the 6 point text to 8 point, adjust layout as necessary.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

So long as the figure stays on one page

Cl **28** *SC* **28.3.4** *P* **282** *L* **5** # 65
Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A** *Figure Fonts*

Font too small in Figure 28–17. Minimum per style guide is 8 point, this is 6 point. There enough room to do better.

SuggestedRemedy

Change the 6 point text to 8 point if it fits, failing that 7 point. Adjust layout as necessary.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

So long as the figure stays on one page

Cl **28A** *SC* **28A** *P* **687** *L* **32** # 384
Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

In Table 28A-1 text changes could be shown more clearly

SuggestedRemedy

Show as "INCITS" in dark blue underlined font and "Reserved for future Auto-Negotiation developmenta" in red strikethrough font.
In Editor's note change "inserted based on" to "change based on"

Response *Response Status* **C**

ACCEPT.

Cl **28A** *SC* **28A** *P* **687** *L* **33** # 67
Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A**

Table 82A-1 footnote a has disappeared:
For up-to-date information on the allocation of Auto-Negotiation Selector Fields see http://www.ieee802.org/3/selectors/selectors.html

SuggestedRemedy

Please reinstate it.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Implement commenter remedy. Note that commenter means Table 28A and not 82A

Cl **28C** *SC* *P* **691** *L* **51** # 457
Koussalya Balasubramanian Cisco

Comment Type **T** *Comment Status* **A**

The maintenance request # 1231 says
"Subclause 28C - Table 28C-1 Insert a new message code definition - 11 : Organizationally Unique Identifier Tagged Message (extended next page)"
But the text in the standard is using "5" for organizationally unique Identifier tagged message. This seems to not match the maintenance request.

SuggestedRemedy

Provide explanation or correct the text to match maintenance request

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Please refer to http://www.ieee802.org/3/maint/requests/revision_history.html#REQ1231 for the full notes on the MR. Only part of the original MR was accepted. Refer to comment #405 which addresses the new message.

Cl **28C** *SC* **28C** *P* **692** *L* **21** # 405

Barrass, Hugh — Cisco

Comment Type **T** *Comment Status* **A** *OUI*

Although the OUI message code defined in 28C.6 may be transported by an extended next page message using the encapsulation defined in 28C, such an encapsulation requires 2 extended next pages to transport a mere 20 bits of user-defined information. PHYs that have negotiated the use of extended next pages can take advantage of the more efficient definition for future use of OUI defined messages.

This has no impact to compliant devices. The change adds a new message code and does not preclude the use of the previous message code as defined.

SuggestedRemedy

Subclause 28C - Table 28C-1

Insert a new message code definition - 11 : Organizationally Unique Identifier Tagged Message (extended next page)

Subclause 28C.6

Add a paragraph at the end of the sublause:

Devices that negotiate the use of extended next page messages may use this message encapsulated within the extended next page message as described in clause 28C, however it is recommended that devices use message code 11 for extended next page OUI tagged messages.

Add a new subclause

28C.13 Message code 11—Organizationally Unique Identifier Tagged Message (extended next page)

Devices that negotiate the use of extended next page meassages may use the extended next page OUI Tagged Message. This shall consist of a single message code of 000 0000 1101 and bits U23-U0 of the unformatted code field shall contain the OUI (with most significant bit of the OUI in U23, the second most significant bit in U22, etc.). Bits U31-U24 contain userdefined data. If the next page flag is set, the message page shall be followed by an unformatted extended next page containing user-defined data.

(an example can be produced in the same way as for 28C.6).

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Subclause 28C - Table 28C-1

Insert a new message code definition - XX : Organizationally Unique Identifier Tagged Message (extended next page)

Subclause 28C.6

Add a paragraph at the end of the sublause:

Devices that negotiate the use of extended next page messages may use this message encapsulated within the extended next page message as described in clause 28C, however it is recommended that devices use message code XX for extended next page OUI tagged messages.

Add a new subclause

28C.13 Message code XX—Organizationally Unique Identifier Tagged Message (extended next page)

Devices that negotiate the use of extended next page meassages may use the extended next page OUI Tagged Message. This shall consist of a single message code of 000 0000 1101 and bits U23-U0 of the unformatted code field shall contain the OUI (with most significant bit of the OUI in U23, the second most significant bit in U22, etc.). Bits U31-U24 contain userdefined data. If the next page flag is set, the message page shall be followed by an unformatted extended next page containing user-defined data.

(an example can be produced in the same way as for 28C.6).

Cl **30** *SC* **30.1.1** *P* **358** *L* **23** # 203

Slavick, Jeff — Avago Technologies

Comment Type **TR** *Comment Status* **A** *MR 1229*

The attribute aSlowProtocolFrameLimit has not been added to Clause 30 as requested in maint_1229.pdf. Additionally the request for Table 30-1a to include the attribute has not been done.

SuggestedRemedy

Complete the edits stated in main_1229.pdf

Response *Response Status* **C**

ACCEPT.

Cl **30** *SC* **30.2.2.1** *P* **315** *L* **37** # 341

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A** *Editor Note*

The correct hypertext link for http://www.ieee802.org/3/maint/requests/maint_1199.pdf is associated with the black text and the the blue text has a hypertext link which has a spurious "IEEE" at the end.

Editor's notes on pages 316, 318 and 326 have the link associated with black text rather than blue text

SuggestedRemedy

Fix the links

Response *Response Status* **C**

ACCEPT.

The Editor's note is intended as additional information for the balloter. It will not be part of the standard. Nevertheless, your comment will be considered on the next draft

Cl **30** *SC* **30.2.2.1** *P* **315** *L* **37** # 69

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A** *Editor Note*

This isn't an insertion, it's a change.

SuggestedRemedy

Correct the editor's note and any similar instances.

Response *Response Status* **C**

ACCEPT.

The Editor's note is intended as additional information for the balloter. It will not be part of the standard. Nevertheless, your comment will be considered on the next draft

Cl **30** *SC* **30.2.2.1** *P* **315** *L* **38** # 175

Thaler, Patricia Broadcom

Comment Type **E** *Comment Status* **A**

The hypertext URL produces "Object not found!" - It ends in .pdfIEEE rather than .pdf.

SuggestedRemedy

Please correct the hypertext. This also applies to the links on page 316, 318, 326 so please check globally for the error.

Response *Response Status* **C**

ACCEPT.

Cl **30** *SC* **30.2.3** *P* **322** *L* **4** # 70

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

Subclause references should be clickable links, as on next page.

SuggestedRemedy

Per comment. Also change green text to black, serif font to Arial.

Response *Response Status* **C**

ACCEPT.

Cl **30** *SC* **30.2.5** *P* **325** *L* **41** # 72

Dawe, Piers IPtronics

Comment Type **TR** *Comment Status* **R**

Text says "For LLDP management, the LLDP Basic Package is mandatory." and Table 30-7 says LLDP Basic Package (mandatory). I don't think management is like MDIO or I2C where there are reserved register addresses that are zero whether an implementation knows what they will be used for or even whether they will be used. As far as I know, LLDP is not a requirement of 802.3 so its management package can't be mandatory either.

SuggestedRemedy

Change "For LLDP management, the LLDP Basic Package is mandatory." to "The LLDP Basic Package is optional." and show it as optional in the table.

Response *Response Status* **U**

REJECT.

There are requirements where LLDP is mandatory. The text is correct. There are other instances where the term "mandatory" is used for other management packages that are mandated when an option is supported.

Cl **30** *SC* **30.2.5** *P* **328** *L* **19** # 201

Slavick, Jeff — Avago Technologies

Comment Type **ER** *Comment Status* **A** *MR 1233*

Request from main_1233.pdf was to insert an X into the Energy Efficient Ethernet (optional) column for the floowing entries:

aTransmitLPIMicroseconds
aReceiveLPIMicroseconds
aTransmitLPITransitions
aReceiveLPITransitions
aLDFastRetrainCount
aLPFastRetrainCount

Those entries and many more within the table recieved an X in that column.

SuggestedRemedy

Remove the X in the EEE (optional) column for all entries except:

aTransmitLPIMicroseconds
aReceiveLPIMicroseconds
aTransmitLPITransitions
aReceiveLPITransitions
aLDFastRetrainCount
aLPFastRetrainCount

Response *Response Status* **C**

ACCEPT.

See #181

Cl **30** *SC* **30.2.5** *P* **328** *L* **19** # 181

Thaler, Patricia — Broadcom

Comment Type **TR** *Comment Status* **A** *MR 1233*

Table 30-1b. Maint 1233 appears to have been misinterpreted. It was saying that the 6 objects in table 30-1b in the amendment should have Xs added in the EnergyEfficient Ethernet column. That should have only been applied to those 6 items, not to all the objects in 30-1b.

On a more minor editorial item: I think that Table 30-1 was divided into 30-1a through 30-1e just to make each page a separate table. Now 30-1b spans two pages so it should be split Tables 30-1b and Table 30-1c. The same applies to 30-1e (or all of 30-1 should be one table).

SuggestedRemedy

Remove the blue Xs for all objects except the 6 EEE objects (the 6 objects start wtih aTransmitPLMicroseconds and end with aLPFastRetrainCount).

Consider whether to resegment or join Tables 30-1a through 30-1e.

Response *Response Status* **C**

ACCEPT.

Cl **30** *SC* **30.2.5** *P* **328** *L* **20** # 71

Dawe, Piers — IPtronics

Comment Type **TR** *Comment Status* **A** *MR 1233*

Far too many crosses for Energy-Efficient Ethernet in Table 30-1b. There should be just six.

SuggestedRemedy

Remove all the blue crosses except
aTransmitLPIMicroseconds
aReceiveLPIMicroseconds
aTransmitLPITransitions
aReceiveLPITransitions
aLDFastRetrainCount
aLPFastRetrainCount

Response *Response Status* **C**

ACCEPT.

See #181

Cl **30** *SC* **30.2.5** *P* **329** *L* **24** # 142

Ganga, Ilango Intel

Comment Type **TR** *Comment Status* **A**

Table 30-1b, NOTE 2" Change "PFCEnable attribute" to "PFCEnableStatus attribute"

SuggestedRemedy

As per comment

Response *Response Status* **C**

ACCEPT.

Cl **30** *SC* **30.3.1.1** *P* **347** *L* **8** # 346

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A** *MR 1229*

Part of maintenance request 1229 has not been implemented

SuggestedRemedy

In subclause 30.3.1.1, add a new subclause which defines the attribute:
30.3.1.1.3X aSlowProtocolFrameLimit

Response *Response Status* **C**

ACCEPT.

See #203

Cl **30** *SC* **30.3.1.1.3** *P* **347** *L* **38** # 68

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

nonresetable: presumably something to do with silk (seta)? This was spelled correctly in the earlier editions.

SuggestedRemedy

Revert to correct speling.

Response *Response Status* **C**

ACCEPT.

Cl **30** *SC* **30.50.1.1.2** *P* **400** *L* **2** # 421

Maguire, Valerie Siemon

Comment Type **TR** *Comment Status* **A** *UTP*

Specifying "UTP" in these lists implies that these applications are not supported by shielded cabling.

SuggestedRemedy

Globally replace "UTP" with "twisted-pair cabling" in this clause.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Agree with direction. Change the reference to 30.5.1.1.2.

Cl **30** *SC* **30.6.1.1.6** *P* **413** *L* **8** # 219

Law, David HP

Comment Type **T** *Comment Status* **A**

The syntax for this attributes is 'Same as aAutoNegLocalTechnologyAbility' (see 30.6.1.1.5) which means that it allows values such as 1000BASE-T and 10GBASE-T to be read and written to this attribute.

The behaviour however states that this attribute maps to the Technology Ability Field of the Auto-Negotiation Link Codeword which only supports 10BASE-T, 100BASE-TX, 100BASE-T4 and PAUSE (see Table 28B-1 Technology Ability Field bit assignments). This behaviour needs to be expanded to also include the Next page Message Codes such as the 10GBASE-T/1000BASE-T Technology message code.

SuggestedRemedy

Suggest use text similar to that used for 30.6.1.1.5 along the lines of 'This GET-SET attribute maps to the technology ability of the local device, as defined in Clause 28 and Clause 37.'

Response *Response Status* **C**

ACCEPT.

Cl **30** *SC* **30.6.1.1.8** *P* **413** *L* **45** # 176

Thaler, Patricia — Broadcom

Comment Type **E** *Comment Status* **A**

Since the nature of this object is that new values will be assigned from time to time to organizations without any relationship to an IEEE 802.3 project, perhaps the sequence list should be done by referencing the selector webpage rather than including it here.

Also, the hypertext URL points to maint_1199 rather than 1201. Also applies to the URL on 626, section 4 page 73.

SuggestedRemedy

Correct the hypertext URLs to match the text URLs.

Consider replacing the sequence list with a reference to the selector webpage. (Or keep the list here for the existing items but change the syntax to "A sequence that meets the requirements of the description below or on <URL for the selector webpage>:"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Replace the sequence list with a reference to the selector webpage

---

Cl **30** *SC* **30.6.1.1.8** *P* **413** *L* **45** # 14

Dawe, Piers — IPtronics

Comment Type **E** *Comment Status* **A**

Is the full stop after INCITS acceptable?

SuggestedRemedy

Remove it?

Response *Response Status* **C**

ACCEPT.

Cl **30** *SC* **30.6.1.1.8** *P* **413** *L* **48** # 381

Anslow, Peter — Ciena

Comment Type **E** *Comment Status* **A** *Editor Note*

Link to maintenance request shows maint_1201.pdf but goes to maint_1199.pdf

SuggestedRemedy

Change link to go to maint_1201.pdf

Response *Response Status* **C**

ACCEPT.

The Editor's note is intended as additional information for the balloter. It will not be part of the standard. Nevertheless, your comment will be considered on the next draft

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Cl **30** *SC* **30.9.1.1** *P* **449** *L* **27** # 407

Barrass, Hugh — Cisco

Comment Type **T** *Comment Status* **A** *PoE Management*

It would be advantageous to include a managed object that allows the PSE to indicate the actual power drawn by the PD.

SuggestedRemedy

Add 2 new subclauses 30.9.1.1.12 and 30.9.1.1.13

30.9.1.1.12 aPSEActualPower

ATTRIBUTE
APPROPRIATE SYNTAX:
INTEGER
BEHAVIOUR DEFINED AS:
An integer value indicating current (actual) power being supplied by the PSE as measured at the MDI in milliwatts. The behaviour is undefined if the state of aPSEPowerDetectionStatus is anything other than deliveringPower.;

30.9.1.1.13 aPSEPowerAccuracy

ATTRIBUTE
APPROPRIATE SYNTAX:
INTEGER
BEHAVIOUR DEFINED AS:
An integer value indicating the accuracy associated with aPSEActualPower in +/- milliwatts.;

Update table 30-4 as appropriate.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Add 2 new subclauses 30.9.1.1.12 and 30.9.1.1.13

30.9.1.1.12 aPSEActualPower

ATTRIBUTE
APPROPRIATE SYNTAX:
INTEGER
BEHAVIOUR DEFINED AS:
An integer value indicating present (actual) power being supplied by the PSE as measured at the MDI in milliwatts. The behaviour is undefined if the state of aPSEPowerDetectionStatus is anything other than deliveringPower. The sampling frequency and averaging is vendor-defined.;

30.9.1.1.13 aPSEPowerAccuracy

ATTRIBUTE
APPROPRIATE SYNTAX:
INTEGER
BEHAVIOUR DEFINED AS:
An integer value indicating the accuracy associated with aPSEActualPower in +/- milliwatts.;

Update table 30-4 by:
- adding these two new attributes into object class "oPSE managed object class"
- adding "X" in the column "PSE Recommended Package" for these two new objects

---

Cl **30** *SC* **30.9.1.1** *P* **449** *L* **28** # 408

Barrass, Hugh Cisco

Comment Type **T** *Comment Status* **A** *PoE Management*

It would be advantageous to include a managed object that allows the PSE to indicate the cumulative energy drawn by the PD.

SuggestedRemedy

Add a new subclauses 30.9.1.1.14

30.9.1.1.12 aPSECumulativeEnergy

ATTRIBUTE
APPROPRIATE SYNTAX:
Generalized nonresetable counter. The counter has a maximum increment rate of 30000 per seond.
BEHAVIOUR DEFINED AS:
A count of the cumulative energy supplied by the PSE as measured at the MDI in millijoules.;

Update table 30-4 as appropriate.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Add a new subclauses 30.9.1.1.14

30.9.1.1.12 aPSECumulativeEnergy

ATTRIBUTE
APPROPRIATE SYNTAX:
Generalized nonresetable counter. The counter has a maximum increment rate of 100000 per second.
BEHAVIOUR DEFINED AS:
A count of the cumulative energy supplied by the PSE as measured at the MDI in millijoules.;

Update table 30-4 by:
- adding these new attribute into object class "oPSE managed object class"
- adding "X" in the column "PSE Recommended Package" for this new object

Cl **30A** *SC* **30A** *P* **701** *L* **8** # 15
Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A**

This says "NOTE—The GDMO specification was moved to IEEE Std 802.3.1-2011."

SuggestedRemedy

So, add IEEE Std 802.3.1-2011 to the list of references, and explain in 1.1 and 30.1 how it fits in.

Response *Response Status* **U**

ACCEPT IN PRINCIPLE.

Will add a reference to Clause 1. If the commenter would like to see intro text, he is invited to propose some for the BRC to consider.

Cl **30A** *SC* **30A** *P* **703** *L* **8** # 16
Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A**

This says "NOTE—The SNMP for Link Aggregation specification was moved to IEEE Std 802.1AX-2008."

SuggestedRemedy

So, add IEEE Std 802.1AX-2008 to the list of references, and explain in 1.1 and 30.1 how it fits in.

Response *Response Status* **U**

ACCEPT IN PRINCIPLE.

Will add a reference to the Annex A (references to 802.1AX are non-normative). If the commenter would like to see intro text, he is invited to propose some for the BRC to consider.

Cl **31** *SC* **31.3.1.2** *P* **475** *L* **25** # 127
Ganga, Ilango Intel

Comment Type **E** *Comment Status* **A**

Fix missing cross refernce to "Annex 31A"
31.3.2.4: line 33: Fix missing cross refernce to "Annex 31A"

SuggestedRemedy

As per comment

Response *Response Status* **C**

ACCEPT.

Cl **31** *SC* **31.3.2.4** *P* **476** *L* **9** # 18
Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

Not a link

SuggestedRemedy

Make "Annex 31A" a link.

Response *Response Status* **C**

ACCEPT.

Cl **31** *SC* **31.4.1** *P* **476** *L* **26** # 17
Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A** *Figure Fonts*

Font too small in Figure 28–19. Minimum per style guide is 8 point, this is 6 point. There is plenty of room to do it right.

SuggestedRemedy

Change the 6 point text to 8 point, adjust layout if necessary.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Make changes to Figure 31-3, space permitting.

Cl **31** *SC* **31.5.3.4** *P* **480** *L* **36** # 134
Ganga, Ilango Intel

Comment Type **ER** *Comment Status* **A**

Merge is not as per 802.3bd.

SuggestedRemedy

Change to "state are opcode-specific (see Annex 31A)."

Response *Response Status* **C**

ACCEPT.

Cl **31A** *SC* **31A** *P* **705** *L* **16** # 19

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

Cross-references in Table 31A-1 don't work.

SuggestedRemedy

Please fix.

Response *Response Status* **C**

ACCEPT.

Cl **31B** *SC* **31B.3.2** *P* **713** *L* **43** # 182

Thaler, Patricia Broadcom

Comment Type **TR** *Comment Status* **A** *MR 1196*

This change is incompletely implemented. It should be done correctly or left as magic (i.e. the state machine magically knows to stay in SEND CONTROL FRAME and SEND DATA FRAME states until the frame from the MA_DATA request was actually transmitted).

As it is now, nothing defines transmission_completed. The TransmitFrameCompleted variable is in the MAC and there is no primitive that transfers that signal from the MAC to MAC Control. Even if the signal was transferred, there would be a race condition between the time MAC Control issued the primitive and the time the MAC started TransmitFrame when TransmitFrameCompleted would still be false.

I can't find any reference here to state machine conventions. 21.5 should be referenced because it adds the requirement that all the actions in the state block are preformed one time before evaluating the exit conditions. The state machine conventions of 1.2 alone don't supply that behavior.

SuggestedRemedy

The simplest complete fix would be:

Add to 31B.3 a statement that the state machines follow the conventions in 21.5. (See 25.1.1 for an example statement. That also covers the timer conventions from 14 which apply here.)

Add to the definition for MAC:MA_DATA.request that the action it invokes isn't considered to end until the transmission of the frame by the MAC has concluded and how the MAC control layer determines that is implementation dependent.

Remove transmission_completed.

If that isn't done, a definition will be needed for transmission_completed which still requires MAC Control knowing magically that it has or a primitive would need to be added that carries the value of TransmitFrameCompleted from the MAC to MAC Control.

Since Annex 31D transmit has similar SEND CONTRL FRAME and SEND DATA FRAME states, if a change is made, it should probably also be applied there.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Remove changes from MR 1196 to Clause 4, Annex 4A, Annex 31B, so that they match 802.3-2008. Make sure that the exit conditions use "UCT" in Figure 4-6 and Figure 4A-3.

Make changes to Clause 64, Figure 64-12 and Figure 64-13 to match equivalent figures in Clause 77.

Add the following statements to Annex 31B (31B.3) and Annex 31D (31D.3) indicating that

the state machines follow the conventions in 21.5. (See 25.1.1 for an example statement. That also covers the timer conventions from 14 which apply here.)

In Annex 31B, Annex 31D, Annex 4A and Clause 4, add in to the definition for MAC:MA_DATA.request that the action it invokes isn't considered to end until the transmission of the frame by the MAC has concluded and how the MAC control layer determines that is implementation dependent.

Add the following statements to Clause 4 (4.3.2) and Annex 4A (4A.3.2) indicating that the state machines follow the conventions in 21.5.

Cl **31B** *SC* **31B.3.7** *P* **717** *L* **11** # 406

Barrass, Hugh Cisco

Comment Type **T** *Comment Status* **A** *PAUSE*

For speeds of 10Gb/s and above, the complexity of the PHY and the encoding make it difficult to verify the PAUSE response time using complex traffic patterns. This problem is made worse for the case of PFC (although that isn't covered in this clause/standard).

The most important aspect of the port behavior is that the amount of data sent after a PAUSE is received will be limited according to the PAUSE timing requirements. Therefore, there should a test that confirms this limit to the data overrun should be sufficient to prove compliance.

SuggestedRemedy

Add the following at the end of the sub-clause:

The PAUSE response time may be verified by demonstrating that no more than max_overrun bytes of frame data are sent by the station after reception of a valid PAUSE frame that contains a non-zero value of pause_time. The value of max_overun is defined for the following operating speeds, where frame_length is the maximum frame length transmitted by the station during the test:

10Gb/s (using 10GBASE-T) - max_overrun = 4736 + frame_length.
10Gb/s (not using 10GBASE-T) - max_overrun = 3840 + frame_length.
40Gb/s - max_overrun = 7552 + frame_length.
100Gb/s - max_overrun = 25216 + frame_length.

Response *Response Status* **C**

ACCEPT.

Cl **31B** *SC* **31B.3.7** *P* **717** *L* **3** # 122

Ganga, Ilango Intel

Comment Type **E** *Comment Status* **A**

In line 2 and line 7: Change "ofpause_time" to "of pause_time" (2 instances)

SuggestedRemedy

As per comment

Response *Response Status* **C**

ACCEPT.

Cl **31B** *SC* **31B.3.7** *P* **717** *L* **3** # 403

Barrass, Hugh Cisco

Comment Type **E** *Comment Status* **A**

Missing space:

ofpause_time

SuggestedRemedy

of pause_time

Response *Response Status* **C**

ACCEPT.

