Cl **00**　　　*SC*　　　　　　　　　*P*　　　　*L*　　　　**#** **168**
Turner, Michelle

Comment Type **E**　　　*Comment Status* **A**　　　　　　　*E168*

At the time of RevCom submittal please remember to supply a separate electronic file for each graphic in TIFF, GIF, EPS, or WMF formats. At this same time, please be sure to supply a list of names and addresses for all members of the working group. This will ensure that each member gets a complimentary copy of the standard upon publication.

SuggestedRemedy

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

All graphics will be in an approved format.

Cl **00**　　　*SC*　　　　　　　　　*P*　　　　*L*　　　　**#** **167**
Turner, Michelle

Comment Type **E**　　　*Comment Status* **A**　　　　　　　*E167*

I noticed on pages 9, 24, 27, 30-33, 35, 37, and 38, there are tables/ and or figures marked as informative in the normative part of the document. In the future, it is preferred that the informative part of the document be moved to an Annex and marked informative.

SuggestedRemedy

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

We acknowledge your point and in any future work we will create informative annexes.

Cl **00**　　　*SC*　　　　　　　　　*P* **1**　　*L* **30**　　　**#** **214**
Law, David　　　　　　　　　　　　　3Com

Comment Type **E**　　　*Comment Status* **A**　　　　　　　*E214*

At a minimum please include an expiration date for the draft, some introductory text would also be useful. Please see a IEEE P802.3ah draft for an example of this text.

SuggestedRemedy

See comment.

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

Editor will add

"This is the text proposed by the IEEE 802.3ak Task Force editor as draft D5.1 of an amendment to IEEE Std 802.3™-2002 as amended by IEEE Std 802.3-2002ae, IEEE STd 802.3af-2003 and IEEE Std 802.3aj-2003. This draft is being distributed for ballot, as the first recirculation ballot, by the IEEE-SA Balloting Center. The draft has no special status, and THE ENTIRE DRAFT IS SUBJECT TO CHANGE. The formal expiration date of this draft is October 17, 2003." to the bottom of page 1.

Cl **00**　　　*SC*　　　　　　　　　*P* **1**　　*L* **5**　　　**#** **218**
Law, David　　　　　　　　　　　　　3Com

Comment Type **E**　　　*Comment Status* **A**　　　　　　　*E218*

I belive the text 'Draft amendment to IEEE Standard for' should proceed this text.

SuggestedRemedy

Change the text 'Information technology—' to read 'Draft Amendment to IEEE Standard for Information technology—'

Proposed Response　　　*Response Status* **C**
ACCEPT IN PRINCIPLE.

add line
"Draft Amendment to IEEE Standard for"
above
"Information technology"

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

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Cl **00**　　　*SC*

Cl **00**   *SC*   *P* **2**   *L* **15**   # **216**
Law, David   3Com

Comment Type   **E**   *Comment Status*   **A**   *E216*

Duplicate text. Line 15 states 'Editorial notes will not be carried over into future editions.' then line 17 states 'Editorial notes will not be carried over into future editions because the changes will be incorporated into the base standard.'.

SuggestedRemedy

Suggest that the boilerplate text from the style guide be used here, see Clause 21 [http://grouper.ieee.org/groups/1057/2000Style.pdf#page=27].

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

Cl **00**   *SC*   *P* **2**   *L* **2**   # **217**
Law, David   3Com

Comment Type   **E**   *Comment Status*   **A**   *E217*

Please correct title, IEEE Std 802.3-2002 is now ammended by IEEE Std 802.3ae-2003, IEEE STd 802.3af-2003 and IEEE Std 802.3aj-2003.

SuggestedRemedy

See comemnt.

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

Cl **00**   *SC*   *P* **2**   *L* **8**   # **133**
Grow, Robert   Intel

Comment Type   **E**   *Comment Status*   **A**   *E164*

Add helpful information to EDITORIAL NOTE.

SuggestedRemedy

At end of first paragraph, insert: (This amendment does not modifiy any text of IEEE Std 802.3af-2003 or IEEE Std 802.3aj-2003.)

Proposed