See #122

Cl **31B** *SC* **31B.3.7** *P* **717** *L* **3** # 310

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

Space missing in "ofpause_time"
Same issue on line 7

SuggestedRemedy

insert space to make it ""of pause_time"
do the same on line 7

Response *Response Status* **C**

ACCEPT.

See #122

Cl **31B** *SC* **31B.3.7** *P* **717** *L* **7** # 404
Barrass, Hugh Cisco

Comment Type **E** *Comment Status* **A**
Missing space:

ofpause_time

SuggestedRemedy

Response *Response Status* **C**
ACCEPT.

See #122

Cl **31B** *SC* **31B.4.3** *P* **719** *L* **21** # 311
Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**
space missing between number and unit in "40Gb/s" and "100Gb/s"

SuggestedRemedy
Insert spaces to become "40 Gb/s" and "100 Gb/s"

Response *Response Status* **C**
ACCEPT.

Cl **31B** *SC* **31B.4.3** *P* **719** *L* **21** # 123
Ganga, Ilango Intel

Comment Type **E** *Comment Status* **A**
In last two rows of table
Change "40Gb/s" to "40 Gb/s"
Change "100Gb/s" to "100 Gb/s"

SuggestedRemedy
As per comment

Response *Response Status* **C**
ACCEPT.

See #311

Cl **31B** *SC* **31B.4.6** *P* **720** *L* **20** # 132
Ganga, Ilango Intel

Comment Type **ER** *Comment Status* **A**
Incorrect merge for TIM5:

SuggestedRemedy
Change to "Measurement point for station at 10 Gb/s with PHY types other than 10GBASE-T"

Response *Response Status* **C**
ACCEPT.

Cl **31B** *SC* **31B.4.6** *P* **720** *L* **24** # 124
Ganga, Ilango Intel

Comment Type **E** *Comment Status* **A**
Change "of10GBASE-T" to "of 10GBASE-T"

SuggestedRemedy
As per comment

Response *Response Status* **C**
ACCEPT.

Cl **31C** *SC* **31C.1** *P* **721** *L* **15** # 385
Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A** *Editor note*
The text changes due to maintenance request 1228 could be shown more clearly

SuggestedRemedy
Show added text in dark blue underlined font, deleted text in red strikethrough font and unchanged text in normal font in 31C.1, 31C.2 and Figure 31C-1
In Editor's note change "inserted based on" to "change based on"

Response *Response Status* **C**
ACCEPT.

The Editor's note is intended as additional information for the balloter. It will not be part of the standard. Nevertheless, your comment will be considered on the next draft

Cl **31D** *SC* **31-3** *P* **729** *L* **3** # 21
Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A** *Figure Fonts*

Font too small in Figure 31D-3. Minimum per style guide is 8 point, this is a mixture of 7 and 8 point.

SuggestedRemedy

Change the 7 point text to 8 point.

Response *Response Status* **C**

ACCEPT.

Cl **31D** *SC* **31D** *P* **724** *L* **6** # 20
Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

PFC? What?

SuggestedRemedy

Spell it out in full at least once in this annex.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

"The PFC operation is used … " to be changed to "The Priority-based Flow Control (PFC) operation is used ..." in line 11

Cl **31D** *SC* **31D.2** *P* **725** *L* **6** # 125
Ganga, Ilango Intel

Comment Type **E** *Comment Status* **A**

Remove change bar from second paragraph
Remove change bar from Fig 31-D1

SuggestedRemedy

As per comment

Response *Response Status* **C**

ACCEPT.

Cl **31D** *SC* **31D.7.1.2** *P* **730** *L* **31** # 126
Ganga, Ilango Intel

Comment Type **E** *Comment Status* **A** *PICS*

Change "IEEE Std 802.3bd-200x," to IEEE Std 802.3-201x,

SuggestedRemedy

This is a global change required throughout the merged document for all PICS subclauses.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

See #261

Cl **31D** *SC* **31D.7.4** *P* **731** *L* **25** # 133
Ganga, Ilango Intel

Comment Type **ER** *Comment Status* **A**

Fix references to point to the right subclauses & figures.

SuggestedRemedy

Item PSDT: Change missing reference to "Figure 31D-2"
Item PSDR: Change references to Subclause "31D.6" and "Figure 31D-3".

Response *Response Status* **C**

ACCEPT.

Cl **33** *SC* **2.7.5** *P* **605** *L* **47** # 145
Michael, McCormack Texas Instruments

Comment Type **TR** *Comment Status* **R** *PoE: PSE Startup*

In IEEE Std 802.3-2008, section 33.2.8.5 which was the equivalent section, there was allowance for 1ms of settling time (item b.) This settling time has been removed which will make some previously compliant systems no longer compliant.

SuggestedRemedy

1) Restore the 1ms allowance.
2) Add note that preferred behavior is to meet output requirements during 1ms settling time.
3) Add note in section 33.3.5.2 that some PSEs may oscillate during the first millisecond and therefore filtering of 1ms variations may be prudent.

Response *Response Status* **U**

REJECT.

The suggested remedy does not fully resolve the problem identified in the comment.

Cl **33** *SC* **3.7.8** *P* **626** *L* **3** # 113

Dwelley, David — Linear Technology

Comment Type **TR** *Comment Status* **D** *PoE: MR 1230*

Note: This text was changed by maintenence request 1230.

This change implies a change to state diagram 33-16, since the current state machine does not require a rising-only voltage transition.

It also introduces a risk that existing compliant PSE devices may fail to interoperate with compliant PDs that do not present classification signatures after a falling edge. This could occur if a type 2 PSE includes classification circuitry that overshoots the Vclass range (but does not reach Vport_pd(min)) and then returns to the Vclass range within the time defined in Table 33-10 (Tcle1(min) or Tpdc(min)). If the PD fails to present a classification signature in this case, the PSE will treat the PD as a Class 0 device and may fail to provide enough power for the PD to operate.

SuggestedRemedy

Submit a suitable change to state diagram 33-16 and demonstrate that this change does not impact interoperability.

Proposed Response *Response Status* **Z**

REJECT.

This comment was WITHDRAWN by the commenter.

Cl **33** *SC* **33.1.4** *P* **579** *L* **42** # 422

Maguire, Valerie — Siemon

Comment Type **T** *Comment Status* **A** *UTP*

Specifying "UTP" here implies that this application is not supported by shielded cabling.

SuggestedRemedy

Replace:
"UTP per 14.4 and 14.5a"

with:
"twisted-pair cabling per 14.4 and 14.5a"

Response *Response Status* **C**

ACCEPT.

Cl **33** *SC* **33.1.4.1** *P* **580** *L* **5** # 435

Maguire, Valerie — Siemon

Comment Type **E** *Comment Status* **A**

'568-B-2 and applicable addenda have been rolled into '568-C.2. Remode unnecessary date reference from '568-A.

SuggestedRemedy

Replace:
"These requirements are also met by Category 5e or better cable and components as specified in ANSI/TIA/EIA-568-B.2, ANSI/TIA/EIA-568-B.2-1, and ANSI/TIA/EIA-568-B.2-10; or Category 5 cable and components as specified in ANSI/TIA/EIA-568-A-1995."

with:
"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.

Response *Response Status* **C**

ACCEPT.

Cl **33** *SC* **33.3.7.8** *P* **626** *L* **3** # 22

Dawe, Piers — IPtronics

Comment Type **ER** *Comment Status* **A**

This is not all new text, some of it comes from 802.3at.

SuggestedRemedy

Show the change correctly so we can vote on it appropriately next time.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

See #382.

Cl **33** *SC* **33.3.7.8** *P* **626** *L* **3** # 382
Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

Text changes could be shown more clearly
Link to maintenance request shows maint_1230.pdf but goes to maint_1199.pdf

SuggestedRemedy

The text should be shown as "Following a valid detection and a rising voltage transition from Vvalid to VClass, t" in dark blue underlined font, "T" in red strikethrough font and the rest of the text in normal font as it is unchanged.
Change link to go to maint_1230.pdf

Response *Response Status* **C**

ACCEPT.

Cl **33** *SC* **33.3.7.8** *P* **626** *L* **4** # 196
Booth, Brad Dell

Comment Type **E** *Comment Status* **A**

Missing a space

SuggestedRemedy

Change to read as "the duration".

Response *Response Status* **C**

ACCEPT.

Cl **33** *SC* **33.6.3.3** *P* **644** *L* **22** # 383
Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

Hyperlink has spurious "IEEE" at the end

SuggestedRemedy

Correct the link

Response *Response Status* **C**

ACCEPT.

Cl **34** *SC* **34** *P* **1** *L* **27** # 23
Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **R**

"Introduction to 1000 Mb/s baseband network": they aren't all baseband, some are optical (around 2.10^14 Hz). A singular "network" seems odd. Compare "80. Introduction to 40 Gb/s and 100 Gb/s networks". This point applies to Clause 44 also.

SuggestedRemedy

Please delete baseband and change network to networks, here and at Clause 44.

Response *Response Status* **C**

REJECT.

The port type is BASE and this clause title has been stable for a long time

Cl **36** *SC* **36.2.4.13** *P* **51** *L* **39** # 24
Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

Why the backslashes?

SuggestedRemedy

Use forward slashes /LI/ as elsewhere.

Response *Response Status* **C**

ACCEPT.

Cl **36** *SC* **36.3.5.2** *P* **80** *L* **44** # 25
Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

ac

SuggestedRemedy

AC Also for next table.

Response *Response Status* **C**

ACCEPT.

Cl **38** *SC* **38** *P* **115** *L* **1** # 26

Dawe, Piers IPtronics

Comment Type **T** *Comment Status* **R**

An optical fibre is not a baseband medium. It works at very high frequencies. It doesn't even form a waveguide if the frequency is too low (wavelength too long). Compare clause titles for optical PMDs in EFM and 40/100GE.

SuggestedRemedy

Delete "baseband" here and consequently in PICS.

Response *Response Status* **C**

REJECT.

The port type is BASE and this clause title has been stable for a long time

Cl **38** *SC* **38.11.1** *P* **131** *L* **26** # 28

Dawe, Piers IPtronics

Comment Type **TR** *Comment Status* **R**

Updating reference to IEC 60793-2, which is too broad anyway.
The dispersion limits have changed slightly for 50 um MMF and I think for SMF. Both old and new limits are allowable, and this must be made clear.
I don't think SMF is called "10/125" any more.
The "type A1a" naming is not memorable. It might help to give the "OM2" style names as well.

SuggestedRemedy

List old and new dispersion limits.
Use dated old and new references to IEC 60793-2-10 and IEC 60793-2-50.
Update the name of SMF.
Add rows to Table 38-12 with A1a and OM2 style fibre names.
Do similar in Clause 52.

Response *Response Status* **U**

REJECT.

The key fiber parameters are called in the table and not from the references.

Cl **38** *SC* **38.11.2.2** *P* **132** *L* **24** # 29

Dawe, Piers IPtronics

Comment Type **T** *Comment Status* **R**

"The return loss for multimode connections shall be greater than 20 dB" is not as clear as it should be. I think it should specify the return loss of each connection. Maybe there should be an additional specification for the return loss of an appropriately terminated channel.

SuggestedRemedy

One remedy would be to copy the wording of 52.14.2.2.
Change
38.11.2.2 Connection return loss
The return loss for multimode connections shall be greater than 20 dB.
The return loss for single-mode connections shall be greater than 26 dB.
to
38.11.2.2 Maximum discrete reflectance
The maximum discrete reflectance for 10GBASE-S shall be less than -20 dB.
The maximum discrete reflectance for 10GBASE-L and 10GBASE-E shall be less than -26 dB.
Update the PICS LI2 and LI3.

Response *Response Status* **C**

REJECT.

There is no consensus that the proposed remedy improves the clarity of the exiting text.

Cl **38** *SC* **38.6.11** *P* **127** *L* **42** # 27

Dawe, Piers IPtronics

Comment Type **T** *Comment Status* **A**

This says VECP = 10.log(AO/AN)

SuggestedRemedy

Shouldn't it be 10 log10(AN/AO)? And please give the base of the log.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Make the order (AN/A0). Delete the dot in the equation.

Cl **38** *SC* **38.6.4** *P* **124** *L* **28** # 30

Dawe, Piers IPtronics

Comment Type **T** *Comment Status* **A** *FC-PH*

If FC-PH has been withdrawn, we could refer to a later document in the FC series or we could refer to 52.9.6, adding here an equation for RIN (as opposed to RIN_OMA).

SuggestedRemedy

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change reference to ANSI X3.230-1994 (FC-PH) to ANSI/INCITS 450-2009 (FC-PI-4), conditional on confirmation with the FC expert.

Cl **40** *SC* **40.8.3.3** *P* **253** *L* **18** # 342

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

Says "inserted based on maintenance request 1202" but it should be request 1203 (URL is correct)
Also, http://www.ieee802.org//3/maint/requests/revision_history.html says:
"(a) After discussion, the suggested text was changed to say "The frequency of the measurement shall be above 1 MHz."

SuggestedRemedy

Change 1202 to 1203
If revision history is correct, change text to "The frequency of the measurement shall be above 1 MHz."

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
See #31

Cl **40** *SC* **40.8.3.3** *P* **253** *L* **22** # 31

Dawe, Piers IPtronics

Comment Type **T** *Comment Status* **A** *MR 1203*

I don't think "total common-mode output voltage" can sensibly be measured at a single frequency as stated here. I presume the peak-to-peak is in the time domain, not the peak of a spectrum analyser sweep?

SuggestedRemedy

I think this should say something like "less than 50 mV peak-to-peak after a 1 MHz high-pass filter and a 100 MHz low-pass filter, when transmitting data". Defining the filter type would be advisable, e.g. "50 mV peak after a 1 MHz first-order high-pass filter...".

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change the text "shall be less than 50 mV peak-to-peak when transmitting data. The frequency of the measurement shall be from 1 MHz to 100 MHz" to read "shall be less than 50 mV peak-to-peak when transmitting data at frequencies above 1 MHz"

Cl **42** *SC* **42.1.1** *P* **307** *L* **7** # 423

Maguire, Valerie Siemon

Comment Type **T** *Comment Status* **A** *UTP*

UTP is exclusionary and not required here.

SuggestedRemedy

Replace:
"Category 5 UTP Link Segment (1000BASE-T)"

with:
"Category 5 Link Segment (1000BASE-T)"

Response *Response Status* **C**

ACCEPT.

Cl **42** *SC* **42.3** *P* **308** *L* **27** # 424

Maguire, Valerie Siemon

Comment Type **T** *Comment Status* **A** *UTP*

UTP is exclusionary and not required here.

SuggestedRemedy

Replace:
"Category 5 UTP"

with:
"Category 5 Twisted-Pair"

Response *Response Status* **C**

ACCEPT.

Cl **42** *SC* **42.3** *P* **308** *L* **36** # 425

Maguire, Valerie Siemon

Comment Type **T** *Comment Status* **A** *UTP*

UTP is exclusionary and not required here.

SuggestedRemedy

Replace:
"Assumes 100 m of Category 5 UTP and one Optical Fiber link of 110 m."

with:
"Assumes 100 m of Category 5 twisted-pair and one Optical Fiber link of 110 m."

Response *Response Status* **C**

ACCEPT.

Cl **42** *SC* **42.3.1.2** *P* **310** *L* **16** # 426

Maguire, Valerie Siemon

Comment Type **T** *Comment Status* **A** *UTP*

UTP is exclusionary and not required here.

SuggestedRemedy

Replace:
"Category 5 UTP Cable segment"

with:
"Category 5 Cable segment"

Response *Response Status* **C**

ACCEPT.

Cl **43C** *SC* **43C** *P* **339** *L* **6** # 339

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

In "was moved to IEEE Std 802.1AX-200X during the IEEE Std 802.3-200X revision" has two instances of "200X"

SuggestedRemedy

Change to "was moved to IEEE Std 802.1AX-2008 during the IEEE Std 802.3-2008 revision"

Response *Response Status* **C**

ACCEPT.

Cl **44** *SC* **44.1** *P* **1** *L* **38** # 32

Dawe, Piers IPtronics

Comment Type **T** *Comment Status* **R**

The first sentence "10 Gigabit Ethernet extends the IEEE 802.3 MAC beyond 1000 Mb/s to 10 Gb/s." is obsolete advertising material. The second "The bit rate is faster and the bit times are shorter-both in proportion to the change in bandwidth." misuses bandwidth, an analog quantity measured in hertz. The third sentence "The minimum packet transmission time has been reduced by a factor of ten." is an obsolete copy from an older clause. It was true when rates were low and links were never long. For 10G, the time of flight (up to 200 us) can vastly exceed the spooling time of a frame (up to 1.6 us), so it's misleading and wrong. We deleted equivalent sentences in D1.0 of 802.3ba. We should correct this too.

SuggestedRemedy

Delete these three sentences. As "A rate control mode (see 4.2.3.2.2) is added to the MAC to adapt" is an out-of-date way of putting it (this isn't an amendment that adds, this is the base standard now), change "is added to" to "is included in", or change to "A rate control mode of the MAC (see 4.2.3.2.2) adapts". Consider combining the text that remains into fewer paragraphs.

Response *Response Status* **C**

REJECT.

This text is not incorrect and this style of text also exists in other rate introduction clauses

Cl **44A** *SC* **44A** *P* **661** *L* **1** # 33

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **R**

Although Annex 44A contains useful material it is not referred to from the relevant places in Section 4.

SuggestedRemedy

Remedy to follow.

Response *Response Status* **C**

REJECT.

The commenter has not proposed any change to the draft.

Cl **45** *SC* **45.2.1** *P* **14** *L* **35** # 330

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

Various amendments have added a "subclause" column to Table 45-3 PMA/PMD registers and put in cross-references to the applicable subclause for each register. However, there are many entries missing.

Also, IEEE 802.3bf added a subclause column to Table 45-77 WIS registers, Table 45-98 PCS registers, Table 45-127 PHY XS register, Table 45-138 DTE XS registers and Table 45-149 TC registers but this has not been implemented.

The title of Table 45-127 has lost the "s" from "registers" since the 802.3-2008 version.

SuggestedRemedy

Complete the subclause column in Table 45-3 PMA/PMD registers
Add a subclause column to:
Table 45-77 WIS registers
Table 45-98 PCS registers
Table 45-127 PHY XS register
Table 45-138 DTE XS registers
Table 45-149 TC registers

Change the name of Table 45-127 "PHY XS register" to be "PHY XS registers"

For consistency in the rest of clause 45 add a subclause column to:
Table 45-163 Auto-Negotiation MMD registers
Table 45-175 Clause 22 extension registers
Table 45-183 Vendor specific MMD 2 registers

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.1** *P* **17** *L* **26** # 336

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

45.2.1.99 calls register 1.1500 "Test-pattern ability" but when it is referenced in Table 45-3 and Table 83-3 it is shown without the hyphen as "Test pattern ability"

SuggestedRemedy

In Table 45-3 and Table 83-3 change "Test pattern" to "Test-pattern" (8 instances in total)

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.1.1.3** *P* **19** *L* **32** # 294

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

space missing in "a100G" and see 45.2.1.6.1 should be a link

SuggestedRemedy

Insert space in "a100G" and make 45.2.1.6.1 a link

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.1.104** *P* **94** *L* **35** # 297

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

Space missing in "seeTable 45-74"
On line 36 "repectively" should be "respectively"

SuggestedRemedy

Insert a space
Change "repectively" to "respectively"

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.1.105** *P* **95** *L* **4** # 223

Law, David HP

Comment Type **E** *Comment Status* **A**

Somethig odd has happened with the subclause numbering here, it reads '4.5.2.105TimeSync ..', that is the subclause.

SuggestedRemedy

Subclause should be 45.2.1.105 and there should be a space between the subclause number and the title.

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.1.12.6** *P* **37** *L* **13** # 321

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

In the heading of 45.2.1.12.6, "40BASE-FR ability" should be "40GBASE-FR ability"

SuggestedRemedy

Change "40BASE-FR ability" to "40GBASE-FR ability"

Response *Response Status* **C**

ACCEPT.
See also comment #217

Cl **45** *SC* **45.2.1.12.6** *P* **37** *L* **13** # 217

Law, David HP

Comment Type **E** *Comment Status* **A**

Typo.

SuggestedRemedy

Missing G after 40, '40BASE-FR ability' should read '40GBASE-FR ability'.

Response *Response Status* **C**

ACCEPT.
See also comment #321

Cl **45** *SC* **45.2.1.7.5** *P* **26** *L* **24** # 295

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

The references for the 40/100GBASE-SR4/10 and the 40GBASE-LR4 PMDs are swapped over

SuggestedRemedy

Swap the references "87.5.11" and "86.5.11"

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.1.73** *P* **73** *L* **46** # 386

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

Link to maintenance request shows maint_1225.pdf but goes to maint_1199.pdf

SuggestedRemedy

Change link to go to maint_1225.pdf

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.1.73** *P* **73** *L* **49** # 195

Booth, Brad Dell

Comment Type **E** *Comment Status* **A**

Improper case.

SuggestedRemedy

Change Rx to be RX.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change Rx to RX in the inserted text in 45.2.1.73 through 45.2.1.76 (4 instances)

Cl **45** *SC* **45.2.1.73** *P* **73** *L* **51** # 34

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

8db

SuggestedRemedy

8 dB Make the change 4 times.

Response *Response Status* **C**

ACCEPT.

See also comment #387

Cl **45** *SC* **45.2.1.73** *P* **73** *L* **51** # 387

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

In the changes due to maintenance request 1225, the references to 55.4.6.1 should be a link and "8db" should be "8 dB"

SuggestedRemedy

In 45.2.1.73, 45.2.1.74, 45.2.1.75 and 45.2.1.76, change the references to 55.4.6.1 to links and "8db" to "8 dB" (4 instances of each)

Response *Response Status* **C**

ACCEPT.
See also comment #34

Cl **45** *SC* **45.2.1.78.4** *P* **75** *L* **49** # 463

Brett McClellan Marvell Semiconducto

Comment Type **E** *Comment Status* **A**

The text as written implies that fast retrain negotiation is defined in 55.4.2.5.15. However there is no definition of fast retrain negotiation anywhere in Clause 55.

SuggestedRemedy

"When read as a one, bit 1.147.3 indicates that the PHY negotiated fast retrain, as defined in 55.4.2.5.15 during the most recent auto-negotiation. When read as a zero, bit 1.147.3 indicates that the PHY did not negotiate fast retrain. See 45.2.7.10.6."
to:
"When read as a one, bit 1.147.3 indicates that the PHY negotiated fast retrain, as defined in 55.4.2.5.15 during the most recent auto-negotiation. This is the condition where both the local device indicated fast retrain ability (7.32.1 = 1) and the link partner indicated fast retrain ability (7.33.1 = 1). When read as a zero, bit 1.147.3 indicates that the PHY did not negotiate fast retrain. See 45.2.7.10.6."

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
In 45.2.1.78.4, insert a new second sentence:
"This is the condition where both the local device indicated fast retrain ability (bit 7.32.1 is one) and the link partner indicated fast retrain ability (bit 7.33.1 is one)."

Cl **45** *SC* **45.2.1.8** *P* **28** *L* **1** # 296

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

The note at the end is missing a "."

SuggestedRemedy

add "." at the end of the note.

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.2.20** *P* **112** *L* **7** # 316

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

Table 45-93 is followed by Table 45-95

SuggestedRemedy

Fix Table numbering

Response *Response Status* **C**

ACCEPT.
See also comment #232

Cl **45** *SC* **45.2.2.20** *P* **112** *L* **8** # 232

Law, David HP

Comment Type **E** *Comment Status* **A**

Error in Table numbering, Table 45-95 'TimeSync WIS capability' follows Table 45-93 '10G WIS J0 receive 0-15 register bit definitions'.

SuggestedRemedy

'TimeSync WIS capability' should be numbered Table 45-94 and all subsequent tables will be renumbered.

Response *Response Status* **C**

ACCEPT.
See also comment #316

Cl **45** *SC* **45.2.3.13** *P* **126** *L* **1** # 298

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

The title of Table 45-107 is not as modified by 802.3ba

SuggestedRemedy

In the title of Table 45-107 change "BASE-R and BASE-T" to "BASE-R and 10GBASE-T"

Response *Response Status* **C**

ACCEPT.
See also comment #212

Cl **45** *SC* **45.2.3.13.2** *P* **126** *L* **1** # 212

Law, David HP

Comment Type **E** *Comment Status* **A**

While IEEE Std 802.3ba-2010 changed the table 45-107 title by removing 10G from 10GBASE-R (see page 48) I'm not able to find an amendment that deletes 10G from the 10GBASE-T in the title.

SuggestedRemedy

Change 'BASE-R and BASE-T PCS status 1 register bit definitions' to read 'BASE-R and 10GBASE-T PCS status 1 register bit definitions'.

Response *Response Status* **C**

ACCEPT.
See also comment #298

Cl **45** *SC* **45.2.3.26.3** *P* **142** *L* **6** # 391

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

This says "in 61.2.3.4" but 61.2.3.4 does not exist

SuggestedRemedy

Change to pint to the correct subclause. 61.2.3?

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change reference to 61.2.3

Cl **45** *SC* **45.2.3.42** *P* **148** *L* **43** # 213

Law, David HP

Comment Type **E** *Comment Status* **A**

It is normal to end the table titles in Clause 45 with 'register bit definitions'. For Table 45-136 this isn't the case, and the R in register is upper case.

SuggestedRemedy

Change '10GBASE-PR and 10/1GBASE-PRX BER monitor status Register' to read '10GBASE-PR and 10/1GBASE-PRX BER monitor status register bit definitions'.

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.3.48** *P* **150** *L* **29** # 317

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

Table 45-139 is followed by Table 45-124

SuggestedRemedy

Fix Table numbering

Response *Response Status* **C**

ACCEPT.
See also comment #214

Cl **45** *SC* **45.2.3.48** *P* **150** *L* **29** # 214

Law, David HP

Comment Type **E** *Comment Status* **A**

Table 45-124 'TimeSync PCS capability' follows Table 45-139 'Lane 0 mapping register bit definitions' and is the second Table 45-124 in the draft.

SuggestedRemedy

Renumber the table 'TimeSync PCS capability' to be Table 45-139.

Response *Response Status* **C**

ACCEPT.
See also comment #317

Cl **45** *SC* **45.2.3.6** *P* **120** *L* **1** # 347

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

The titles of Tables 45-102 and 45-103 were changed by 802.3ba

SuggestedRemedy

Change:
"Table 45-102-10G PCS control 2 register bit definitions" to:
"Table 45-102-PCS control 2 register bit definitions"
Change:
"Table 45-103-10G status 2 register bit definitions" to:
"Table 45-103-PCS status 2 register bit definitions"

Response *Response Status* **C**

ACCEPT.
See also comments #209 and 210

Cl **45** *SC* **45.2.3.6.1** *P* **119** *L* **52** # 348

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

This says "The PCS type abilities of the PCS are advertised in bits 3.8.2:0." as per the changes made by 802.3ba. However this should have been "in bits 3.8.5:0"
See Table 45-103

SuggestedRemedy

Change "in bits 3.8.2:0." to "in bits 3.8.5:0"

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.3.6.1** *P* **120** *L* **1** # 209

Law, David HP

Comment Type **E** *Comment Status* **A**

The '10G PCS control 2 register bit definitions' table was renamed to be the 'PCS control 2 register bit definitions' by IEEE Std 802.3ba-2010 (see page 46).

SuggestedRemedy

Delete the text '10G' from the Table 45-102 title so that it reads 'PCS control 2 register bit definitions' (note that based on previous comment this should be table 45-101).

Response *Response Status* **C**

ACCEPT.
See also comment #347

Cl **45** *SC* **45.2.3.7.4** *P* **120** *L* **1** # 210

Law, David HP

Comment Type **E** *Comment Status* **A**

The '10G PCS status 2 register bit definitions' table was renamed to be the 'PCS status 2 register bit definitions' by IEEE Std 802.3ba-2010 (see page 47). In addition I can't find an amendment that deletes the text PCS from the title.

SuggestedRemedy

Delete the text '10G' from the Table 45-103 title, add the text 'PCS' to the Table 45-103 title, so that it reads 'PCS status 2 register bit definitions' (note that based on previous comment this should be table 45-102).

Response *Response Status* **C**

ACCEPT.
See also comment #347

Cl **45** *SC* **45.2.3.9** *P* **122** *L* **32** # 211

Law, David HP

Comment Type **E** *Comment Status* **A**

It isn't normal to include the register bits in the table title.

SuggestedRemedy

Change 'EEE capability register (Register 3.20) bit definitions' to read 'EEE capability register bit definitions'.

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.4** *P* **151** *L* **40** # 215

Law, David HP

Comment Type **E** *Comment Status* **A**

Typo, Table 45-127 'PHY XS register' should read 'PHY XS registers' as there is more than one PHY XS register.

SuggestedRemedy

See comment.

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.4.10** *P* **160** *L* **21** # 227

Law, David HP

Comment Type **T** *Comment Status* **A**

The instructions in IEEE Std 802.3bf-2011 in respect to it's subclause 45.2.4.10 'TimeSync PHY XS capability (Register 4.1800)' states 'Insert subclauses 45.2.4.10, 45.2.4.11, 45.2.4.12 immediately after 45.2.4.9'. Subclause 45.2.4.9 is '10G PHY XGXS test control register (Register 4.25)' so register 4.1800 through 4.1808 added by IEEE Std 802.3bf-2011 should be after it. The draft has a different order:

45.2.4.10 TimeSync PHY XS capability (Register 4.1800)
45.2.4.11 TimeSync PHY XS transmit path data delay (Registers 4.1801, 4.1802, 4.1803, 4.1804)
45.2.4.12 TimeSync PHY XS receive path data delay (Registers 4.1805, 4.1806, 4.1807, 4.1808)
45.2.4.13 10G PHY XGXS test control register (Register 4.25)
  45.2.4.13.1 10G PHY XGXS test-pattern enable (4.25.2)
  45.2.4.13.2 10G PHY XGXS test-pattern select (4.25.1:0)

SuggestedRemedy

The order and numbering of these subclauses (assuming implementation of my other comment to add missing subclause heading 45.2.4.8 'EEE capability (Register 4.20)' that will renumber subsequent subclauses) should be:

45.2.4.11 10G PHY XGXS test control register (Register 4.25)
  45.2.4.11.1 10G PHY XGXS test-pattern enable (4.25.2)
  45.2.4.11.2 10G PHY XGXS test-pattern select (4.25.1:0)
45.2.4.12 TimeSync PHY XS capability (Register 4.1800)
45.2.4.13 TimeSync PHY XS transmit path data delay (Registers 4.1801, 4.1802, 4.1803, 4.1804)
45.2.4.14 TimeSync PHY XS receive path data delay (Registers 4.1805, 4.1806, 4.1807, 4.1808)

Response *Response Status* **C**

ACCEPT.
See also comment #319

Cl **45** *SC* **45.2.4.10** *P* **160** *L* **21** # 319

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

The text describing register 4.25 comes after that for register 4.1800 through 4.1808

SuggestedRemedy

Move the text for register 4.25 before that for register 4.1800

Response *Response Status* **C**

ACCEPT.
See also comment #227

Cl **45** *SC* **45.2.4.2** *P* **154** *L* **40** # 224

Law, David HP

Comment Type **T** *Comment Status* **A**

While register bits 4.1.11, 4.1.10, 4.1.9, 4.1.8 and 4.1.6, that we added by IEEE Std 802.3az-2010, have been included in Table 45-129 'PHY XS status 1 register bit definitions' the associated subclauses (numbered 45.2.4.2.a, 45.2.4.2.b, 45.2.4.2.c, 45.2.4.2.d and 45.2.4.2.2a in IEEE Std 802.3az-2010) have been inserted in the wrong location as subclauses of 45.2.4.4 'PHY XS speed ability (Register 4.4)' so they are subclause 45.2.4.4.1
through 45.2.4.4.5.

Also note that the instruction for 45.2.4.2.2a in IEEE Std 802.3az-2010 did not place the subclause is what we be the normal location. The subclauses are usually in descending order for bits. The instruction states 'Insert new subclause 45.2.4.2.2a before 45.2.4.2.3 as follows'. Subclause 45.2.4.2.2a is bit 4.16, subclause 45.2.4.2.2 is bit 4.12 and subclause 45.2.4.2.3 is bit 4.11. This would place bit 4.16 between 4.12 and 4.11, instead 4.16 should be between subclause 45.2.4.2.1 which is bit 4.16 and subclause 45.2.4.2.2 which bit 4.12.

Hence as part of the revision please place subclause 45.2.4.2.2a from IEEE 802.3az-2010 as described below instead of following the IEEE Std 802.3az-2010 instructions.

SuggestedRemedy

Add and renumber subclauses as follows:

[1] Insert subclause 45.2.4.2.a 'Transmit LPI received (4.1.11)' added by IEEE Std 802.3az-2010 as subclause 45.2.4.2.1.

[2] Insert subclause 45.2.4.2.b 'Receive LPI received (4.1.10)' added by IEEE Std 802.3az-2010 as subclause 45.2.4.2.2.

[3] Insert subclause 45.2.4.2.c 'Transmit LPI indication (4.1.9)' added by IEEE Std 802.3az-2010 as subclause 45.2.4.2.3.

[4] Insert subclause 45.2.4.2.d 'Receive LPI indication (4.1.8)' added by IEEE Std 802.3az-2010 as subclause 45.2.4.2.4.

[5] Renumber subclause 45.2.4.2.1 'Fault (4.1.7)' to be 45.2.4.2.5.

[6] Insert subclause 45.2.4.2.2a 'Clock stop capable (4.1.6)' added by IEEE Std 802.3az-2010 as subclause 45.2.4.2.6.

[7] Renumber subclauses 45.2.4.2.2 'PHY XS transmit link status (4.1.2)' to be 45.2.4.2.7.

[8] Renumber subclause 45.2.4.2.3 'Low-power ability (4.1.1)' to be 45.2.4.2.8.

[9] Delete subclause 45.2.4.4.1 through 45.2.4.4.5.

[10] Renumber '45.2.4.4.6 10G capable (4.4.0)' to be subclause 45.2.4.4.1.

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.4.7** *P* **158** *L* **13** # 216

Law, David HP

Comment Type **E** *Comment Status* **A**

It isn't normal to include the register bits in the table title.

SuggestedRemedy

Change 'EEE capability register (Register 4.20) bit definitions' to read '132-EEE capability register bit definitions'.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
In table title change:
"EEE capability register (Register 4.20) bit definitions" to:
"EEE capability register bit definitions"

Cl **45** *SC* **45.2.4.7** *P* **158** *L* **9** # 318

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

The heading inserted by 802.3az for "EEE wake error counter (Register 4.22)" is missing

SuggestedRemedy

Insert heading as 45.2.4.8

Response *Response Status* **C**

ACCEPT.
See response to comment #225

Cl **45** *SC* **45.2.4.7.1** *P* **158** *L* **8** # 225

Law, David HP

Comment Type **T** *Comment Status* **A**

While subclause 45.2.4.8a.1 'PHY XS EEE supported (4.20.4)' and 45.2.4.8a.2 'XAUI stop capable (4.20.0)' added by IEEE Std 802.3az-2010 have been included in the draft (subclause 45.2.4.7.1 and 45.2.4.7.2) as well as their associated next level up subclause text and table (Table 45-132), the associated subclause heading is missing.

SuggestedRemedy

[1] Add subclause heading 45.2.4.7a 'EEE capability (Register 4.20)' found in IEEE Std 802.3az-2010 as subclause 45.2.4.8.

[2] Renumber all following subclause to subclause 45.2.5 as required.

Response *Response Status* **C**

ACCEPT.
See also comment #318

Cl **45** *SC* **45.2.5.10** *P* **169** *L* **50** # 322

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

The text describing registers 5.24 and 5.25 comes after that for register 5.1800 through 5.1808

SuggestedRemedy

Move the text for registers 5.24 and 5.25 before that for register 4.1800

Response *Response Status* **C**

ACCEPT.
See also comment #230

Cl **45** *SC* **45.2.5.10** *P* **169** *L* **50** # 230

Law, David HP

Comment Type **T** *Comment Status* **A**

The instructions in IEEE Std 802.3bf-2011 in respect to it's subclause 45.2.5.10 'TimeSync DTE XS capability (Register 5.1800)' state 'Insert subclauses 45.2.5.10, 45.2.5.11, 45.2.5.12 immediately after 45.2.5.9'. Subclause 45.2.5.9 is '10G DTE XGXS test control register (Register 5.25)' so register 5.1800 through 5.1808 added by IEEE Std 802.3bf-2011 should be after it. The draft has a different order:

45.2.5.10 TimeSync DTE XS capability (Register 5.1800)
45.2.5.11 TimeSync DTE XS transmit path data delay (Registers 5.1801, 5.1802, 5.1803, 5.1804)
45.2.5.12 TimeSync DTE XS receive path data delay (Registers 5.1805, 5.1806, 5.1807, 5.1808)
45.2.5.13 EEE wake error counter (Register 5.22)
45.2.5.14 10G DTE XGXS lane status register (Register 5.24)
  45.2.5.14.1 DTE XGXS receive lane alignment status (5.24.12)
  45.2.5.14.2 Pattern testing ability (5.24.11)
  45.2.5.14.3 Lane 3 sync (5.24.3)
  45.2.5.14.4 Lane 2 sync (5.24.2)
  45.2.5.14.5 Lane 1 sync (5.24.1)
  45.2.5.14.6 Lane 0 sync (5.24.0)
45.2.5.15 10G DTE XGXS test control register (Register 5.25)
  45.2.5.15.1 10G DTE XGXS test-pattern enable (5.25.2)
  45.2.5.15.2 10G DTE XGXS test-pattern select (5.25.1:0)

SuggestedRemedy

Correct the order to be:

45.2.5.9 EEE wake error counter (Register 5.22)
45.2.5.10 10G DTE XGXS lane status register (Register 5.24)
  45.2.5.10.1 DTE XGXS receive lane alignment status (5.24.12)
  45.2.5.10.2 Pattern testing ability (5.24.11)
  45.2.5.10.3 Lane 3 sync (5.24.3)
  45.2.5.10.4 Lane 2 sync (5.24.2)
  45.2.5.10.5 Lane 1 sync (5.24.1)
  45.2.5.10.6 Lane 0 sync (5.24.0)
45.2.5.11 10G DTE XGXS test control register (Register 5.25)
  45.2.5.11.1 10G DTE XGXS test-pattern enable (5.25.2)
  45.2.5.15.2 10G DTE XGXS test-pattern select (5.25.1:0)
45.2.5.12 TimeSync DTE XS capability (Register 5.1800)
45.2.5.13 TimeSync DTE XS transmit path data delay (Registers 5.1801, 5.1802, 5.1803, 5.1804)
45.2.5.14 TimeSync DTE XS receive path data delay (Registers 5.1805, 5.1806, 5.1807, 5.1808)

Response *Response Status* **C**

ACCEPT.

See also comment #322

Cl **45** *SC* **45.2.5.13** *P* **171** *L* **20** # 320

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

The text for "EEE wake error counter (Register 5.22)" is there twice
45.2.5.9 and 45.2.5.13

SuggestedRemedy

Remove the second instance

Response *Response Status* **C**

ACCEPT.
See also comment #229

Cl **45** *SC* **45.2.5.13** *P* **171** *L* **20** # 229

Law, David HP

Comment Type **T** *Comment Status* **A**

Subcluase 45.2.5.13 'EEE wake error counter (Register 5.22)' is a duplication of subclause 45.2.5.9 'EEE wake error counter (Register 5.22)'.

SuggestedRemedy

Delete duplicate subclause 45.2.5.13 'EEE wake error counter (Register 5.22)'.

Response *Response Status* **C**

ACCEPT.
See also comment #320

Cl **45** *SC* **45.2.5.7.1** *P* **168** *L* **43** # 226

Law, David HP

Comment Type **T** *Comment Status* **A**

Subcluase 45.2.5.7.1 'Clock stop capable (5.1.6)' is a duplication of subclause 45.2.5.2.6 'Clock stop capable (5.1.6)'. This duplication should be deleted as the earlier instance is the correct one appearing between register 5.1.2 and 5.1.6.

SuggestedRemedy

Delete this duplicated subclause.

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.5.7.2** *P* **168** *L* **50** # 228

Law, David HP

Comment Type **T** *Comment Status* **A**

There seems to have been a duplication of the 'PHY XS EEE supported (5.20.4)' and 'XAUI stop capable (5.20.0)' subclauses as follows:

45.2.5.7.2 PHY XS EEE supported (5.20.4)
45.2.5.7.3 XAUI stop capable (5.20.0)
45.2.5.8 EEE capability (Register 5.20)
45.2.5.8.1 PHY XS EEE supported (5.20.4)
45.2.5.8.2 XAUI stop capable (5.20.0)

SuggestedRemedy

Delete duplicate subclause 45.2.5.7.2 'PHY XS EEE supported (5.20.4)' and subclause 45.2.5.7.3 'XAUI stop capable (5.20.0)'. This will result in 'EEE capability (Register 5.20)' remaining as subclause 45.2.5.8 which is correct.

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.6.13.1** *P* **181** *L* **51** # 389

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

This says "(see 61.2.3.3.8)" but 61.2.3.3.8 does not exist
Same issue in 45.2.6.13.2

SuggestedRemedy

Change to "(see 61.3.3.8)"

Response *Response Status* **C**

ACCEPT.
Change in both places

Cl **45** *SC* **45.2.6.9.1** *P* **180** *L* **1** # 364

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

The heading for 45.2.6.9.1 is "Link partner aggregate operation (1.21.1:0)" but the subclause appears to describe register 6.21 bits 1:0.
Am I missing something?

SuggestedRemedy

Change the heading for 45.2.6.9.1 to "Link partner aggregate operation (6.21.1:0)"

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.7.11.8** *P* **194** *L* **34** # 231

Law, David HP

Comment Type **E** *Comment Status* **A**

The subclause title doesn't include the register address which it is normal to do.

SuggestedRemedy

Change '45.2.7.11.8 Fast retrain ability' to read '45.2.7.11.8 Fast retrain ability (7.33.1)'.

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.7.2.3** *P* **186** *L* **32** # 393

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

This says "... registers 7.19-7.21 ..."
The IEEE Standards Style Manual (2009) in section 14.2 Numbers says that for ranges: "Dashes should never be used because they can be misconstrued for subtraction signs"
Same issue in two other places in this subclause.

SuggestedRemedy

Change "... registers 7.19-7.21 ..." to "... registers 7.19 to 7.21 ..." (2 instances)
Change "... registers 7.25-7.27 ..." to "... registers 7.25 to 7.27 ..."

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.7.2.3** *P* **186** *L* **35** # 390

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

This says "(see 28.2.4.5)" but 28.2.4.5 does not exist.
Also, next sentence says "This bit is a copy of bit 6.1 in register 6, if present (see 28.2.4.1)" but 28.2.4.1 covers all of the registers whereas 28.2.4.1.5 is specific to register 6

SuggestedRemedy

Change "(see 28.2.4.5)" to "(see 28.2.4.1.5)"
Change "(see 28.2.4.1)" to "(see 28.2.4.1.5)"

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.3.7** *P* **205** *L* **8** # 401

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

This says "Figure 22-13 shows the behavior of the MDIO signal during the turnaround field of a read or post-read-increment-address transaction.", but Figure 22-13 is "Octet/nibble transmit and receive order"

However, Figure 22-15 is "Behavior of MDIO during TA field of a read transaction"

SuggestedRemedy

Change "Figure 22-13 shows..." to "Figure 22-15 shows..."

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.4.2** *P* **206** *L* **19** # 323

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

There are two Figures numbered 45-1

SuggestedRemedy

Fix the Figure numbering

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.5.3** *P* **213** *L* **27** # 373

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

Item MM45a points to 45.2.1.10 but should be 45.2.1.13
The change to the Status of Item RM43 made by 802.3ba has not been implemented.
The change to the Status of Items RM49 and RM50 made by 802.3ba have not been implemented correctly.

SuggestedRemedy

In MM45a change 45.2.1.10 to 45.2.1.13
In RM43 change the Status to "!RM50f:M"
In RM49 and RM50 change the Status to "XCR:M"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
In MM45a change 45.2.1.10 to 45.2.1.12
In RM43 change the Status to "!RM50f:M"
In RM49 and RM50 change the Status to "XCR:M"

Cl **45** *SC* **45.5.3.2** *P* **209** *L* **15** # 349

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

Several entries in the subclause column are not links
Items *10P and *2B should have status of PMA:O as modified by 802.3ba
Items *KX, *KX4 and *KR should have subclause of 45.2.1.6 as modified by 802.3ba
Item *40XAR should have a subclause of 45.2.1.12
Item *FEC-R should have feature "Implementation of BASE-R FEC" and subclause 45.2.1.89 as modified by 802.3ba

SuggestedRemedy

Make all entries in the subclause column links
Make status of items *10P and *2B "PMA:O"
Make subclause of items *KX, *KX4 and *KR "45.2.1.6" (and a link)
Change subclause of item *40XAR from "45.2.1.10" to "45.2.1.12"
Change item *FEC-R feature to "Implementation of BASE-R FEC" and subclause to "45.2.1.89"

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.5.3.3** *P* **213** *L* **36** # 35

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

Blue text.

SuggestedRemedy

Nice clickable link. Text can be black now.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change text colour to black

Cl **46** *SC* **46.6.3.8** *P* **270** *L* **14** # 361

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

Item EC4 has subclause of 46.4.2.3 which does not exist

SuggestedRemedy

Reference the correct subclause (presumably 46.4 as it contains Figure 46-11)

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change the subclause to 46.4

Cl **48** *SC* **48.1.6** *P* **290** *L* **13** # 36

Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A**

Font too small in Figure 48-2. Minimum per style guide is 8 point, this is a mixture of 7 and 7.5 point. There is plenty of room to do it right.

SuggestedRemedy

Change the small text to 8 point.

Response *Response Status* **C**

ACCEPT.

Cl **48** *SC* **48.2.6.1.5** *P* **308** *L* **44** # 324

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

Incorrect cross-reference

SuggestedRemedy

Change "(see 45.2.3.8b)" to "(see 45.2.3.10)"

Response *Response Status* **C**

ACCEPT.

Cl **48** *SC* **48.2.6.1.5a** *P* **308** *L* **46** # 325

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

The heading "48.2.6.1.5a Timers" should be re-numbered

SuggestedRemedy

Re-number the headings

Response *Response Status* **C**

ACCEPT.

Cl **48** *SC* **48.2.6.1.5a** *P* **309** *L* **3** # 362
Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**
Table 48-10 does not contain a value for TWR

SuggestedRemedy
Correct the references to Table 48-10 after the missing table has been added.
See related comment.

Response *Response Status* **C**
ACCEPT.

Cl **48** *SC* **48.2.6.2.4** *P* **315** *L* **1** # 38
Dawe, Piers IPtronics

Comment Type **T** *Comment Status* **A**
What is the unlabelled arrow coming from top right?

SuggestedRemedy
Define or remove.

Response *Response Status* **C**
ACCEPT IN PRINCIPLE.
Remove unlabelled arrow
Also, clean up the exit from LPI

Cl **48** *SC* **48.2.6.2.4** *P* **315** *L* **1** # 37
Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A**
Font too small in Figure 48-9. Minimum per style guide is 8 point, this is mainly 7 point.
There is plenty of room to do it right.

SuggestedRemedy
Change to 8 point.

Response *Response Status* **C**
ACCEPT.

Cl **48** *SC* **48.2.6.2.5** *P* **316** *L* **5** # 39
Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**
Font too small in Figure 48-10. "reset" is in 7 point.

SuggestedRemedy
Change to 8 point.

Response *Response Status* **C**
ACCEPT.

Cl **48** *SC* **48.2.6.2.5** *P* **317** *L* **51** # 363
Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**
Table 48-10 as added by 802.3az is missing

SuggestedRemedy
Add the table

Response *Response Status* **C**
ACCEPT.

Cl **48** *SC* **48.7.4.5** *P* **326** *L* **41** # 392
Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**
The PICS items in 48.7.4.5 all have the same item description "LP-01"

SuggestedRemedy
Change them to be "LP-01" through "LP-05"

Response *Response Status* **C**
ACCEPT.

Cl **48A** *SC* **48A.1** *P* **673** *L* **20** # 40

Dawe, Piers IPtronics

Comment Type **T** *Comment Status* **A**

Misuse of bit time, which specifically refers to MAC bits (see 1.4.110 and 1.4.406). The bits here are not the same.

SuggestedRemedy

Change "bit time" to "unit interval" or "UI" throughout 48A.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Since unit interval is defined in 1.4, change the first instance from:
"a duration of 1 bit time" to:
"a duration of 1 unit interval (UI)"

Change the other instances to UI

Cl **48B** *SC* **48B.3.2.1.1** *P* **689** *L* **30** # 398

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

This says "...corresponding to 10E-12 BER..." and on line 35 "...(approximately 10E-4)..."
10E-12 is equivalent to 1E-11 and 10E-4 is equivalent to 1E-3 which isn't what was meant.

SuggestedRemedy

Change:
"...corresponding to 10E-12 BER..." to:
"...corresponding to 1E-12 BER..."
Change:
"...(approximately 10E-4)..." to:
"...(approximately 1E-4)..."

Response *Response Status* **C**

ACCEPT.

Cl **48B** *SC* **48B.3.2.2.1** *P* **690** *L* **23** # 399

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

This says "...described in 48B3.2.1.2,...", but 48B.3.2.1.2 does not exist

SuggestedRemedy

Change "...described in 48B3.2.1.2,..." to "...described in 48B.3.2.1.1,..."

Response *Response Status* **C**

ACCEPT.

Cl **49** *SC* **49.1.6** *P* **331** *L* **22** # 42

Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A**

Font too small in Figure 48-9. Minimum per style guide is 8 point, this is 7 and 7.5 point.

SuggestedRemedy

Change to 8 point.

Response *Response Status* **C**

ACCEPT.
[Editor's Note: This comment refers to Figure 49-4]

Cl **49** *SC* **49.1.6** *P* **331** *L* **36** # 331

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

Figure 49-4 still has the underlines showing added text from 802.3az
Same issue in Figures 49-14 and 49-15

SuggestedRemedy

Remove underlines

Response *Response Status* **C**

ACCEPT.

Cl **49** *SC* **49.2.13.3** *P* **355** *L* **2** # 41

Dawe, Piers IPtronics

Comment Type **TR** *Comment Status* **A**

This state diagram requires a definition of rx_block_lock to be usable. Yet 49.2.13.2.2 Variables says:
The following variables are used only for the EEE capability:
...
rx_block_lock
Variable used by the lock state diagram to reflect the status of the code-group delineation. This variable is set TRUE when the receiver acquires block delineation.
So, EEE has broken the non-EEE PCS. It has made a state diagram rely on a variable it says is not used.

SuggestedRemedy

Mend it!

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Move the rx_block_lock definition to be above the "The following variables are used only for the EEE capability:" statement in 49.2.13.2.2
Also, in 49.2.9 change:
"Otherwise the relationship between block_lock and rx_block_lock is given by Figure 49-15." to refer to the LPI Receive state diagram (Figure 49-17 in D2.0)

Cl **49** *SC* **49.2.13.3.1** *P* **352** *L* **32** # 332

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

Table cells with no value entered should contain an em dash (see IEEE style manual)

SuggestedRemedy

Put an em dash in empty (Min) cells in Table 49-3

Response *Response Status* **C**

ACCEPT.

Cl **49** *SC* **49.2.2** *P* **332** *L* **35** # 199

Slavick, Jeff Avago Technologies

Comment Type **E** *Comment Status* **A**

There's an excessive amount of space around the "or" on this line.

SuggestedRemedy

Remove the extra spaces

Response *Response Status* **C**

ACCEPT.

Cl **49** *SC* **49.2.6** *P* **340** *L* **12** # 200

Slavick, Jeff Avago Technologies

Comment Type **ER** *Comment Status* **A**

Figure 49-8--Scrambler does not match the updated 802.3az revision of the Figure.

SuggestedRemedy

Update the figure to match the 802.3az figure.

Response *Response Status* **C**

ACCEPT.

Cl **49** *SC* **49.2.9** *P* **342** *L* **24** # 115

Ewen, John IBM

Comment Type **T** *Comment Status* **A**

This sentance describes the relationship between the variables block_lock and rx_block_lock, and refers to the state diagram in Figure 49-15. However there is no reference to either variable in Figure 49-15.

SuggestedRemedy

Change reference on line 24 from Figure 49-15 to Figure 49-17.

Response *Response Status* **C**

ACCEPT.

Cl **49** SC **Figure 49-15** P **357** L **1** # 202

Slavick, Jeff — Avago Technologies

Comment Type **TR** *Comment Status* **A**

Figure 49-14 contains

NOTE-Optional state (inside the dotted box) and transition E
are only required to support EEE capability.

which is missing from Figure 49-15. This was true in the approved 802.3az standard too.

There's a comment against D2.0 of 802.3az requesting to add it to Figure 49-15 which was Approved in Principal with a change to the text. The text change occurred by D2.3 but the replication of the note into Figure 49-15 did not happen.

SuggestedRemedy

Add the same note from Figure 49-14 to Figure 49-15.

Response *Response Status* **C**

ACCEPT.
[Editor's note: the comment referred to was comment #454 against 802.3az D2.0.
Comment:
This state diagram also needs a note saying the state in the dotted box is optional.
ACCEPT IN PRINCIPLE.
Also add the following note:
Note: transition E is only required for EEE capability.]

Cl **4A** SC **4A.3.2.1.1** P **603** L **8** # 180

Thaler, Patricia — Broadcom

Comment Type **TR** *Comment Status* **A** *MR 1196*

My comments on Annex 4 also apply here. In addition, the variable name here is inconsistant: transmission_completed should be TransmitFrameCompleted. The text here is also inconsistant with that in Clause 4 for TransmitFrameCompleted. Since the state machine calls TransmitFrame, the wording in Clause 4 is more direct.

The variable definition is indented too much.

SuggestedRemedy

Change transmit_completed to TransmitFrameCompleted and the definition should be the same as in Clause 4.

Also, please correct the indentation or paragraph format for the variable definition.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

See comment #182

Cl **4A** SC **4A.4.2** P **608** L **6** # 309

Anslow, Peter — Ciena

Comment Type **E** *Comment Status* **A**

space missing in "valueof 8 BT"

SuggestedRemedy

insert space in "valueof"

Response *Response Status* **C**

ACCEPT.

Cl **4A** SC **4A.4.2** P **608** L **7** # 121

Ganga, Ilango — Intel

Comment Type **E** *Comment Status* **A**

In Note 4, change "lanealignment" to "lane alignment"

SuggestedRemedy

As per comment

Response *Response Status* **C**

ACCEPT.

Cl **4A** SC **4A.7.2.4** P L # 169

Grow, Robert — Intel

Comment Type **TR** *Comment Status* **A**

Inconsistent with 4.2.7.4

SuggestedRemedy

Change interFrameGap to interPacketGap

Response *Response Status* **C**

ACCEPT.

Cl **50** *SC* **50.3.8.3** *P* **385** *L* **11** # 43

Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A**

Font too small in Figure 48-9. Minimum per style guide is 8 point, this is 7 and 6 point. There is plenty of room to do it right.

SuggestedRemedy

Change to 8 point.

Response *Response Status* **C**

ACCEPT.
[Editor's Note: This comment refers to Figure 50-12]

Cl **51** *SC* **51.3.3** *P* **405** *L* **44** # 44

Dawe, Piers IPtronics

Comment Type **T** *Comment Status* **A**

As the bits in the PMA are line-coded, not MAC bits,

SuggestedRemedy

change "bit times" to "unit intervals".

Response *Response Status* **C**

ACCEPT.

Cl **51** *SC* **51.4** *P* **408** *L* **36** # 365

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

The bottom box of Figure 51-3 (as inserted by 802.3az) says "see 51.8a" which does not exist.

SuggestedRemedy

Correct the reference

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Since the only other occurrence of PMA_ENERGY.indication is in 51.2.6, change reference to that.

Cl **51** *SC* **51.8** *P* **417** *L* **15** # 396

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

This says "then this function maps to the PMA loopback function as specified in 45.2.1.1.4", but this is referring to local loopback, which has been re-numbered to 45.2.1.1.5
same issue in 54.5.8

SuggestedRemedy

Change "in 45.2.1.1.4" to "in 45.2.1.1.5" here and in 54.5.8

Response *Response Status* **C**

ACCEPT.

Cl **52** *SC* **52** *P* **421** *L* **1** # 49

Dawe, Piers IPtronics

Comment Type **T** *Comment Status* **R**

An optical fibre is not a baseband medium. It works at very high frequencies. It doesn't even form a waveguide if the frequency is too low (wavelength too long). Compare newer clause titles for optical PMDs.

SuggestedRemedy

Delete "baseband" here and consequently in PICS.

Response *Response Status* **C**

REJECT.

The port type is BASE and this clause title has been stable for a long time

Cl **52** *SC* **52.14.1** *P* **456** *L* **26** # 45

Dawe, Piers IPtronics

Comment Type **TR** *Comment Status* **A**

Now that IEC 60793-2-10 ed.4 is published, we should not include TIA-492AAAD in the normative spec. That's the policy: international standards only unless there isn't a suitable one available, "NOTE--Local and national standards such as those supported by ANSI, EIA, MIL, NFPA, and UL are not a formal part of this standard except where no international standard equivalent exists."

In general, we refer to IEC 60793-2-10 without a date or edition number, except in the table of references and two cases which I think are in error.

Also, as IEC 60793-2-10 contains many things, and doesn't mention OM4 by that name (at least in the table of contents), we need to mention type A1a.3 so the reader can find the right spec.

Also, there have been minor changes in chromatic dispersion limits, for 50 um MMF and I believe for SMF. The newer limits provide slightly better performance but one case is formally outside the previous limits. We do not want to make existing serviceable fibre non-compliant, so we need to keep the old limits (as 802.3 does for twisted pair copper) as well as introduce the new ones.

SuggestedRemedy

So, please change
Effective modal bandwidth for fiber meeting TIA/EIA-492AAAC-2002 when used with sources meeting the wavelength (range) and encircled flux specifications of Table 52-7.
to
Effective modal bandwidth for OM4 fibers are specified for type A1a.3 in IEC 60793-2-10.
Add IEC 60793-2-10 (2011) to 1.3 Normative references, or replace IEC 60793-2-10 (2004).
Give the old and new chromatic dispersion parameters for 50 um MMF and SMF, and say that either old or new is compliant.

Response *Response Status* **U**

ACCEPT IN PRINCIPLE.
This note is for OM3 fibre.
Change:
"Effective modal bandwidth for fiber meeting TIA/EIA-492AAAC-2002 when used with sources meeting the wavelength (range) and encircled flux specifications of Table 52-7."
to:
"Effective modal bandwidth for fiber meeting IEC 60793-2-10 Type A1a.2 when used with sources meeting the wavelength (range) and encircled flux specifications of Table 52-7."

Replace IEC 60793-2-10 (2004) with IEC 60793-2-10 (2011) in 1.3 Normative references.

See also comments #12, #106, #109, #108

A vote of the BRC was taken on whether to accept this proposed response:
Yes 15
No 1
Abstain 3

Cl **52** *SC* **52.14.2** *P* **456** *L* **8** # 282

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

The text changes due to maintenance request 1213 could be shown more clearly

SuggestedRemedy

Should be shown as "cabled optical" in dark blue underlined font, "fiber" in normal font and "cable" in red strikethrough font.
In Editor's note change "inserted based on" to "change based on"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Show as "Cabled optical fiber" in dark blue underlined font and "Fiber cable" in red strikethrough font.
In Editor's note change "inserted based on" to "change based on"

Cl **52** *SC* **52.5** *P* **427** *L* **42** # 112

Dudek, Mike QLogic

Comment Type **TR** *Comment Status* **A**

4700MHz.km fiber (OM4) should be added with a reach of 2 to 400m

SuggestedRemedy

See Matt Traverso presentation.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Modify the draft per changes outlined in traverso_1_0711 in slides 10 to 13 inclusive. (http://www.ieee802.org/3/maint/public/traverso_1_0711.pdf).

Adopt the result of comment #45 for the fiber standards referred to in the proposed additional note f of Table 52-25.

A vote of the BRC on whether to accept the proposed response was:
Yes 16
No 1
Abstain 8

Cl **52** *SC* **52.5** *P* **427** *L* **42** # 458

Barrass, Hugh

Comment Type **T** *Comment Status* **A**

Add OM4 category to clause 52 consistent with the fiber characteristics in clause 86.

SuggestedRemedy

Modify text per changes outlined in traverso_1_0711 in slides 10 thru 13 (http://www.ieee802.org/3/maint/public/traverso_1_0711.pdf).

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
See Response to comment #112

Cl **52** *SC* **52.5.1** *P* **428** *L* **29** # 144

King, Jonathan Finisar

Comment Type **TR** *Comment Status* **A**

Table 52-7 (page 428), Table 52-12 (page 432), Table 52-16 (page 435).
The current optical transmitter eye-mask test for 10GBASE-R optical transmitters, commonly implemented as a zero hit eye-mask test leads to poor repeatability and has a large range in allowed device performance between all-passing and all-failing. Statistical eye-mask tests have been adopted in recent standards 802.3aq and 802.3ba to provide more accurate and repeatable measurements with better discrimination between 'good' and 'bad' transmitters.
This comment proposes adding an equivalent alternative statistical mask to the existing eye mask definition in clause 52, full details are given in the presentation:
http://www.ieee802.org/3/maint/public/king_2_0911

SuggestedRemedy

Add an alternative optical transmitter eye-mask test for 10GBASE-R optical modules, to allow the use of a statistical eye mask test, with revised eye-mask coordinates and a maximum ratio of 5x10-5 hits per sample. Implement changes as described on slide 10 of http://www.ieee802.org/3/maint/public/king_2_0911

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Implement changes as described on slide 10 of
http://www.ieee802.org/3/maint/public/king_2_0911

Cl **52** *SC* **52.5.1** *P* **428** *L* **29** # 46

Dawe, Piers IPtronics

Comment Type **T** *Comment Status* **R**

Compare this mask with the SRn mask:
X1, X2, X3, Y1, Y2, Y3
SR 0.25, 0.40, 0.45, 0.25, 0.28, 0.40
SRn 0.23, 0.34, 0.43, 0.27, 0.35, 0.4
The SRn mask, which was designed a long time later with more knowledge, is longer and lower, although there is more jitter in nPPI than SFI, and less fibre (100 m vs. 300 m) in SRn. This implies that the SR mask should be at least as long. This comment takes the effect of hit ratio mask definition into account.

SuggestedRemedy

For the 10GBASE-S mask, reduce X1 to 0.23. Consider increasing Y1 and Y2 (reducing the height of the central polygon).

Response *Response Status* **C**

REJECT.
Commenter has not provided sufficient technical justification for any change to the long established 10GBASE-S mask coordinates to be made.

Cl **52** *SC* **52.5.1** *P* **428** *L* **29** # 47

Dawe, Piers IPtronics

Comment Type **T** *Comment Status* **R**

I strongly suspect that the LR mask can be more demanding than TDP, which was not the intention in 802.3ae. Moving to hit ratio mask definition will take out much of the poor reproducibility, but may not fix the problem.

SuggestedRemedy

If the problem remains, increase the 10GBASE-L mask coordinates Y1 and Y2 towards 0.30, 0.33 (reducing the height of the central polygon).

Response *Response Status* **C**

REJECT.
Commenter has not provided sufficient technical justification for any change to the long established 10GBASE-L mask coordinates to be made.

Cl **52** *SC* **52.6.3** *P* **434** *L* **14** # 388

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

The text changes due to maintenance request 1213 could be shown more clearly

SuggestedRemedy

"fiber" should not be in blue underlined (it has not been added)

Response *Response Status* **C**

ACCEPT.

Cl **52** *SC* **52.9.10.3** *P* **451** *L* **22** # 48

Dawe, Piers IPtronics

Comment Type **T** *Comment Status* **R**

Why did we choose this way of timing extraction:
"For all transmitter and dispersion penalty measurements, determination of the center of the eye is required.
Center of the eye is defined as the time halfway between the left and right sampling points within the eye where the measured BER is greater than or equal to 1 × 10-3."
Does it represent what test equipment or a product receiver actually does?

SuggestedRemedy

Consider if a definition based on mean crossing times would be more practical and a better predictor of performance in service.

Response *Response Status* **C**

REJECT.
The commenter has not provided sufficient technical justification for any change to the long established definition of the center of the eye to be made.

Cl **52** *SC* **52.9.6.2** *P* **442** *L* **6** # 338

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

802.3 has chosen to use "single-mode" rather than "singlemode" see:
http://www.ieee802.org//3/WG_tools/editorial/requirements/words.html

Section 4 has 7 instances in Clauses 52 and 53 of "singlemode"

SuggestedRemedy

Change "singlemode" to "single-mode" (7 instances)

Response *Response Status* **C**

ACCEPT.

Cl **53** *SC* **53.14.1** *P* **493** *L* **24** # 454

Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A**

Update Standards reference

SuggestedRemedy

Replace:
"For the single-mode case, the 0.5 dB/km attenuation is provided for Outside Plant cable as defined in ANSI/TIA/EIA-568-B.3-2000."

with:
"For the single-mode case, the 0.5 dB/km attenuation is provided for Outside Plant cable as defined in ANSI/TIA-568-C.3."

Response *Response Status* **C**

ACCEPT.
[Editor's note: Clause changed from 55 to 53 and Subclause changed from 55.14.1 to 53.14.1]

Cl **53** *SC* **53.14.1** *P* **493** *L* **9** # 283

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

The text changes due to maintenance request 1213 could be shown more clearly

SuggestedRemedy

Show as "cabled optical" in dark blue underlined font, "fiber" in normal font and "cable" in red strikethrough font.
In Editor's note change "inserted based on" to "change based on"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Show as "cabled optical fiber" in dark blue underlined font and "Fiber cable" in red strikethrough font.
In Editor's note change "inserted based on" to "change based on"

Cl **53** *SC* **53.15.4.3** *P* **498** *L* **31** # 367

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

53.4.8 says "If the optional PMD_lane_by_lane_transmit_disable function is not implemented in MDIO, an alternative method shall be provided to independently disable each transmit lane."

PICS item MR4 "PMD_lane_by_lane_transmit_disable" points to 53.4.8 and has Value/Comment "Disables each optical transmitter independently if FN12 = NO"

But FN12 is the "PMD_reset function" which is nothing to do with disabling lanes.
Since 53.4.8 says that an "alternative method shall be provided" MR3 and MR4 should not both be optional.

SuggestedRemedy

In PICS item MR3 Status change "MD:O" to "MD:O.2"
In PICS item MR4 Value/Comment change "if FN12 = NO" to "if MR3 = NO" and in Status change "O" to "O.2"

Response *Response Status* **C**

ACCEPT.

Cl **53** *SC* **53.8.1** *P* **475** *L* **19** # 343

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

The changes due to maintenance request 1213 have not been made to Table 53-9 Note c

SuggestedRemedy

Change "multimode fiber" in note c to "cabled multimode optical fiber"

Response *Response Status* **C**

ACCEPT.

Cl **53** *SC* **53.9.10.2** *P* **483** *L* **3** # 371

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

This says "This shall be achieved using ITU-T G.652 fiber (note 2) or fibers ..."

What does "(note 2)" refer to?
There isn't a note 2 in G.652 or in 53.9.10.2

SuggestedRemedy

Either clarify what this refers to or remove "(note 2)"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Remove "(note 2)"

Cl **53** *SC* **53.9.13** *P* **485** *L* **30** # 395

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

This says "The test may use two optical sources and an optical combiner as defined in 52.9.12", but 52.9.12 does not exist.

SuggestedRemedy

Change "in 52.9.12" to "in 52.9.11"

Response *Response Status* **C**

ACCEPT.

Cl **54** *SC* **54.1** *P* **527** *L* **13** # 204

D'Ambrosia, John — Dell

Comment Type **ER** *Comment Status* **A**

Table 54-1 is titled "Table 54-1-PHY (Physical Layer) clauses associated with the 10GBASE-CX4 PMD" However, a PHY is defined by 1.4310 as "Within IEEE 802.3, the portion of the Physical Layer between the Medium Dependent Interface (MDI) and the Media Independent Interface (MII), Gigabit Media Independent Interface (GMII) or 10 Gigabit Media Independent Interface (XGMII), consisting of the Physical Coding Sublayer (PCS), the Physical Medium Attachment (PMA), and, if present, the WAN Interface Sublayer (WIS) and Physical Medium Dependent (PMD) sublayers." Therefore a table defining a PHY would not include the associated MII layer.

SuggestedRemedy

Rename Table 54-1 from
PHY (Physical Layer) clauses associated with the 10GBASE-CX4 PMD
to
Physical Layer clauses associated with the 10GBASE-CX4 PMD

Response *Response Status* **C**

ACCEPT.

Cl **54** *SC* **54.6** *P* **509** *L* **42** # 427

Maguire, Valerie — Siemon

Comment Type **TR** *Comment Status* **R**

Balanced twisted-pair and optical fiber MDI interfaces are interoperable between vendors. In addition, industry comparative evaluation events (e.g. Ethernet Alliance Plugfests) go to great lengths to ensure interoperability between equipment manufactured by different vendors. In may cases, however, EEPROM circuitry is built into the 10GBASE-CX4 MDI for the specific purpose of ensuring that products between vendors DO NOT work together. This is outside the spirit of an applications Standard that specifies requirements "to allow for maximum interoperability between various 10 Gb/s components" (e.g. see clause 54.6.4.3) and should not be allowed.

SuggestedRemedy

Insert new clause:
"54.6.1 Interoperability

The 10GBASE-CX4 MDI shall not contain circuitry or use other means to prohibit interoperability between compliant interfaces and cable assemblies.

Response *Response Status* **U**

REJECT.

An interface that does not operate according to the requirements for 10GBASE-CX4 when connected to equipment from a different vendor (that does meet the requirements for 10GBASE-CX4) is already non-compliant with the 10GBASE-CX4 specification, so no new subclauses are needed.

A vote of the BRC on whether to reject the comment with the above text was:
Yes 8
No 3
Abstain 6

The 10GBASE-CX4 MDI shall be interoperable with compliant interfaces and cable assemblies

A vote of the BRC on whether to AIP the comment with the above text was:
Yes 8
No 7
Abstain 2

Move to re-consider the first vote
Yes 12
No 3

Motion to overrule the chair
Yes 3
No 11
Abstain 3

The first vote of the BRC on whether to reject the comment with the proposed text was re-taken:
Yes 11
No 3
Abstain 2

Cl **55** *SC* **55.1** *P* **533** *L* **11** # 436

Maguire, Valerie — Siemon

Comment Type **E** *Comment Status* **A**

Update to most current editions of TSB-155-A and '568-C.2. ISO/IEC equivalent of TSB-155-A is missing.

SuggestedRemedy

Replace:
"It is recommended that the guidelines in TIA TSB-155, ANSI/TIA-568-B.2-10, and ISO/IEC 11801:2002/Amendment 1 be considered before the installation of 10GBASE-T equipment for any cabling system."

with:
"It is recommended that the guidelines in TIA TSB-155-A, ISO/IEC TR 24750, ANSI/TIA-568-C.2, and ISO/IEC 11801:2002/Amendment 1 be considered before the installation of 10GBASE-T equipment for any cabling system."

Response *Response Status* **C**

ACCEPT.

Cl **55** *SC* **55.1.3** *P* **537** *L* **1** # 327

Anslow, Peter — Ciena

Comment Type **E** *Comment Status* **A**

Figure 55-3 seems to have been corrupted compared to the version in 802.3az

SuggestedRemedy

Fix the figure

Response *Response Status* **C**

ACCEPT.
See also comment #50

Cl **55** *SC* **55.1.3** *P* **537** *L* **4** # 50

Dawe, Piers — IPtronics

Comment Type **E** *Comment Status* **A**

Figure is incomplete.

SuggestedRemedy

Fix.

Response *Response Status* **C**

ACCEPT.
See also comment #327

Cl **55** *SC* **55.12.4** *P* **653** *L* # 54

Dawe, Piers — IPtronics

Comment Type **E** *Comment Status* **A**

4dB

SuggestedRemedy

4 dB

Response *Response Status* **C**

ACCEPT.
See also comment #287

Cl **55** *SC* **55.12.4** *P* **653** *L* **7** # 287

Anslow, Peter — Ciena

Comment Type **E** *Comment Status* **A**

The text changes due to maintenance request 1223 could be shown more clearly
Link to maintenance request shows maint_1223.pdf but goes to maint_1199.pdf

SuggestedRemedy

Show as "Slave's PBO final setting" in normal font, "should be" in red strikethrough font and "within two levels (4dB) of the MASTER's PBO level" in normal font.
Change link to go to maint_1223.pdf

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Show as "Slave's PBO final setting" in normal font, "should be" in red strikethrough font and "within two levels (4 dB) of the MASTER's PBO level" in normal font.
Change link to go to maint_1223.pdf

See also comment #54

Cl **55** *SC* **55.3.5.4** *P* **578** *L* **5** # 326

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

The editing instruction in 802.3az said "Replace Figure 55-14, Figure 55-15, and Figure 55-16 with new figures"
However, the LFER monitor state diagram appears twice as Figures 55-14 and 55-15

SuggestedRemedy

Delete Figure 55-14

Response *Response Status* **C**

ACCEPT.

Cl **55** *SC* **55.4.2.5.14** *P* **597** *L* **33** # 460

Daniel Dove Hewlett Packard

Comment Type **ER** *Comment Status* **A**

Spelling error on the word "start"

SuggestedRemedy

Add an 's' on the end to "starts"

Response *Response Status* **C**

ACCEPT.

Cl **55** *SC* **55.4.2.5.14** *P* **597** *L* **33** # 459

Daniel Dove Hewlett Packard

Comment Type **ER** *Comment Status* **A**

"The PMA frame after the transition_count reach zero, the PHYs enter the PMA_Fine_Adjust state and..."

SuggestedRemedy

Change to "During the first PMA frame after the transition_count reaches zero, the PHYs enter the PMA_Fine_Adjust state and..."

Response *Response Status* **C**

ACCEPT.

Cl **55** *SC* **55.4.2.5.14** *P* **598** *L* **26** # 285

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

The text changes due to maintenance request 1216 could be shown more clearly

SuggestedRemedy

show the row that has been replaced in red strikethrough font.

Response *Response Status* **C**

ACCEPT.
See also comment #183

Cl **55** *SC* **55.4.2.5.14** *P* **598** *L* **26** # 183

Thaler, Patricia — Broadcom

Comment Type **TR** *Comment Status* **A**

This change is not clear without reading the maintenance request. There are two times given, one with timing_lock_OK=0/1 and one with timing_lock_OK=1 - the meaning of timing_lock_OK = 0/1 is ambiguous as its relationship to the second time. From reading the maintenance request, it appears that the intent is that the total time allowed for the state is 520 max and 468 average (i.e. the sum of the two values). However, an alternative interpretation would be that once timing_lock_OK=1, the max time should be 420 regardless of how long it took to get there.

Also, note that there is a typo in the average value for the timing_lock_OK = 1 time. It should be 378, not 78.

SuggestedRemedy

I think it would be more clear to have two lines:

one for timing_lock_OK = 0 with a maximum of 100 (an average probably isn't needed for this one - it is okay if it happens faster).

a second for total time in the state with the existing values of 520 and 468.

This has the same result but makes the total time constraint on the state and the relationship between the two time values clear. Another alternative would be to leave two lines as they are, correcting the second average value and add an explanation of the relationship between the times.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change inserted rows to:

Rec max	Rec ave	Slave
100	90	PMA_Coeff_Exch state with timing_lock_OK=0
520	468	Total for PMA_Coeff_Exch state

A vote of the BRC on whether to accept the above resolution was:

Yes 6
No 1
Abstain 8

Cl **55** *SC* **55.4.2.5.14** *P* **598** *L* **27** # 51

Dawe, Piers — IPtronics

Comment Type **T** *Comment Status* **A**

What does timing_lock_OK=0/1 mean? 0/1 is a fraction I can calculate: it's 0. If it means 0 or 1, then the entry 420 ms doesn't make sense.

SuggestedRemedy

Explain what you mean another way.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
See response to comment #183

Cl **55** *SC* **55.4.2.5.14** *P* **598** *L* **28** # 461

Daniel Dove — Hewlett Packard

Comment Type **TR** *Comment Status* **R**

The recommended values in this table can lead to potential interoperability problems with existing devices that are known to use different timing values for PMA_Coeff_Exch state timing_lock_OK=0/1. While this is only a recommended value table, it can potentially lead to implementations that assume the maximum values are required, and thus suggest that anything that exceeds these maximum values are not compliant.

SuggestedRemedy

Change Recommended maximum time (ms) from 100ms to 200ms and from 420ms to 320ms respectively.

Response *Response Status* **U**

REJECT.

Feedback from those making and testing PHYs was that 100 ms is sufficient for this and that raising the maximum to 200 ms would leave too little time in the 1 state

Cl **55** *SC* **55.4.3.1** *P* **600** *L* **45** # 394

Anslow, Peter — Ciena

Comment Type **E** *Comment Status* **A**

This says "... in registers 1.141-1.144 ..."
The IEEE Standards Style Manual (2009) in section 14.2 Numbers says that for ranges: "Dashes should never be used because they can be misconstrued for subtraction signs"

SuggestedRemedy

Change to "... in registers 1.141 to 1.144 ..."

Response *Response Status* **C**

ACCEPT.

Cl **55** *SC* **55.4.6.2** *P* **609** *L* **3** # 52

Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A**

Font too small in Figure 55-26. Minimum per style guide is 8 point, this is mainly 7.5 point.

SuggestedRemedy

Change to 8 point.

Response *Response Status* **C**

ACCEPT.
This figure is not in editable form in the current draft, so it will have to be re-drawn with the potential for errors to be introduced.

Cl **55** *SC* **55.5.2.1** *P* **616** *L* **5** # 53

Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A**

Font too small in Figure 55-30. Minimum per style guide is 8 point, this is mainly 7 point.

SuggestedRemedy

Change to 8 point.

Response *Response Status* **C**

ACCEPT.
This figure is not in editable form in the current draft, so it will have to be re-drawn with the potential for errors to be introduced.

Cl **55** *SC* **55.5.4.4** *P* **619** *L* **26** # 286

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

The text changes due to maintenance request 1224 could be shown more clearly

SuggestedRemedy

Show as "a receiver shall operate with an Ethernet frame error" in normal font, "rate" in red strikethrough font, "ratio" in dark blue underlined font, "less than" in normal font, "6.4" in red strikethrough font, "9.6" in dark blue underlined font, "× 10-9 for 800 octet frames" in normal font and "with minimum IPG or greater than 799 octet IPG" n dark blue underlined font

Response *Response Status* **C**

ACCEPT.

Cl **55** *SC* **55.6.1.2** *P* **621** *L* **47** # 366

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

D12 says "Defined in 28.2.1.2.6" but that is D15 Next Page

SuggestedRemedy

Change to "Defined in 28.2.1.2.3"

Response *Response Status* **C**

ACCEPT.

Cl **55** *SC* **55.6.2** *P* **623** *L* **28** # 397

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

This says "...shown in the Arbitration state diagram (Figure 28-13.)", but Figure 28-13 is "Extended Message Page encoding"

Also, on Page 625 line 15 it says "Determination of MASTER-SLAVE values occur on the entrance to the FLP LINK GOOD CHECK state (Figure 28-16)", but the state FLP LINK GOOD CHECK does not appear in Figure 28-16

SuggestedRemedy

Change "(Figure 28-13.)" to "(Figure 28-18)."
On Page 625 change "(Figure 28-16)" to "(Figure 28-18)"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change "(Figure 28-13.)" to "(Figure 28-18)."
On Page 625 change "(Figure 28-16)" to "(Figure 28-18)" (2 instances)

Cl **55** *SC* **55.7** *P* **625** *L* **47** # 437
Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A**
Update to most current editions of TSB-155-A and '568-C.2

SuggestedRemedy
Replace:
"It is recommended that the guidelines in TIA TSB-155, ISO/IEC TR 24750, ANSI/TIA-568-B.2-10, and ISO/IEC 11801:2002/Amendment 1 be considered before the installation of 10GBASE-T equipment for any cabling system."

with:
"It is recommended that the guidelines in TIA TSB-155-A, ISO/IEC TR 24750, ANSI/TIA-568-C.2, and ISO/IEC 11801:2002/Amendment 1 be considered before the installation of 10GBASE-T equipment for any cabling system."

Response *Response Status* **C**
ACCEPT.

Cl **55** *SC* **55.7.2** *P* **626** *L* **29** # 438
Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A**
Update to most current revision of TSB-155-A

SuggestedRemedy
In 3 locations in Table 55-6, change "TSB-155" to "TSB-155-A"

Response *Response Status* **C**
ACCEPT.

Editor has changed the clause number from 5 to 55.

Cl **55** *SC* **55.7.2** *P* **626** *L* **36** # 442
Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A**
Harmonize text with '568-C.2 Standard

SuggestedRemedy
In Table 55-6, replace:
"Augmented Category 6"

with:
"Category 6A"

Response *Response Status* **C**
ACCEPT.

Cl **55** *SC* **55.7.2** *P* **626** *L* **37** # 439
Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A**
Update to most current revision.

SuggestedRemedy
In Table 55-6, change "ANSI/TIA-568-B.2-10" to "ANSI/TIA-568-C.2"

Response *Response Status* **C**
ACCEPT.

Cl **55** *SC* **55.7.2** *P* **626** *L* **43** # 414
Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A**
Reference most current edition of TSB-155-A

SuggestedRemedy
Replace:
"...as specified in ISO/IEC TR 24750 and TIA TSB-155."

with:
"...as specified in ISO/IEC TR 24750 and TIA TSB-155-A."

Response *Response Status* **C**
ACCEPT.

Cl **55** *SC* **55.7.3.1.2** *P* **633** *L* **21** # 443
Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A**
Harmonize text with '568-C.2 Standard

SuggestedRemedy
In Table 55-8, replace:
"Augmented Category 6"

with:
"Category 6A"

Response *Response Status* **C**
ACCEPT.

Cl **55** *SC* **55.7.3.1.2** *P* **633** *L* **37** # 449
Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A**
Harmonize text with '568-C.2 Standard

SuggestedRemedy
In Table 55-9, replace:
"Augmented Category 6"

with:
"Category 6A"

Response *Response Status* **C**
ACCEPT.

Cl **55** *SC* **55.7.3.2.2** *P* **636** *L* **11** # 415
Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A**
Reference most current edition of TSB-155-A

SuggestedRemedy
Replace:
"The field testing of length and insertion loss are addressed in TIA TSB-155 and ISO/IEC TR 24750."

with:
"The field testing of length and insertion loss are addressed in TIA TSB-155-A and ISO/IEC TR 24750."

Response *Response Status* **C**
ACCEPT.

Cl **55** *SC* **55.7.3.2.2** *P* **636** *L* **34** # 450
Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A**
Harmonize text with '568-C.2 Standard

SuggestedRemedy
In Table 55-11, replace:
"Augmented Category 6"

with:
"Category 6A"

Response *Response Status* **C**
ACCEPT.

Cl **55** *SC* **55.7.3.2.2** *P* **636** *L* **50** # 451
Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A**
Harmonize text with '568-C.2 Standard

SuggestedRemedy
In Table 55-12, replace:
"Augmented Category 6"

with:
"Category 6A"

Response *Response Status* **C**
ACCEPT.

Cl **55** *SC* **55.B.1.2** *P* **696** *L* **43** # 452
Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A**
Harmonize text with '568-C.2 Standard

SuggestedRemedy
Replace:
"Augmented Category 6"

with:
"Category 6A"

Response *Response Status* **C**
ACCEPT.

Cl **55** *SC* **55B1.2** *P* **696** *L* **25** # 416
Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A**
Update reference to most current edition of TSB-155-A.

SuggestedRemedy
Replace:
"For more information on mitigation techniques, see TIA TSB-155 and ISO/IEC TR 24750."

with:
"For more information on mitigation techniques, see TIA TSB-155-A and ISO/IEC TR 24750."

Response *Response Status* **C**
ACCEPT.

Cl **57** *SC* **57.6.1** *P* **52** *L* **19** # 237

Frazier, Howard — Broadcom Corporation

Comment Type **TR** *Comment Status* **A** *802.3.1 alignment*

One of the goals for the revision project is to redirect the variable descriptors in OAM to point to the SNMP(SMIv2) branch and leaf encodings
defined in IEEE Std 802.3.1, rather than the CMIP encodings defined in
what used to be Annex 30A of IEEE Std 802.3.
To this end, all references to "the CMIP protocol encodings as found in Annex 30A" should be replaced.
However, this is not as easy as it first appeared to be, and will take more thought and effort to bring about. The CMIP (GDMO) encodings are much flatter than the SNMP (SMIv2) encodings. Whereas GDMO objects can be referenced by a two-value branch and leaf encoding, an equivalent SMIv2 object are referenced by up to 6 levels of branch and a leaf. As an example, the attribute aSingleCollisionFrames can be accessed via the GDMO branch/leaf combination of 0x07/0x0003. The same object in the SNMP MIB module would be accessed by the branch/leaf combination of 0x0A/0x01/0x02/0x01/0x0004. This would require a change to the variable descriptors to allow multiple levels of branching, and this in turn would necessitate the use of a new set of OAMPDU code points for the variable request and response OAMPDUs. Another approach would be to specify the OAM variable request and response PDUs the way SNMP does, using ASN.1.

SuggestedRemedy

Replace the words "the CMIP protocol encodings as found in Annex 30A" with "the CMIP protocol encodings found in Annex B of IEEE Std 802.3.1".
Further work is needed to accomplish the transition to using SNMP (SMIv2) encodings, but at least the suggested change will bring the documents into alignment, for now.

Response *Response Status* **C**

ACCEPT.

Cl **57** *SC* **57.6.1** *P* **52** *L* **26** # 238

Frazier, Howard — Broadcom Corporation

Comment Type **TR** *Comment Status* **A** *802.3.1 alignment*

One of the goals for the revision project is to redirect the variable descriptors in OAM to point to the SMIv2 (SNMP) branch and leaf encodings
defined in IEEE Std 802.3.1, rather than the CMIP encodings defined in
what used to be Annex 30A of IEEE Std 802.3.
To this end, all references to "the CMIP protocol encodings in Annex 30A" should be replaced.

SuggestedRemedy

In Table 57-13, in two places in the Description column, replace "the CMIP protocol encodings in Annex 30A" with "the CMIP protocol encodings found in Annex B of IEEE Std 802.3.1".

Also change in two places in Table 57-14, page 53, line 8.
Also change in two places in Table 57-15, page 54, line 5.

Response *Response Status* **C**

ACCEPT.

Cl **57** *SC* **57.6.2.2** *P* **54** *L* **25** # 239

Frazier, Howard — Broadcom Corporation

Comment Type **TR** *Comment Status* **A** *802.3.1 alignment*

One of the goals for the revision project is to redirect the variable descriptors in OAM to point to the SMIv2 (SNMP) branch and leaf encodings
defined in IEEE Std 802.3.1, rather than the CMIP encodings defined in
what used to be Annex 30A of IEEE Std 802.3.
To this end, all references to "Annex 30A" should be replaced.

SuggestedRemedy

Replace the text:
"Attributes within packages and objects are returned in the order those attributes are listed in Annex 30A."

with:
"Objects are returned in the order they are listed in Annex B of IEEE Std 802.3.1."

Response *Response Status* **C**

ACCEPT.

Cl **57A** *SC* **57A.2** *P* **685** *L* **38** # 293

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A** *MR related; BULK*

Link to maintenance request shows maint_1229.pdf but goes to maint_1199.pdf
The text changes due to maintenance request 1229 could be shown more clearly

SuggestedRemedy

Change link to go to maint_1229.pdf
"frames" and "transmitted in any one-second period per Slow Protocol subtype" should be in normal font as they have not changed.
Show "the absolute" in red strikethrough font.
When the appropriate 30.3.1.1.3X aSlowProtocolFrameLimit subclause has been added, update 30.3.1.1.3X to the correct reference

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Coordinate the link change from 30.3.1.1.3X to the correct location with section 3 editor

---

Cl **58** *SC* **58.3.2** *P* **70** *L* **37** # 55

Dawe, Piers IPtronics

Comment Type **T** *Comment Status* **A**

Document uses a mixture or two words for the same thing: reflectance and reflectivity. Reflectance dominates, in Section 5.

SuggestedRemedy

Change reflectivity to reflectance, 8 times.

Response *Response Status* **C**

ACCEPT.

Cl **58** *SC* **58.9.2** *P* **95** *L* **50** # 288

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A** *MR related; BULK*

The text changes due to maintenance request 1213 could be shown more clearly

SuggestedRemedy

Show as "cabled optical" in dark blue underlined font, "fiber" in normal font and "cable" in red strikethrough font.

Response *Response Status* **C**

ACCEPT.

Cl **59** *SC* **59.6** *P* **111** *L* **35** # 368

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

Equation 59-1 is
"TJ = 14.1s + DJ at 1012" where "s" is sigma and "1012" is 10 to the power 12
However, this should be 10 to the power -12

SuggestedRemedy

Change equation 59-1 to end 10 to the power -12

Response *Response Status* **C**

ACCEPT.

Cl **59** *SC* **59.7.12** *P* **117** *L* **10** # 369

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

This says "stressed receive sensitivity level in Table for 1000BASE-LX10", but the table number is missing (although the link works)

SuggestedRemedy

Change "Table for" to "Table 59-5 for"

Response *Response Status* **C**

ACCEPT.

Cl **59** *SC* **59.9.2** *P* **121** *L* **17** # 289

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A** *MR related; BULK*

The text changes due to maintenance request 1213 could be shown more clearly

SuggestedRemedy

Show as "cabled optical" in dark blue underlined font, "fiber" in normal font and "cable" in red strikethrough font.

Response *Response Status* **C**

ACCEPT.

Cl **60** *SC* **60.9.3** *P* **150** *L* **12** # 290

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A** *MR related; BULK*

The text changes due to maintenance request 1213 could be shown more clearly

SuggestedRemedy

Show as "cabled optical fiber" in dark blue underlined font and "cable" in red strikethrough font.

Response *Response Status* **C**

ACCEPT.

Cl **60** *SC* **60.9.3** *P* **150** *L* **31** # 291

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A** *MR related; BULK*

The text changes due to maintenance request 1213 could be shown more clearly

SuggestedRemedy

Show as "cabled optical" in dark blue underlined font, "fiber" in normal font and "cable" in red strikethrough font.

Response *Response Status* **C**

ACCEPT.

Cl **64** *SC* **64.2.2.1** *P* **261** *L* **18** # 250

Hajduczenia, Marek ZTE Corporation

Comment Type **E** *Comment Status* **A** *TF approval; BULK*

Unnecessary reference to Clause in "The value of the Length/Type field as defined in Clause 31.4.1.3."

SuggestedRemedy

Change "The value of the Length/Type field as defined in Clause 31.4.1.3." to "The value of the Length/Type field as defined in 31.4.1.3."

Response *Response Status* **C**

ACCEPT.

Cl **64** *SC* **64.2.2.1** *P* **261** *L* **26** # 251

Hajduczenia, Marek ZTE Corporation

Comment Type **E** *Comment Status* **A** *TF approval; BULK*

Unnecessary reference to Clause in "overhead items are described in Clause 3.1.1"

SuggestedRemedy

Change "overhead items are described in Clause 3.1.1" to "overhead items are described in 3.1.1"

Response *Response Status* **C**

ACCEPT.

Cl **64** *SC* **64.2.2.1** *P* **261** *L* **26** # 252

Hajduczenia, Marek ZTE Corporation

Comment Type **E** *Comment Status* **A** *TF approval; BULK*

Unnecessary reference to Clause in "The size of the EPD is described in Clause 36.2.4.14."

SuggestedRemedy

Change "The size of the EPD is described in Clause 36.2.4.14." to "The size of the EPD is described in 36.2.4.14."

Response *Response Status* **C**

ACCEPT.

Cl **64** *SC* **64.2.2.3** *P* **263** *L* **5** # 184

Thaler, Patricia — Broadcom

Comment Type **TR** *Comment Status* **A** *MR 1196*

See my comment on Annex 31B.3.2.

This comment also applies to 77.2.2.3 page 634 line 8.

At least in this case, transmission_completed is defined. However, there is no linkage between the MAC and MAC Control that lets MAC Control know when transmission has been completed.

The definition of transmission completed has the same problem as the definition of TransmitFrameCompleted in Clause 4. The definition says when it is set true, but nothing sets it false.

SuggestedRemedy

One doesn't need transmission_completed if one adds to the definition for MAC:MA_DATA.request that the action it invokes isn't considered to end until the transmission of the frame by the MAC has concluded and how the MAC control layer determines that is implementation dependent.

If that isn't done, the definition for transmission_completed still requires MAC Control knowing magically that the MAC has completed transmission since there is no primitive for it to use. The definition should acknowledge that by saying that how transmission_completed determines that is implementation dependent. Also, transmission_completed needs to be set false, either stating in its definition that it is set false when the invocation of MAC:MA_DATA.Request is initiated or by setting it false in states before making the invocation.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

See comment #182

Cl **64** *SC* **64.3.3** *P* **274** *L* **28** # 56

Dawe, Piers — IPtronics

Comment Type **ER** *Comment Status* **A** *BULK*

Font too small in Figure 64-16 and 64-17. Minimum per style guide is 8 point, this goes as small as 6 point!

SuggestedRemedy

Change to 8 point.

Response *Response Status* **C**

ACCEPT.

Cl **64** *SC* **64.3.4.1** *P* **284** *L* **45** # 243

Hajduczenia, Marek — ZTE Corporation

Comment Type **T** *Comment Status* **A** *TF approval*

Current text of 802.3 relative to EPON systems, in subclauses 64.3.4.1, 64.3.5.1, 77.3.4.1, 77.3.5.1, defines the following maximum allowed intervals: report_timeout, gate_timeout and mpcp_timeout. During the development of IEEE 1904.1 power saving mechanisms for EPON, it became critical to tolerate longer timeout values, especially for intervals defined by report_timeout, gate_timeout constants, allowing the ONU sleep longer and save more energy.
It is desired for the network operator to be able to adjust these values on per ONU basis (S-ONU using the IEEE 1904.1 nomenclature), maintaining the default values equal to the values currently defined in 802.3 text.

SuggestedRemedy

1)Move definition of gate_timeout from 77.3.5.1 to 77.3.5.2 and 64.3.5.1 to 64.3.5.2, changing the type from constant to variable and modify the definition to read as follows:
gate_timeout
TYPE: 32 bit unsigned
This variable represents the maximum allowed interval of time between two GATE messages generated by the OLT to the same ONU, expressed in units of time_quanta.
VALUE: 0x002FAF08 (50 ms, default value)
2)Move definition of report_timeout from 77.3.4.1 to 77.3.4.2 and 64.3.4.1 to 64.3.4.2 , changing the type from constant to variable and modify the definition to read as follows:
report_timeout
TYPE: 32 bit unsigned
This variable represents the maximum allowed interval of time between two REPORT messages generated by the OLT to the same ONU, expressed in units of time_quanta.
VALUE: 0x002FAF08 (50 ms, default value)
3)Move definition of mpcp_timeout from 77.3.4.1 to 77.3.4.2 and 64.3.4.1 to 64.3.4.2 , changing the type from constant to variable and modify the definition to read as follows:
mpcp_timeout
TYPE: 32 bit unsigned
This variable represents the maximum allowed interval of time between two MPCPDU messages. Failure to receive at least one frame within this interval is considered a fatal fault and leads to deregistration. This variable is expressed in units of time_quanta.
VALUE: 0x03B9ACA0 (1 s, default value)
4)Remove subclause 77.3.4.1 and 64.3.4.1 (there are no more constants left once the changes in the previous steps are done), renumbering the following subclauses as needed

Response *Response Status* **C**

ACCEPT.

Cl **64** *SC* **64.3.5.6** *P* **295** *L* **1** # 194

Booth, Brad — Dell

Comment Type **E** *Comment Status* **A** *MR related; BULK*

Comment for maintenance item 1222 indicates the change is in blue in figure 64-29.
Cannot see any blue in the figure.

SuggestedRemedy

Either use a different color or highlight by other means. Thanks.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change is shown in Figure 64-29 in red right now. We can change the colour marking to blue to align it with the maintenance 1222 request text.

Cl **65** *SC* **65.1.3.3.2** *P* **312** *L* **54** # 235

Frazier, Howard — Broadcom Corporation

Comment Type **TR** *Comment Status* **A** *mLLID*

The ONU receive filtering rules must be extended to support multicast LLIDs.
Material to support this change has been previously provided to the Working Group.

SuggestedRemedy

Following the paragraph that begins with "If the device is an ONU .," add the following sentence as a third bullet item:
"f) If the received logical_link_id value matches one of the assigned multicast LLIDs, then the comparison is considered a match."

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Make changes per barrass_1_0911.pdf
In favour: 12
Against: 6
Abstain: 6
Motion fails

Make changes per barrass_1_0911.pdf with the addition of an editor's note in both Clause 65 and Clause 76 that states that management attributes for multicast LLID need to be added to the draft.
Moved by: Hugh
Seconded by: Howard
In favour: 18
Against: 6
Abstain: 4
Motion passes

Cl **68** *SC* **68.5** *P* **358** *L* **53** # 57

Dawe, Piers — IPtronics

Comment Type **T** *Comment Status* **R**

As we have added OM4 to other PMD clauses:

SuggestedRemedy

Add OM4 to Table 68-2. Operating range will be 220 m or a little better.

Response *Response Status* **C**

REJECT.
Too little information to fill in the table and no specific justification to add the information.

Cl **68** *SC* **68.5** *P* **359** *L* **1** # 344

Anslow, Peter — Ciena

Comment Type **T** *Comment Status* **A** *MR related*

The text changes due to maintenance request 1213 have not been implemented correctly

SuggestedRemedy

"cable" should be "cabled"

Response *Response Status* **C**

ACCEPT.

Cl **68** *SC* **68.9** *P* **379** *L* **11** # 345

Anslow, Peter — Ciena

Comment Type **T** *Comment Status* **A** *MR related*

The text changes due to maintenance request 1213 have not been implemented in Tables 68-8 and 68-9

SuggestedRemedy

In Table 68-8 Change "fibre insertion loss" to "cabled optical fiber insertion loss"
In Table 68-9 Change "cable attenuation" to "cabled optical fiber attenuation"

Response *Response Status* **C**

ACCEPT.

Cl **69B** *SC* **69B.4.2** *P* **779** *L* **24** # 73

Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A** *Editorial; BULK*

NO NEED TO SHOUT

SuggestedRemedy

Per style manual, change
HIGH CONFIDENCE REGION
to
High confidence region
seven times.

Response *Response Status* **C**

ACCEPT.

Cl **70** *SC* **70** *P* **393** *L* **1** # 75

Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A** *Editorial; BULK*

Gratuitous capitals

SuggestedRemedy

Change
Physical Medium Dependent Sublayer and Baseband Medium, Type 1000BASE-KX
to
Physical Medium Dependent sublayer and baseband medium, type 1000BASE-KX
and similarly for
71. Physical Medium Dependent Sublayer and Baseband Medium, Type 10GBASE-KX4
and
72. Physical Medium Dependent Sublayer and Baseband Medium, Type 10GBASE-KR

Response *Response Status* **C**

ACCEPT.

Cl **70** *SC* **70.1** *P* **393** *L* **41** # 141

Ganga, Ilango Intel

Comment Type **T** *Comment Status* **A**

Change last sentence of the paragraph to "This transmission will be detected by the remote PHY, causing it to also exit the LPI mode."

The above change would make this sentence to be consistent with 71.1 and 72.1

SuggestedRemedy

As per comment

Response *Response Status* **C**

ACCEPT.

Cl **70** *SC* **70.2.2** *P* **394** *L* **31** # 74

Dawe, Piers IPtronics

Comment Type **T** *Comment Status* **A**

lower power mode or low power mode (as in the maintenance request)?

SuggestedRemedy

?

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
[Changed to "T"]
"low power mode" per original maintenance request.

Cl **70** *SC* **70-1** *P* **425** *L* **12** # 205

D'Ambrosia, John Dell

Comment Type **ER** *Comment Status* **A** *BULK*

Table 70-1 is titled "Table 70-1-PHY (Physical Layer) clauses associated with the 1000BASE-KX PMD" However, a PHY is defined by 1.4310 as "Within IEEE 802.3, the portion of the Physical Layer between the Medium Dependent Interface (MDI) and the Media Independent Interface (MII), Gigabit Media Independent Interface (GMII) or 10 Gigabit Media Independent Interface (XGMII), consisting of the Physical Coding Sublayer (PCS), the Physical Medium Attachment (PMA), and, if present, the WAN Interface Sublayer (WIS) and Physical Medium Dependent (PMD) sublayers." Therefore a table defining a PHY would not include the associated MII layer.

SuggestedRemedy

Rename Table 70-1 from
PHY (Physical Layer) clauses associated with the 1000BASE-KX PMD
to
Physical Layer clauses associated with the 1000BASE-KX PMD

Response *Response Status* **C**

ACCEPT.
Format then will be aligned with 40G/100G clauses as well, which is additional advantage of the proposal.

Cl **71** *SC* **71.7.1.5** *P* **420** *L* **2** # 76

Dawe, Piers — IPtronics

Comment Type **E** *Comment Status* **A** *Editorial*

We should be working to replace the few bitmap figures: they cause large file size and contents can't be searched for.

SuggestedRemedy

Graphs like these can be redrawn giving the clearer graphs as in 40/100GE. There are three or four easy ones in the document.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

The only change to be done is to make sure that caption for Figure 71-4 is not cut into half

Cl **71** *SC* **71.7.2** *P* **422** *L* **44** # 245

Hajduczenia, Marek — ZTE Corporation

Comment Type **T** *Comment Status* **A** *TF approval*

Lines 43 and 46 in Table 71-6 contain unresolved reference to 71.6.4a. A search shows no such subclause, bullets in 71.6.4 etc.

SuggestedRemedy

Need to fix the reference - identify the correct one, replace existing two incorrect instances and make sure that the links are live.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change to 71.6.4

Cl **71** *SC* **71-1** *P* **443** *L* **15** # 206

D'Ambrosia, John — Dell

Comment Type **ER** *Comment Status* **A** *BULK*

Table 71-1 is titled "Table 71-1-PHY (Physical Layer) clauses associated with the 10GBASE-KX4 PMD" However, a PHY is defined by 1.4310 as "Within IEEE 802.3, the portion of the Physical Layer between the Medium Dependent Interface (MDI) and the Media Independent Interface (MII), Gigabit Media Independent Interface (GMII) or 10 Gigabit Media Independent Interface (XGMII), consisting of the Physical Coding Sublayer (PCS), the Physical Medium Attachment (PMA), and, if present, the WAN Interface Sublayer (WIS) and Physical Medium Dependent (PMD) sublayers." Therefore a table defining a PHY would not include the associated MII layer.

SuggestedRemedy

Rename Table 71-1 from
PHY (Physical Layer) clauses associated with the 10GBASE-KX4 PMD
to
Physical Layer clauses associated with the 10GBASE-KX4 PMD

Response *Response Status* **C**

ACCEPT.
Format then will be aligned with 40G/100G clauses as well, which is additional advantage of the proposal.

Cl **72** *SC* **72.1** *P* **431** *L* **12** # 207

D'Ambrosia, John — Dell

Comment Type **ER** *Comment Status* **A** *BULK*

Table 72-1 is titled "Table 72-1-PHY (Physical Layer) clauses associated with the 10GBASE-KR PMD" However, a PHY is defined by 1.4310 as "Within IEEE 802.3, the portion of the Physical Layer between the Medium Dependent Interface (MDI) and the Media Independent Interface (MII), Gigabit Media Independent Interface (GMII) or 10 Gigabit Media Independent Interface (XGMII), consisting of the Physical Coding Sublayer (PCS), the Physical Medium Attachment (PMA), and, if present, the WAN Interface Sublayer (WIS) and Physical Medium Dependent (PMD) sublayers." Therefore a table defining a PHY would not include the associated MII layer.

SuggestedRemedy

Rename Table 72-1 from
PHY (Physical Layer) clauses associated with the 10GBASE-KR PMD
to
Physical Layer clauses associated with the 10GBASE-KR PMD

Response *Response Status* **C**

ACCEPT.
Format then will be aligned with 40G/100G clauses as well, which is additional advantage of the proposal.

Cl **72** *SC* **72.10.4.3** *P* **462** *L* **49** # 400

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

Says "Sets PMD_transmit_fault as specified in 45.2.1.7.5", but this is PMD_receive_fault

SuggestedRemedy

Change to "Sets PMD_receive_fault as ..."

Response *Response Status* **C**

ACCEPT.
Comment type was changed from "E" to "T"

Cl **72** *SC* **72.2** *P* **432** *L* **8** # 246

Hajduczenia, Marek ZTE Corporation

Comment Type **E** *Comment Status* **A** *TF approval*

Text "These messages are defined for the PCS in 49.2.13.2.6" contains unresolved reference to non-existing subclause 49.2.13.2.6.

SuggestedRemedy

Need to fix the reference - identify the correct one, replace existing incorrect instance and make sure that the link is live.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change "49.2.13.2.6" to "49.2.13.2.2"

Cl **72** *SC* **72.5** *P* **433** *L* **26** # 312

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A** *BULK*

There are two tables numbered Table 72-1

SuggestedRemedy

Fix the table numbering in Clause 72

Response *Response Status* **C**

ACCEPT.
Correct the autonumbering format for Tables in Clause 72

Cl **72** *SC* **72.7.1** *P* **449** *L* **17** # 335

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A** *BULK*

Table 72-5 contains two rows where the Value is two numbers separated by "-"
The IEEE Standards Style Manual (2009) in section 14.2 Numbers says that for ranges: "Dashes should never be used because they can be misconstrued for subtraction signs"

SuggestedRemedy

Change "0-1.9" to "0 to 1.9"
Change "24-47" to "24 to 47"

Response *Response Status* **C**

ACCEPT.

Cl **72** *SC* **72.7.1.8** *P* **453** *L* **39** # 77

Dawe, Piers IPtronics

Comment Type **T** *Comment Status* **A**

The definition of DCD in 72.7.1.8 is ambiguous by up to a factor of 2 until, after discussing something else, 72.7.1.9 gives the pattern to be used. Remarks about 10^-12 can't be applied to this DCD definition.

SuggestedRemedy

Please reorder 72.7.1.8 and 72.7.1.9 so that all the DCD material is together and all the non-DCD jitter material is together.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Reorder 72.7.1.8 and 72.7.1.9, plus fix any references, as needed.

Cl **73** *SC* **73.10.1** *P* **488** *L* **43** # 303

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A** *BULK*

Items 4 to 6 of single_link_ready are shown in underline font

SuggestedRemedy

Remove the underline

Response *Response Status* **C**

ACCEPT.

Cl **73** *SC* **73.10.1** *P* **488** *L* **44** # 128
Ganga, Ilango Intel

Comment Type **E** *Comment Status* **A** *BULK*
Variable single_link_ready: Delete underline for the inserted lines 4-6

SuggestedRemedy
As per comment

Response *Response Status* **C**
ACCEPT.

Cl **73** *SC* **73.11.2.2** *P* **496** *L* **35** # 253
Hajduczenia, Marek ZTE Corporation

Comment Type **ER** *Comment Status* **A** *TF approval; PICS*
"Identification of protocol standard " field contains the project designation "IEEE P802.3/D1.0, Clause 73" even though it has been balloted and approved.

SuggestedRemedy
Change "IEEE P802.3/D1.0" to "IEEE 802.3-2008" in two locations: in line 35 and line 41

Response *Response Status* **C**
ACCEPT IN PRINCIPLE.

Resolved per #261

Cl **73** *SC* **73.7.1** *P* **477** *L* **25** # 247
Hajduczenia, Marek ZTE Corporation

Comment Type **E** *Comment Status* **A** *TF approval*
Text "The DME transmit signal level and receive sensitivity are specified in 73.5.1.1" contains unresolved reference to subclause 73.5.1.1

SuggestedRemedy
Need to fix the reference - identify the correct one, replace existing incorrect instance and make sure that the link is live.

Response *Response Status* **C**
ACCEPT IN PRINCIPLE.
Change to 73.5.1 - "73.5.1 DME electrical specifications" and incudes the transmit and receive signal levels for DME.

Cl **73** *SC* **73.7.2** *P* **477** *L* **35** # 302
Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A** *BULK*
40GBASE-KR4, 40GBASE-CR4, and 100GBASE-CR10 is shown in underline font

SuggestedRemedy
Remove the underline

Response *Response Status* **C**
ACCEPT.

Cl **74** *SC* **74.1** *P* **505** *L* **13** # 462
Arthur Marris Cadence

Comment Type **T** *Comment Status* **A** *Than in 74*
Text does not have the same meaning as in 802.3ba-2010

SuggestedRemedy
Change 'that' to 'than'

Response *Response Status* **C**
ACCEPT.

Cl **74** *SC* **74.1** *P* **505** *L* **13** # 135
Ganga, Ilango Intel

Comment Type **ER** *Comment Status* **A** *Than in 74; BULK*
In correct merge from 802.3ba

SuggestedRemedy
Change to "than are defined in Clause 69"

Response *Response Status* **C**
ACCEPT.

Cl **74** *SC* **74.1** *P* **505** *L* **13** # 305
Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A** *Than in 74; BULK*
"that are defined" should be "than are defined" (802.3ba)

SuggestedRemedy
change "that are defined" to "than are defined"

Response *Response Status* **C**
ACCEPT.

Cl **74** *SC* **74.11.2.2** *P* **528** *L* **34** # 254

Hajduczenia, Marek — ZTE Corporation

Comment Type **ER** *Comment Status* **A** *TF approval; PICS*

"Identification of protocol standard " field contains the project designation "IEEE P802.3/D1.0, Clause 74" even though it has been balloted and approved.

SuggestedRemedy

Change "IEEE P802.3/D1.0" to "IEEE 802.3-2008" in line 34

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Resolved per #261

Cl **74** *SC* **74.11.5** *P* **531** *L* **15** # 130

Ganga, Ilango — Intel

Comment Type **E** *Comment Status* **A** *BULK*

Renumber items in PICs table after merge from 802.3ba.

SuggestedRemedy

Change FE3a to FE4 and renumber subsequent items in table.

Response *Response Status* **C**

ACCEPT.
Scrub the remaining draft clauses to make sure no reference to FE3a and Fexxx items are made anywhere.

Cl **74** *SC* **74.4** *P* **506** *L* **35** # 136

Ganga, Ilango — Intel

Comment Type **ER** *Comment Status* **A** *BULK; 802.3ba merge*

Incorrect merge from 802.3ba. Remove change "10GBBASE-R PCS" to "PCS" in the first sentence of this paragraph

SuggestedRemedy

Change as per 802.3ba as follows: "An FEC service interface is provided to allow the FEC sublayer to transfer information to and from the PCS."

Response *Response Status* **C**

ACCEPT.

Cl **74** *SC* **74.4** *P* **506** *L* **35** # 306

Anslow, Peter — Ciena

Comment Type **E** *Comment Status* **A** *BULK; 802.3ba merge*

Some changes made by 802.3ba have not been implemented

SuggestedRemedy

Change:
"to and from the 10GBASE-R PCS, which is the sole FEC client." to:
"to and from the PCS."

Response *Response Status* **C**

ACCEPT.

Cl **74** *SC* **74.5.1** *P* **510** *L* **20** # 129

Ganga, Ilango — Intel

Comment Type **E** *Comment Status* **A** *BULK*

Add missing cross reference to Clause 78
Add missing cross reference to Clause 49

SuggestedRemedy

As per comment

Response *Response Status* **C**

ACCEPT.
Reference to Clause 78 is in line 20
Reference to Clause 49 is in line 16

Cl **74** *SC* **74.8.1** *P* **522** *L* **53** # 360

Anslow, Peter — Ciena

Comment Type **T** *Comment Status* **A** *802.3ba merge*

A change made by 802.3ba has not been implemented

SuggestedRemedy

Change:
"for the 10GBASE-R PHY" to:
"for the BASE-R PHY"

Response *Response Status* **C**

ACCEPT.

Cl **74** *SC* **74.8.4.1** *P* **524** *L* **19** # 307

Anslow, Peter — Ciena

Comment Type **E** *Comment Status* **A** *BULK; 802.3ba merge*

A change made by 802.3ba is still shown with strikethrough font
same issue in 74.8.4.2 on line 31

SuggestedRemedy

Change:
"for each corrected FEC blocks processed" where the "s" at the end of "blocks" is in strikethrough font to:
"for each corrected FEC block processed"

Make the equivalent change in 74.8.4.2 on line 31

Response *Response Status* **C**

ACCEPT.

Cl **74** *SC* **74.8.4.1** *P* **524** *L* **21** # 137

Ganga, Ilango — Intel

Comment Type **ER** *Comment Status* **A** *BULK; 802.3ba merge*

Fix incorrect reference due to merge from 802.3ba

SuggestedRemedy

Change to "defined in 45.2.1.91 (1.172, 1.173) for single-lane PHYs and 45.2.1.93 (1.300 to 1.339) for multi-lane PHYs."

Response *Response Status* **C**

ACCEPT.
Reconcile changes to references in Clause 45 with section 4 editor.

Cl **74** *SC* **74.8.4.2** *P* **524** *L* **33** # 138

Ganga, Ilango — Intel

Comment Type **ER** *Comment Status* **A** *BULK; 802.3ba merge*

Fix incorrect reference due to merge from 802.3ba.

SuggestedRemedy

Change to "defined in 45.2.1.92 (1.174, 1.175) for single-lane PHYs and 45.2.1.94 (1.700 to 1.739) for multi-lane PHYs."

Response *Response Status* **C**

ACCEPT.
Reconcile changes to references in Clause 45 with section 4 editor.

Cl **75** *SC* **75.10.2.2** *P* **561** *L* **38** # 255

Hajduczenia, Marek — ZTE Corporation

Comment Type **ER** *Comment Status* **A** *PICS; TF approval*

Field "Identification of protocol standard" contains standard designation that reads "IEEE Std 802.3av-2009, Clause 75" - this needs to be changed.

SuggestedRemedy

Change "IEEE Std 802.3av-2009" to "IEEE Std 802.3-2008", in lines 38 and 46.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Resolved per #261

Cl **75** *SC* **75.10.4.13** *P* **567** *L* **34** # 256

Hajduczenia, Marek — ZTE Corporation

Comment Type **ER** *Comment Status* **A** *TF approval; BULK*

Item OM5 contains unresolved reference to non-existing subclause 52.9.5.6.
Item OM6 contains unresolved reference to non-existing subclause 58.8.7.

SuggestedRemedy

Need to fix the reference - identify the correct one, replace existing incorrect instance and make sure that the link is live.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

In OM5, change 52.9.5.6 to 52.9.5 - it seems to be the correct one (52.9.6 Relative intensity noise optical modulation amplitude (RINxOMA) measuring procedure)

In OM6, change the text to read "As described in 58.7.7 for 1 Gb/s PHY and in 52.9.6 for 10 Gb/s PHY."

Cl **75** *SC* **75.7.14** *P* **556** *L* **14** # 248

Hajduczenia, Marek — ZTE Corporation

Comment Type **E** *Comment Status* **A** *TF approval; BULK*

Text "Tcode_group_align is defined in 36.6.2.4" contains unresolved reference to subclause 36.6.2.4

SuggestedRemedy

Need to fix the reference - identify the correct one, replace existing incorrect instance and make sure that the link is live.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change 36.6.2.4 to 36.3.2.4, which seems to be the correct referenece (36.3.2.4 Code-group alignment)

Cl **75** *SC* **75.7.14** *P* **556** *L* **16** # 249

Hajduczenia, Marek — ZTE Corporation

Comment Type **E** *Comment Status* **A** *TF approval; BULK*

Text "Toff is defined in 60.7.13.11.1" contains unresolved reference to subclause 60.7.13.11.1

SuggestedRemedy

Need to fix the reference - identify the correct one, replace existing incorrect instance and make sure that the link is live.

Response *Response Status* **C**

ACCEPT.

Change 60.7.13.11.1 to 60.7.13.1.1, which seems to be the correct reference (60.7.13.1.1 Definitions)

Cl **76** *SC* **76.2.6.1.3.2** *P* **577** *L* **4** # 236

Frazier, Howard — Broadcom Corporation

Comment Type **TR** *Comment Status* **A** *mLLID*

The ONU receive filtering rules must be extended to support multicast LLIDs. Material to support this change has been previously provided to the Working Group.

SuggestedRemedy

Following the paragraph that begins with "If the device is an ONU .," add the following sentence as a third bullet item:
"f) If the received logical_link_id value matches one of the assigned multicast LLIDs, then the comparison is considered a match."

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

See #235

Accept the resolution:
In favour: 18
Against: 6
Abstain: 5
Motion passes

Cl **76** *SC* **76.3.2.1.2** *P* **580** *L* **50** # 257

Hajduczenia, Marek — ZTE Corporation

Comment Type **ER** *Comment Status* **R** *TF approval; BULK*

Text "This variable is defined in 49.2.13.2.2." references to non-existing subclause 49.2.13.2.2

SuggestedRemedy

Need to fix the reference - identify the correct one, replace existing incorrect instance and make sure that the link is live.

Response *Response Status* **C**

REJECT.

Reference seems OK after reconfirmation.

Cl **76** *SC* **76.3.2.1.3** *P* **581** *L* **4** # 258

Hajduczenia, Marek — ZTE Corporation

Comment Type **ER** *Comment Status* **R** *TF approval; BULK*

Text "This variable is defined in 49.2.13.2.3." references to non-existing subclause 49.2.13.2.3

SuggestedRemedy

Need to fix the reference - identify the correct one, replace existing incorrect instance and make sure that the link is live.

Response *Response Status* **C**

REJECT.

Reference seems OK after reconfirmation.

Cl **76** *SC* **76.3.2.5.2** *P* **591** *L* **12** # 185

Thaler, Patricia — Broadcom

Comment Type **TR** *Comment Status* **A** *MR 1218*

The value for SH_DATA shouldn't be the same as the value for SH_CTRL. The value for SH_DATA should be 01 (where 0 is the LSB which is transmitted first; Clause 49 always shows the sync codes as binary, but if it were shown as hex, it would be 0x02).

The value for SH_CTRL should be 10 or 0x01.

SuggestedRemedy

It would be more consistant with Clause 49 to show these values the same way that Clause 49 does - as bits transmitted left to right. If that isn't done, there should be a note to explain why Claues 49 shows the control value of the sync header as 10 while this Clause says it is 0x01 and vice versa for the data value.

In any case, correct the values.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
See comment #78

Cl **76** *SC* **76.3.2.5.2** *P* **591** *L* **18** # 78

Dawe, Piers — IPtronics

Comment Type **T** *Comment Status* **A** *MR 1218*

Maintenance request said SH_CTRL ... 0x01 (binary representation 01)
Draft says SH_CTRL ... Value: 0x02 (binary representation 10)
Which is it?

SuggestedRemedy

?

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Maintenance Request 1218 was not rolled in correctly into the draft.

SH_CTRL value should read: "Value: 0x1 (binary representation 01)" with changes per meeting discussion.

Change the value in SH_DATA from 0x02 to 0x2.

Add note under both items with the text: "The binary representation of the sync header in here is different than that in Clause 49. In Clause 49, binary values are shown with the first transmitted bit (the LSB) on the left."

Cl **76** *SC* **76.3.2.5.2** *P* **591** *L* **4** # 292

Anslow, Peter — Ciena

Comment Type **E** *Comment Status* **A** *MR related; BULK*

Link to maintenance request shows maint_1218.pdf but goes to maint_1199.pdf

SuggestedRemedy

Change link to go to maint_1218.pdf

Response *Response Status* **C**

ACCEPT.

Cl **76** *SC* **76.5.2.2** *P* **614** *L* **4** # 259

Hajduczenia, Marek ZTE Corporation

Comment Type **ER** *Comment Status* **A** *PICS; TF approval*

Field "Identification of protocol standard" contains standard designation that reads "IEEE Std 802.3av-2009, Clause 76" - this needs to be changed.

SuggestedRemedy

Change "IEEE Std 802.3av-2009" to "IEEE Std 802.3-2008", in lines 4 and 12.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Resolved per #261

Cl **77** *SC* **77.5.2.2** *P* **681** *L* **34** # 260

Hajduczenia, Marek ZTE Corporation

Comment Type **ER** *Comment Status* **A** *PICS; TF approval*

Field "Identification of protocol standard" contains standard designation that reads "IEEE Std 802.3av-2009, Clause 77" - this needs to be changed.

SuggestedRemedy

Change "IEEE Std 802.3av-2009" to "IEEE Std 802.3-2008", in lines 34 and 41.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Resolved per #261

Cl **78** *SC* **78.1.4** *P* **26** *L* **30** # 208

D'Ambrosia, John Dell

Comment Type **ER** *Comment Status* **A**

Table 78-1 is titled -"Table 78-1-Clauses associated with each PHY type" but in the table XGXS (XAUI) is included. However, the XGXS (XAUI) is not a PHY type, as it resides above a 10G PHY type.

See also Table 78-2,

SuggestedRemedy

change title of Table 78-1 from
Table 78-1-Clauses associated with each PHY type

to

Table 78-1- PHY type or Physical Layer Clauses.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change title to:
Table 78-1-Clauses associated with each interface type

Cl **78** *SC* **78.4.2.3** *P* **29** *L* **36** # 268

Trowbridge, Steve Alcatel-Lucent

Comment Type **E** *Comment Status* **A**

Spurious page break in the middle of Table 78-3.

SuggestedRemedy

Let Table 78-3 float and keep on one page. Same for Table 79-3a.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Re-pagination due to moving Title from Page 19 of D2.0 fixes Table 78-3.
For Table 79-3a (re-numbered to 79-4) show bottom ruling on first page of split table.

Cl **79** *SC* **79.4.2** *P* **49** *L* **7** # 334

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

In Tables 79-6 and 79-7 right hand column, some of the managed object class attribute entries are links and others are not.

SuggestedRemedy

Make them all links.

Response *Response Status* **C**

ACCEPT.

Cl **79** *SC* **79.5.7** *P* **54** *L* **8** # 402

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

Item PVT1 has a Value/Comment of "Bit map of the MDI power capabilities and status as defined in Table 79-2", but Table 79-2 is "IEEE 802.3 auto-negotiation support/status". This should be Table 79-3 "MDI power capabilities/status"

SuggestedRemedy

Change "...defined in Table 79-2" to "...defined in Table 79-3"

Response *Response Status* **C**

ACCEPT.

Cl **79** *SC* **79.5.8** *P* **55** *L* **1** # 280

Trowbridge, Steve Alcatel-Lucent

Comment Type **T** *Comment Status* **R**

Is the Link Aggregation TLV still needed here since LAG is moved to 802.1?

SuggestedRemedy

Remove this TLV assuming this duplicates capability moved to 802.1.

Response *Response Status* **C**

REJECT.
This is already indicated by deprecating:
79.3.3 Link Aggregation TLV (deprecated)
and the associated note:
NOTE-As the Link Aggregation specification has now been removed from IEEE Std 802.3 and is now standardized as IEEE Std 802.1AX, new implementations of this standard are encouraged to make use of the Link Aggregation TLV that is now part of the IEEE 802.1 extension MIB specified in Annex E of IEEE Std 802.1AB-2009.

Cl **80** *SC* **80.1.4** *P* **59** *L* **26** # 350

Anslow, Peter Ciena

Comment Type **T** *Comment Status* **A**

In Table 80-1, item 40GBASE-SR4 "100 km" should be "100 m"

SuggestedRemedy

change "100 km" to "100 m"

Response *Response Status* **C**

ACCEPT.

Cl **80** *SC* **80.1.5** *P* **60** *L* **11** # 269

Trowbridge, Steve Alcatel-Lucent

Comment Type **E** *Comment Status* **A**

40GBASE-ER should be 40GBASE-FR in the table heading

SuggestedRemedy

Change 40GBASE-ER to 40GBASE-FR

Response *Response Status* **C**

ACCEPT.
See also comment #139

Cl **80** *SC* **80.1.5** *P* **60** *L* **11** # 139

Ganga, Ilango Intel

Comment Type **ER** *Comment Status* **A**

In the last column of Table 80-2, change 40GBASE-ER to 40GBASE-FR
Also remove the bold vertical line for last column

SuggestedRemedy

As per comment

Response *Response Status* **C**

ACCEPT.
See also comments #269 and #299

Cl **80** *SC* **80.1.5** *P* **60** *L* **6** # 299

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

In Table 80-2, the border to the left of the clause 89 column should not be thick and should not go through the "Clause" row

SuggestedRemedy

Fix the border and straddle cells.

Response *Response Status* **C**

ACCEPT.
See also comment #139

Cl **80** *SC* **80.2.8** *P* **61** *L* **50** # 270

Trowbridge, Steve Alcatel-Lucent

Comment Type **E** *Comment Status* **A**

"little or no modification" may have made sense when 802.3ba was a new project, but reads funny now that it is part of the existing suite of Ethernet specifications.

SuggestedRemedy

Replace "can be managed by existing network management stations with little or no modification to the agent code"
with
"can be managed by the same network management stations".

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change:
"Clause 30 consolidates all IEEE 802.3 management specifications so that 10/100/1000 Mb/s, 10 Gb/s, 40 Gb/s, and 100 Gb/s agents can be managed by existing network management stations with little or no modification to the agent code." to:
"These items are defined in Clause 30."

Make equivalent changes in
21.1.15 for 100 Mb/s
34.1.6 for 1000 Mb/s
44.1.5 for 10 Gb/s
56.1.4 for EFM
69.2.5 for backplane

Cl **80** *SC* **80.3.2** *P* **62** *L* **54** # 271

Trowbridge, Steve Alcatel-Lucent

Comment Type **E** *Comment Status* **A**

Stray colon in italics at bottom of page

SuggestedRemedy

Remove stray colon.

Response *Response Status* **C**

ACCEPT.

Cl **80** *SC* **80.4** *P* **67** *L* **15** # 178

Thaler, Patricia Broadcom

Comment Type **T** *Comment Status* **A**

31B.3.7 says 118 pause quantum bit times for 40 Gb/s and 394 pause quantum for 100 Gb/s.

The times in Table 80-3 sbulayer delay constraints sums to 122 for the largest delay (CR4 PMD plus R PMA, R FEC and MAC, RS and MAC control). Also, the largest sum for 100 Gb/s is 404.

It is possible that the discrepancy is due to the Annex 31B time being measured from the MDI. While the CR4 and CR10 delays in Table 80-3 include the delay of one direction through the cable medium. If so, it is confusing to have the two parts of the standard specify delay differently.

SuggestedRemedy

It would be better to use the same measurement point for delay in Table 80-3 and 84.4 and 85.4 as in Annex 31B. If there is a reason why that isn't practical, there should be a note on those values in the table that mentions the difference between this delay and the total in 31B.3.7.

If the cable delay doesn't completely cover the difference, then correct the total in 31B.3.7.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Since 31B.3.7 says "as measured at the MDI", refer the delays to this point.

The delay for the 40GBASE-CR4 PMD layer to the MDI is 6144 bit times minus the one way delay through the medium (2072 bit times) = 4072 bit times. Divide by 512 = 7.95 which rounds up to 8 pause_quanta. Using 8 instead of 12 for the 40GBASE-CR4 PMD gives 118 pause_quanta total as in 31B.3.7

The delay for the 100GBASE-CR10 PMD layer to the MDI is 14848 bit times minus the one way delay through the medium (5180 bit times) = 9668 bit times. Divide by 512 = 18.88 which rounds up to 19 pause_quanta. Using 19 instead of 29 for the 100GBASE-CR10 PMD gives 394 pause_quanta total as in 31B.3.7

In Table 80-3:
For 40GBASE-CR4 PMD change:
Maximum (bit time) from 6144 to 4096
Maximum (pause_quanta) from 12 to 8
Maximum (ns) from 153.6 to 102.4
Notes from "Includes delay of one direction through cable medium. See 85.4." to: "Does not include delay through cable medium. See 85.4."

For 100GBASE-CR10 PMD change:
Maximum (bit time) from 14848 to 9728
Maximum (pause_quanta) from 29 to 19
Maximum (ns) from 148.48 to 97.28
Notes from "Includes delay of one direction through cable medium. See 85.4." to: "Does not include delay through cable medium. See 85.4."

In 85.4 change:
"The sum of the transmit and the receive delays at one end of the link contributed by the 40GBASE-CR4 PMD, AN, and the medium in one direction shall be no more than 6144 bit times (12 pause_quanta or 153.6 ns). It is assumed that the one way delay through the medium is no more than 2072 bit times (51.8 ns).
The sum of the transmit and the receive delays at one end of the link contributed by the 100GBASE-CR10 PMD, AN, and the medium in one direction shall be no more than 14848 bit times (29 pause_quanta or 148.48 ns). It is assumed that the one way delay through the medium is no more than 5180 bit times (51.8 ns)." to:
"The sum of the transmit and the receive delays at one end of the link contributed by the 40GBASE-CR4 PMD and AN shall be no more than 4096 bit times (8 pause_quanta or 102.4 ns). The delay through the medium is not included.
The sum of the transmit and the receive delays at one end of the link contributed by the 100GBASE-CR10 PMD and AN shall be no more than 9728 bit times (19 pause_quanta or 97.28 ns). The delay through the medium is not included."

Cl **80** *SC* **80.4** *P* **67** *L* **22** # 314

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

In Table 80-3, item 40GBASE-FR PMD, "89.3.1" should be a link and the row should have a thin lower border

SuggestedRemedy

Make it a link and fix the border

Response *Response Status* **C**

ACCEPT.
See also comments #272 and #131

Cl **80** *SC* **80.4** *P* **67** *L* **23** # 131

Ganga, Ilango Intel

Comment Type **E** *Comment Status* **A**

Remove bold line between rows for 40GBASE-FR and LR4 PMDs.

SuggestedRemedy

As per comment

Response *Response Status* **C**

ACCEPT.
See also comment #314

Cl **80** *SC* **80.4** *P* **67** *L* **23** # 272

Trowbridge, Steve — Alcatel-Lucent

Comment Type **E** *Comment Status* **A**

Lines above and below 40GBASE-LR4 PMD are thicker than those in the rest of the table

SuggestedRemedy

Make lines in table consistent width

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
The line below 40G-BASE-LR4 is thick to help separate the 40G PMDs from the 100G PMDs. See response to comment #314

Cl **80** *SC* **80.5** *P* **70** *L* **15** # 140

Ganga, Ilango — Intel

Comment Type **ER** *Comment Status* **A**

In Table 80-4: Item SP4; Add missing reference to 89.3.2

SuggestedRemedy

As per comment

Response *Response Status* **C**

ACCEPT.
See also comment #313

Cl **80** *SC* **80.5** *P* **70** *L* **15** # 313

Anslow, Peter — Ciena

Comment Type **E** *Comment Status* **A**

In Table 80-4 Item SP4, the change made by 802.3bg has not been implemented.
Also, the instances of "89.3.2" are not links (or in Table 80-5)

SuggestedRemedy

Add "or 89.3.2"
make all instances of "89.3.2" links in Tables 80-4 and 80-5

Response *Response Status* **C**

ACCEPT.
See also comment #140

Cl **82** *SC* **82.1.5** *P* **100** *L* **23** # 281

Trowbridge, Steve — Alcatel-Lucent

Comment Type **T** *Comment Status* **R**

It doesn't seem that the bi-directional arrow is correct between the "Alignment Lock/Lane Deskew" block and the "BER Monitor" block. The BER Monitor State Diagram (Figure 82-13) looks at sync headers and controls the "HIGH_BER" variable, but I don't see that this is fed back into either the alignment marker lock or block lock state diagrams. It seems that if you have a bunch of bad sync headers, the way you lose alignment lock is that you first lose block lock (Figure 82-10 is independently looking at sync headers on a per-PCS lane basis).

SuggestedRemedy

Change the arrow to a single-ended arrow pointing left

Response *Response Status* **C**

REJECT.
The state of the hi_ber variable controls whether the PCS processes blocks or not. 82.2.1 contains:

"When the PCS deskew process has obtained alignment, the BER monitor process monitors the signal quality asserting hi_ber if excessive errors are detected. When align_status is asserted and hi_ber is de-asserted, the PCS Receive process continuously accepts blocks and generates RXD <63:0> and RXC <7:0> on the XLGMII/CGMII."

Cl **82** *SC* **82.2.18.2.2** *P* **116** *L* **51** # 372

Anslow, Peter — Ciena

Comment Type **T** *Comment Status* **A**

Item signal_ok has "...value of inst:IS_UNITDATA.indication(SIGNAL_OK)" but this should be: "...value of inst:IS_SIGNAL.indication(SIGNAL_OK)"

SuggestedRemedy

change
"...value of inst:IS_UNITDATA.indication(SIGNAL_OK)" to:
"...value of inst:IS_SIGNAL.indication(SIGNAL_OK)"

Response *Response Status* **C**

ACCEPT.

Cl **82** *SC* **82.2.3.3** *P* **105** *L* **53** # 114

Ewen, John IBM

Comment Type **E** *Comment Status* **A**

Footnote 6 states that there are 4 unused block type field values that maintain a 4-bit Hamming distance. 0x55 seems to be missing from this list.

SuggestedRemedy

Change footnote 6 to:

The block type field values have been chosen to have a 4-bit Hamming distance between them. There are five unused values that
maintain this Hamming distance: 0x00, 0x2D, 0x33, 0x55, and 0x66.

Response *Response Status* **C**

ACCEPT.

Cl **82** *SC* **82.2.3.3** *P* **106** *L* **32** # 308

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

"G.709[Bx1]" should be "G.709[B50]"

SuggestedRemedy

Change "G.709[Bx1]" to "G.709[B50]" (2 instances)

Response *Response Status* **C**

ACCEPT.

Cl **82** *SC* **82.2.3.3** *P* **106** *L* **35** # 273

Trowbridge, Steve Alcatel-Lucent

Comment Type **E** *Comment Status* **A**

Missing space between "seeITU"

SuggestedRemedy

Change "seeITU" to "see ITU"

Response *Response Status* **C**

ACCEPT.

Cl **83** *SC* **83.5.10** *P* **147** *L* **41** # 79

Dawe, Piers IPtronics

Comment Type **T** *Comment Status* **A**

This sentence:
The checker shall increment the test-pattern error counter by one for each incoming bit error in the PRBS31 pattern (see 49.2.8) for isolated single bit errors.
Causes confusion. The reference specifies the pattern but it also contains a different error counter.
There are four paragraphs that normatively generate or check PRBS31 and two for PRBS9. Giving the reference for each pattern each time seems unnecessary. the first paragraph says "shall generate a PRBS31 pattern (as defined in 49.2.8) on
each of the lanes" which seems enough. The other two paragraphs say e.g. "when send Tx PRBS9 test-pattern mode (see 68.6.1) is enabled" but 68.6.1 does not define a test-pattern mode, a table within it defines PRBS9.

SuggestedRemedy

Delete "(see 49.2.8)" here.
Change
If supported, when send Tx PRBS9 test-pattern mode (see 68.6.1) is enabled by the PRBS9_enable and PRBS_Tx_gen_enable control variables, the PMA shall generate a PRBS9 pattern on each lane...
to
If supported, when send Tx PRBS9 test-pattern mode is enabled by the PRBS9_enable and PRBS_Tx_gen_enable control variables, the PMA shall generate a PRBS9 pattern (as defined in Table 68-6) on each lane...
and change
If supported, when send Rx PRBS9 test-pattern mode (see 68.6.1) is enabled by the PRBS9_enable and PRBS_Rx_gen_enable control variables, the PMA shall generate a PRBS9 pattern on each lane...
to
If supported, when send Rx PRBS9 test-pattern mode is enabled by the PRBS9_enable and PRBS_Rx_gen_enable control variables, the PMA shall generate a PRBS9 pattern on each lane...

Response *Response Status* **C**

ACCEPT.

Cl **83** *SC* **83.7.4** *P* **156** *L* **24** # 274

Trowbridge, Steve Alcatel-Lucent

Comment Type **E** *Comment Status* **A**

Missing space in "Skewvariation"

SuggestedRemedy

Change "Skewvariation" to "Skew variation"

Response *Response Status* **C**

ACCEPT.

Cl **83A** *SC* **83A.3.3.1** *P* **302** *L* # 110

Dawe, Piers IPtronics

Comment Type **TR** *Comment Status* **R**

According to the PCI Express Base Specification Revision 3.0,
De-emphasis = 20log10 Vb/Va, where in our terminology Vb is VMA and Va is differential peak-to-peak amplitude.
Or, from the same document,
VTX-DE-RATIO = -20log10 (VTX-DIFF-PP/VTX-DE-EMPH-PP), where in our terminology VTX-DIFF-PP is differential peak-to-peak amplitude and VTX-DE-EMPH-PP is VMA.
Example: -3.5 dB De-emphasis
So, it is clear that more negative de-emphasis is more emphasis, in line with what de- means in English.
But 83A and 83B have got this upside down.

SuggestedRemedy

Either change the sign of all entries for de-emphasis, paying attention to maxima and minima, and equation 83B-6 (about 12 changes in all of Section 6 including consequential changes such as PICS);
or change "de-emphasis" to "emphasis and keep the positive sign. 24 changes, easy to do.

Response *Response Status* **U**

REJECT.
De-emphasis is an industry standard term where implementations are de-emphasizing low frequency content.
This was repeatedly debated during the development of the 802.3ba amendment with no consensus to change from the current usage.
See Comment #84 against D2.2
http://ieee802.org/3/ba/public/sep09/P8023ba-D22-Final_Responses_byID.pdf
See Comment #55 against D2.3
http://ieee802.org/3/ba/public/nov09/P8023ba-D23-Final_Responses_byID.pdf
See Comment #318 against D3.0
http://ieee802.org/3/ba/public/jan10/P8023ba-D30-Final_Responses_byID.pdf

Cl **83B** *SC* **2.1** *P* **359** *L* # 148

Palkert, Thomas Luxtera

Comment Type **TR** *Comment Status* **A**

Table 83B-2 specifies module output common mode output return loss. This spec. was added to limit EMI. It has been shown that there is no correlation between common mode return loss and EMI.

SuggestedRemedy

Delete common mode return loss from Table 83B-2

Response *Response Status* **C**

ACCEPT.

Cl **83B** *SC* **83B.1** *P* **317** *L* **22** # 105

Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A**

Text says "Equation (83B-1) for the host and Equation (83B-2) for the module. ... Equation (83B-1) is illustrated in Figure 83B-1 and Equation (83B-2) is illustrated in Figure 83B-1." However, Figure 83B-1 shows the module insertion loss and not the host insertion loss.

SuggestedRemedy

Add the line for the host insertion loss to Figure 83B-1.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

This is an Erratum as these graphs were corrupted between D3.2 and the published version of 802.3ba.
Show the graphs as Figures 83B-1 and 83B-2 as per D3.2 of 802.3ba

Cl **83B** *SC* **83B.2.1** *P* **323** *L* **1** # 143

King, Jonathan Finisar

Comment Type **TR** *Comment Status* **A**

Equation 83B-6 allows compliant module XLAUI/CAUI transmitters to have unreasonably low VMA values for short transition time module outputs.

As well as eqn 83B-6, a minimum 272 mV VMA is implied by the electrical eye mask definition in Table 83B-3, which is for a 0 dB de-emphasis signal and any rise time. During development of 83B, a Finite Impulse Response (FIR) implementation with constant main tap was assumed for adding de-emphasis; the intent was that the minimum VMA spec'd in 83B-6 should be consistent with an FIR implementation of de-emphasis for the 0dB de-emphasis transmitter eye mask test value, and for the operating range of 3.5 to 6 dB de-emphasis range.
The issues and proposed remedy are described in the supporting presentation:
The issue can be resolved by adding a lower limit of 38 to the value of x used in equation 83B-6.
http://www.ieee802.org/3/maint/public/king_1_0911

SuggestedRemedy

Implement the changes on slide 7 of presentation
http://www.ieee802.org/3/maint/public/king_1_0911

Response *Response Status* **C**

ACCEPT.

Cl **85** *SC* **10.9.3** *P* **204** *L* # 146

Palkert, Thomas Luxtera

Comment Type **T** *Comment Status* **A**

85.10.9.3 specifies common mode output return loss. This spec. was added to limit EMI. It has been shown that there is no correlation between common mode return loss and EMI.

SuggestedRemedy

Eliminate section 85.10.9.3 and fig. 85-17.

Response *Response Status* **C**

ACCEPT.

Cl **85** *SC* **10.9.5** *P* **206** *L* **35** # 151

Palkert, Thomas Luxtera

Comment Type **TR** *Comment Status* **R**

The mated test fixture ICN values were generated based on a 4 lane interface. The values are used for both 4 and 10 lane implementations and need to be modified to include the performance of 10 lane compliance boards.

SuggestedRemedy

Modify the values in Table 85-12 per the following:
Change SDNEXT from 0.7 to 3.0
Change SDFEXT from 2.5 to 4.0
Change MDNEXT from 1.0 to 3.5
Change MDNEXT from 3.5 to 5.0

Response *Response Status* **U**

REJECT.

This modification would modify the specifcation for the 4 lane interfaces as well as the 10 lane interfaces.
The commenter has not provided information on the impact of this change on the SR10 specifications such as the jitter budget.
The chair has appointed an Adhoc to gather more information on the impact of this proposed change.

Cl **85** *SC* **8.3** *P* **182** *L* # 147

Palkert, Thomas Luxtera

Comment Type **T** *Comment Status* **A**

Table 85-5 specifies common mode output return loss. This spec. was added to limit EMI. It has been shown that there is no correlation between common mode return loss and EMI.

SuggestedRemedy

Remove the common mode return loss spec and consider adding an intra pair skew specification to limit EMI.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Remove the common mode return loss spec.

Cl **85** *SC* **85.10.7** *P* **201** *L* **40** # 111

Dudek, Mike QLogic

Comment Type **ER** *Comment Status* **A**

Figure 85-12 is incorrect.

SuggestedRemedy

Copy it from 802.3ba

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

The editor changed the clause from 00 to 85.

See also #170

Cl **85** *SC* **85.8** *P* **181** *L* **48** # 428

Maguire, Valerie Siemon

Comment Type **TR** *Comment Status* **R**

Balanced twisted-pair and optical fiber MDI interfaces are interoperable between vendors. In addition, industry comparative evaluation events (e.g. Ethernet Alliance Plugfests) go to great lengths to ensure interoperability between equipment manufactured by different vendors. In may cases, however, EEPROM circuitry is built into 40GBASE-CR4 and 100GBASE-CR10 MDIs for the specific purpose of ensuring that products between vendors DO NOT work together. This is outside the spirit of an applications Standard that specifies generic performance requirements and should not be allowed.

SuggestedRemedy

Insert new clause:
"85.8.1 Interoperability

The 40GBASE-CR4 and 100GBASE-CR10 MDI shall not contain circuitry or use other means to prohibit interoperability between compliant interfaces and cable assemblies.

Response *Response Status* **U**

REJECT.
An interface that does not operate according to the requirements for 40GBASE-CR4 when connected to equipment from a different vendor (that does meet the requirements for 40GBASE-CR4) is already non-compliant with the 40GBASE-CR4 specification (likewise for 100GBASE-CR10), so no new subclauses are needed.

Cl **85** *SC* **85.8.3** *P* **182** *L* **38** # 116

Healey, Adam LSI Corporation

Comment Type **T** *Comment Status* **A**

Table 85-5 defines the limit to "max normalized error (linear fit), e" of 0.037 and refers to 85.8.3.3. However, 85.8.3.3 limits the RMS value of the error to 0.037. The label in Table 85-5 should be updated to reduce the possibility for confusion.

SuggestedRemedy

In Table 85-5, change "max normalized error (linear fit)" to "max RMS normalized error (linear fit)".

Response *Response Status* **C**

ACCEPT.

Cl **85** *SC* **85.8.3.3** *P* **185** *L* **52** # 119

Healey, Adam LSI Corporation

Comment Type **TR** *Comment Status* **A**

The RMS value of the linear fit error, e, is required to be less than 0.037 for each configuration of the transmit equalizer. Linear fit pulse values in the time window of [-D_p, N_p-D_p-1) unit intervals are excluded from the linear fit error calculation. D_p is set to 1 and N_p is set to 7 in Table 85-6.

However, decreasing c(-1) values (negative quantity) yield increasing "pre-shoot" in the linear fit pulse and much of this pre-shoot occurs outside of the exception window i.e. prior to -1 unit intervals. This pre-shoot incorrectly influences the linear fit error measurement because it does not represent an actual link impairment. It is the consequence of over-equalizing the host channel with c(-1) values that were provisioned for the end-to-end channel i.e. two host channels and cabling. Given the 10GBASE-KR start-up protoocol is leveraged by 40GBASE-CR4 and 100GBASE-CR10 to tune the transmit equalizer for best performance, it is unlikely that a receiver will tune the transmitter to over-equalize the channel.

It can be shown that changing D_p to 2 eliminates the influence of pre-shoot even for over-equalized cases. N_p would need to be increased to 8 to avoid changing the upper boundary of the exception window.

SuggestedRemedy

Change D_p to 2 and N_p to 8 in Table 85-6.

Response *Response Status* **C**

ACCEPT.

Cl **85** *SC* **85.8.3.3.5** *P* **187** *L* **10** # 117

Healey, Adam LSI Corporation

Comment Type **TR** *Comment Status* **A**

Equation (85-5) is incorrect. The last term in the square brackets should be x(D_p) and not x(N-D_p).

SuggestedRemedy

Change the last term in the square brackets to x(D_p).

Response *Response Status* **C**

ACCEPT.

Cl **85** *SC* **85.8.3.3.6** *P* **187** *L* **51** # 118

Healey, Adam — LSI Corporation

Comment Type **TR** *Comment Status* **A**

Equation (85-10) is incorrect. The last term in the square brackets should be p_i(D_w) and not p_i(N-D_w).

SuggestedRemedy

Change the last term in the square brackets to p_i(D_w).

Response *Response Status* **C**

ACCEPT.

Cl **85** *SC* **Figure 85-12** *P* **201** *L* **29** # 170

Grow, Robert — Intel

Comment Type **ER** *Comment Status* **A**

Something happend in the merge to make the figure unreadable.

SuggestedRemedy

Fix.

Response *Response Status* **C**

ACCEPT.

See #111

Cl **86** *SC* **86.1** *P* **221** *L* **10** # 104

Dawe, Piers — IPtronics

Comment Type **E** *Comment Status* **A**

Croos-references to other clauses don't seem to be working. Cross-references to base document not made.

SuggestedRemedy

Please fix.

Response *Response Status* **C**

ACCEPT.

Cl **86** *SC* **86.1** *P* **222** *L* **43** # 106

Dawe, Piers — IPtronics

Comment Type **TR** *Comment Status* **A**

The latest IEC 60793-2-10 includes OM4.

SuggestedRemedy

Change "50/125 um multimode, type A1a.2^a (OM3) or OM4^b" to "50/125 um multimode, type A1a.2 (OM3) or A1a.3 (OM4)^a"
Change
"a Type A1a.2 (OM3) specified in IEC 60793-2-10. See 86.10.2.1.
OM4 specified in TIA-492AAAD. See 86.10.2.1."
to
"a See 86.10.2.1."

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change:
"50/125 um multimode, type A1a.2^a (OM3) or OM4^b" to:
"50/125 um multimode, type A1a.2^a (OM3) or A1a.3^b (OM4)"
Also change:
"b OM4 specified in TIA-492AAAD. See 86.10.2.1" to:
"b Type A1a.3 (OM4) specified in IEC 60793-2-10. See 86.10.2.1.

See also comments #12, #45, #109, #108

Cl **86** *SC* **86.10.2.1** *P* **242** *L* **18** # 109

Dawe, Piers — IPtronics

Comment Type **TR** *Comment Status* **A**

The latest IEC 60793-2-10 includes OM4.

SuggestedRemedy

Change note b to "IEC 60793-2-10 type A1a.3".

Response *Response Status* **C**

ACCEPT.

See also comments #12, #45, #106, #108

Cl **86** *SC* **86.11.2.2** *P* **245** *L* **38** # 103

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A** *PICS*

Identification of protocol standard IEEE Std 802.3ba-2010

SuggestedRemedy

Identification of protocol standard IEEE Std 802.3-201x

Also for 86A.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
See Response to comment #261

Cl **86** *SC* **86.7.4** *P* **232** *L* **11** # 108

Dawe, Piers IPtronics

Comment Type **TR** *Comment Status* **A**

The latest IEC 60793-2-10 includes OM4.

SuggestedRemedy

Delete note b. Move the tag for note a to after "850 nm".

Response *Response Status* **C**

ACCEPT.

See also comments #12, #45, #106, #109

Cl **86** *SC* **86.8.1** *P* **232** *L* **49** # 102

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

Blank line.

SuggestedRemedy

Remove, and check that the layout of following pages is still OK.

Response *Response Status* **C**

ACCEPT.

Cl **86** *SC* **86.9.2** *P* **240** *L* **10** # 107

Dawe, Piers IPtronics

Comment Type **TR** *Comment Status* **R**

As IEC 60825-1 and IEC 60825-2 evolve, is this still Class 1M or is it now Class 1?

SuggestedRemedy

If Class 1 is now appropriate, change 1M to 1, here and in the PICS.

Response *Response Status* **C**

REJECT.
The technical analysis to determine whether this is now within the Class 1 limit of the latest version of IEC 60825-1 has not been provided.

Cl **86A** *SC* **4.1.2** *P* **380** *L* **30** # 149

Palkert, Thomas Luxtera

Comment Type **TR** *Comment Status* **A**

Table 86A-1 specifies host output common mode return loss. This spec. was added to limit EMI. It has been shown that there is no correlation between common mode return loss and EMI.

SuggestedRemedy

Delete common mode return loss from Table 86A-1 and delete section 86A.4.1.2

Response *Response Status* **C**

ACCEPT.

Cl **86A** *SC* **4.2.2** *P* **387** *L* **12** # 150

Palkert, Thomas Luxtera

Comment Type **TR** *Comment Status* **A**

Table 86A-3 specifies module common mode output return loss. This spec. was added to limit EMI. It has been shown that there is no correlation between common mode return loss and EMI.

SuggestedRemedy

Delete common mode return loss from Table 86A-3. Delete section 86A.4.2.2

Response *Response Status* **C**

ACCEPT.

Cl **87** *SC* **87.11.1** *P* **272** *L* **20** # 455

Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A**

Update Standards reference with current publication.

SuggestedRemedy

Replace:
"The 0.5 dB/km attenuation is provided for Outside Plant cable as defined in ANSI/TIA/EIA-568 B.3-2000."

with:
"The 0.5 dB/km attenuation is provided for Outside Plant cable as defined in ANSI/TIA-568-C.3.

Response *Response Status* **C**

ACCEPT.

Cl **87** *SC* **87.7** *P* **257** *L* **49** # 337

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

Fibre type "B6_A" in IEC 60793-2-50 should be shown with a lower case a

SuggestedRemedy

Change all instances of "B6_A" to "B6_a" in clauses 87 and 88

Response *Response Status* **C**

ACCEPT.

Cl **88** *SC* **88.11.1** *P* **296** *L* **20** # 409

Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A**

Update Standards reference with current publication.

SuggestedRemedy

Replace:
"The 0.5 dB/km attenuation is provided for Outside Plant cable as defined in ANSI/TIA/EIA 568-B.3-2000."

with:
"The 0.5 dB/km attenuation is provided for Outside Plant cable as defined in ANSI/TIA-568-C.3.

Response *Response Status* **C**

ACCEPT.

Cl **89** *SC* **89.1** *P* **267** *L* **9** # 315

Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

"G.693 [Bx1]" should be "G.693 [B49]" here, on line 11 and on Page 274 line 27

SuggestedRemedy

Change "G.693 [Bx1]" to "G.693 [B49]" (3 instances)

Response *Response Status* **C**

ACCEPT.

Cl **90** *SC* **90** *P* **287** *L* **1** # 80

Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A**

Rogue capitals. This phrase in the clause heading isn't a proper noun, although Time Synchronization Service Interface and Time Synchronization Protocol (TimeSync) Client may be. Words don't get capitals just because they are in a heading.

SuggestedRemedy

Change Ethernet Support for Time Synchronization Protocols
to
Ethernet support for time synchronization protocols

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* *P* *L* # 161

Grow, Robert Intel

Comment Type **E** *Comment Status* **A**

Boilerplate frontmatter could be improved.

SuggestedRemedy

Provide input topublications editor.
p. vi, l. 42, there is no information about errata at the cited URL. Errata should not be in included in the list on this line.
p. vi, l. 51, following the link take one to a list of all errata, in the case of 802.3, all have been superseded, but are not identified as such. The text either needs to indicate this or the site needs to have structure to segregate the superceded errata from current errata.
p. vii, l. 1, with Interpretations going away can we do away with this paragraph?

Response *Response Status* **C**

ACCEPT.

The editor changed the Clause from 00 to 99 as its related to the FM.

The FM is the responsibility of the WG Chair and IEEE Staff. Your comments will be provided to them to enhance the FM.

Cl **99** *SC* *P* **ii** *L* **12** # 262

Trowbridge, Steve Alcatel-Lucent

Comment Type **E** *Comment Status* **A**

Why is 10 Gigabit Ethernet singled out in the keywords but not other rates?

SuggestedRemedy

Either add other Ethernet rates (e.g., Fast Ethernet, 40 Gigabit Ethernet, 100 Gigabit Ethernet) to the keywords or remove 10 Gigabit Ethernet.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

The FM is the responsibility of the WG Chair and IEEE Staff. Your comments will be provided to them to enhance the FM.

Add new keywords for 40G and 100G

Cl **99** *SC* *P* **v** *L* # 89

Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A**

There are two things at the top level of the bookmarks called "Introduction", possibly next to each other. It makes it hard to know what one is talking about.

SuggestedRemedy

Please rename one or both of them so they have different names.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

The FM is the responsibility of the WG Chair and IEEE Staff. Your comments will be provided to them to enhance the FM.

One is the name of Clause 1, the other is an introduction in the Frontmatter.

Cl **99** *SC* *P* **vii** *L* **1** # 263

Trowbridge, Steve Alcatel-Lucent

Comment Type **E** *Comment Status* **A**

If the interpretations process has been stopped, it should no longer be discussed in the draft.

SuggestedRemedy

Remove mention of the interpretations process from the draft. Also mentioned other places in the front matter.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

The FM is the responsibility of the WG Chair and IEEE Staff. Your comments will be provided to them to enhance the FM.

Need to verify implementation date. Believe it will be January of next year,

Cl **99** *SC* **?** *P* **iv** *L* # 98

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

Text says "Users are cautioned to check to determine that they have the latest edition of any IEEE Standard" yet does not bother to refer the reader to page vi, "Updating of IEEE documents" or "Errata" or "Interpretations".

SuggestedRemedy

Could this be better organised?

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

The FM is the responsibility of the WG Chair and IEEE Staff. Your comments will be provided to them to enhance the FM.

Add a reference to the areas the commenter has indicated

Cl **99** *SC* **21** *P* **1** *L* # 63

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A** *Pub*

Page numbers are re-used in the different sections while clause numbers are not.

SuggestedRemedy

Although the numbers might get large, please consider having unique page numbers: either by continuing the numbers of the Arabic-numbered pages or (assuming we have less than 1000 pages per section), starting from 1001, 2001 and so on for the different sections.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Will discuss with Pub editors. Editor changed clause number from 21 to 99

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

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

If this "IMPORTANT NOTICE" is not repeated in each SECTION, it should appear before "SECTION ONE:". Also, there are disclaimers in at least three different places, e.g. iv, vii and here. They should be brought together.

SuggestedRemedy

Per comment.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Move the Important Notice above the para that starts Section 1.

The other disclaimers part of the FM, which is the responsibility of the WG Chair and IEEE Staff. Your comments will be provided to them to enhance the FM.

Cl **99** *SC* **99** *P* **i** *L* # 95

Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A**

The front matter is 19 pages long (before the contents) and contains several sections. Its structure is not very clear.

SuggestedRemedy

Consider numbering these sections 0.1 0.2 and so on. Bookmark some sections. Add the heading "Contents" to the contents.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Will look to restructure to make the FM shorter and more crisp

The FM is the responsibility of the WG Chair and IEEE Staff. Your comments will be provided to them to enhance the FM.

Cl **99** *SC* **99** *P* **iii** *L* # 87

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

Odd numbered pages of front matter don't have line numbers.

SuggestedRemedy

Please fix.

Response *Response Status* **C**

ACCEPT.

The FM is the responsibility of the WG Chair and IEEE Staff. Your comments will be provided to them to enhance the FM.

Cl **99** *SC* **Errata** *P* **vi** *L* **50** # 81

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

Draft says "Errata, if any, for this and all other standards can be accessed at" an IEEE URL.
It's not so. IEEE is not the whole world; there are plenty of other standards, including ones we use, with errata elsewhere. In any case the web site denies it: "Not all of the available IEEE standards errata and or corrections are online, this list should not be considered to be comprehensive."

SuggestedRemedy

Change "all other" to "other IEEE".

Response *Response Status* **C**

ACCEPT.

The FM is the responsibility of the WG Chair and IEEE Staff. Your comments will be provided to them to enhance the FM.

Cl **99** *SC* **Errata** *P* **vi** *L* **50** # 82

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

The text "Errata, if any, for this and all other standards can be accessed at the following URL:", while not the printed link nor coloured blue, is clickable. Only the link should be clickable.

SuggestedRemedy

Please fix.

Response *Response Status* **C**

ACCEPT.

The FM is the responsibility of the WG Chair and IEEE Staff. Your comments will be provided to them to enhance the FM.

Cl **99** *SC* **Errata** *P* **vi** *L* **51** # 84

Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A**

http://standards.ieee.org/findstds/errata/index.html contains for example IEEE Corrections to 802.3ae, issued 2004. This should have been superseded by 802.3-2005 or 802.3-2008.

SuggestedRemedy

Obsolete errata should be identified as such.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Refer to staff.

Cl **99** *SC* **Errata** *P* **vi** *L* **51** # 83

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

Is http://standards.ieee.org/reading/ieee/updates/errata/index.html out of date? It redirects to http://standards.ieee.org/findstds/errata/index.html .

SuggestedRemedy

Consider changing the URL.

Response *Response Status* **C**

ACCEPT.

The FM is the responsibility of the WG Chair and IEEE Staff. Your comments will be provided to them to enhance the FM.

Cl **99** *SC* **Historical participants** *P* **vii** *L* # 92

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

Layout could be improved.

SuggestedRemedy

Make the table as wide as the text frame.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

The FM is the responsibility of the WG Chair and IEEE Staff. Your comments will be provided to them to enhance the FM.

Cl **99** *SC* **Historical participants** *P* **x** *L* # 91

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

Missing space in "22 March 2007(IEEE)"

SuggestedRemedy

Insert space after 2007

Response *Response Status* **C**

ACCEPT.

The FM is the responsibility of the WG Chair and IEEE Staff. Your comments will be provided to them to enhance the FM.

Cl **99** *SC* **Historical participants** *P* **xv** *L* # 96

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

I believe Jan P. Peeters Weem and Jan P. Peeters-Weem are the same.

SuggestedRemedy

Use just the one he chooses.

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **Interpretations** *P* **vii** *L* # 85

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

The text "Current interpretations can be accessed at the following URL:" is a link. It should not be.

SuggestedRemedy

Please fix.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

The FM is the responsibility of the WG Chair and IEEE Staff. Your comments will be provided to them to enhance the FM.

Interpretations may be deleted all together as other comments have pointed out the process is going away

Cl **99** *SC* **Interpretations** *P* **vii** *L* # 86

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

The link "http://standards.ieee.org/reading/ieee/in-terp/index.html" doesn't work because it has a hyphen in it. In any case, http://standards.ieee.org/reading/ieee/interp/index.html redirects to http://standards.ieee.org/findstds/interps/index.html

SuggestedRemedy

Please correct the URL.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

The FM is the responsibility of the WG Chair and IEEE Staff. Your comments will be provided to them to enhance the FM.

This may be deleted anyway as other comments have pointed out interpretations are going away

Cl **99** *SC* **Introduction** *P* **vi** *L* **10** # 90

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

Rogue capitals. This phrase isn't a proper noun, although it's a clause heading and Time Synchronization Service Interface and Time Synchronization Protocol (TimeSync) Client may be proper nouns.

SuggestedRemedy

specifies Ethernet Support for Time Synchronization Protocols
should be
specifies Ethernet support for time synchronization protocols

Response *Response Status* **C**

ACCEPT.

The FM is the responsibility of the WG Chair and IEEE Staff. Your comments will be provided to them to enhance the FM.

Cl **99** *SC* **Introduction** *P* **vi** *L* **9** # 88

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A** *CAPS*

According to the editors' guidelines, physical layer

SuggestedRemedy

should be Physical Layer, as elsewhere.

Response *Response Status* **C**

ACCEPT.

The FM is the responsibility of the WG Chair and IEEE Staff. Your comments will be provided to them to enhance the FM.

Cl **99** *SC* **Keywords** *P* **ii** *L* **15** # 160

Grow, Robert Intel

Comment Type **ER** *Comment Status* **A**

Add Backplane Ethernet to keywords

SuggestedRemedy

Add backplane Ethernet to keywords

Response *Response Status* **C**

ACCEPT.

The FM is the responsibility of the WG Chair and IEEE Staff. Your comments will be provided to them to enhance the FM.

Cl **99** *SC* **List of special symbol** *P* **xix** *L* # 94

Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

Most of the Greek letters are described by name and case. For consistency,

SuggestedRemedy

change "Lambda" to "Lower case lambda", "Micro" to "Lower case mu", "Omega" to "Capital omega".

Response *Response Status* **C**

ACCEPT.

The FM is the responsibility of the WG Chair and IEEE Staff. Your comments will be provided to them to enhance the FM.

Cl **99** *SC* **List of special symbol** *P* **xix** *L* # 93

Dawe, Piers IPtronics

Comment Type **ER** *Comment Status* **A**

This isn't the up-to-date list of special symbols. The version in P8023ba-D32.pdf contains approximately equal to and capital pi.

SuggestedRemedy

Please use the correct version and maintain proper version control.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

The FM special symbols page is the responsibility of the WG Chair. Your comments will be provided to him to enhance the FM.

Cl **A** *SC* *P* **516** *L* **10** # 100

Dawe, Piers IPtronics

Comment Type **T** *Comment Status* **A** *FC-PH*

Has this standard been withdrawn? [B22] ANSI X3.230-1994 (FC-PH), Information Technology—Fibre Channel—Physical and Signaling Interface.

SuggestedRemedy

If it has, there are replacement documents in the FC series. It's mentioned in 36.3.8 and in 38.6.4 Relative Intensity Noise (RIN) - a normative reference.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change reference to ANSI X3.230-1994 (FC-PH) to ANSI/INCITS 450-2009 (FC-PI-4), conditional on confirmation with the FC expert.

Cl **A** *SC* **Annex A** *P* **515** *L* **3** # 448
Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A**

This Standard is not referenced in the document.

SuggestedRemedy

Delete:
"[B19] ANSI/TIA/EIA-568-B: 2001, Commercial Building Telecommunications Cabling Standard."

and re-number accordingly.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Replace with "[B19] ANSI/TIA/EIA-568-B series, Commercial Building Telecommunications Cabling Standard."

Cl **A** *SC* **annex A** *P* **515** *L* **32** # 431
Maguire, Valerie Siemon

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

Annex A.

There is no reference to this Standard in the document text.

SuggestedRemedy

Delete:
"[B10] ANSI/EIA/TIA 455-127-1991 (FOTP-127), Spectral Characterization of Multimode Lasers."

Re-number references accordingly.

Proposed Response *Response Status* **Z**

REJECT.

This comment was WITHDRAWN by the commenter.

Cl **B** *SC* **B.5.2** *P* **540** *L* **11** # 378
Anslow, Peter Ciena

Comment Type **E** *Comment Status* **A**

The text changes due to request 1213 could be shown more clearly.

SuggestedRemedy

The change on line 11 should be shown as: "cabled optical" in dark blue underlined font, "fiber" in normal font and "optic cable" in red strikethrough font.
In Table B-3 only "cabled optical" should be in blue underlined font
In Example 1 only "cabled" should be in blue underlined font

In Editor's note change "inserted based on" to "change based on"

Response *Response Status* **C**

ACCEPT.

Cl **B** *SC* **B.5.2** *P* **540** *L* **20** # 101
Dawe, Piers IPtronics

Comment Type **E** *Comment Status* **A**

Start the cell with a capital letter. Layout.

SuggestedRemedy

Change cabled to Cabled, and make the left column wider to fit its contents.

Response *Response Status* **C**

ACCEPT.

Cl **B** *SC* **B.5.2** *P* **540** *L* **33** # 444
Maguire, Valerie Siemon

Comment Type **E** *Comment Status* **A**

Update to most current reference

SuggestedRemedy

Replace:
"A horizontal structured building wiring system (e.g., as detailed in ANSI/TIA/EIA-568-A-1995) of 100 m from the wiring..."

with:
"A horizontal structured building wiring system (e.g., as detailed in ANSI/TIA-568-C.0) of 100 m from the wiring..."

Response *Response Status* **C**

ACCEPT.

Cl **H** *SC* **H.4.2** *P* **581** *L* **2** # 419

Maguire, Valerie Siemon

Comment Type **T** *Comment Status* **A** *UTP*

10BASE-T operates over shielded twisted-pair cabling.

SuggestedRemedy

Replace:
"UTP MAU as specified in Clause 14"

with:
"Twisted-pair MAU as specified in Clause 14"

Response *Response Status* **C**

ACCEPT.

Cl **H** *SC* **H3.1.1** *P* **575** *L* **38** # 152

Grow, Robert Intel

Comment Type **T** *Comment Status* **A** *8802*

Because we have flip-flopped on withdrawing 8802-3 we may want to do something about the arcs to isolate us from such indecision.

SuggestedRemedy

Consider advisability of changing the 17 8802 management arcs to an 802 arc.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

OBE by #329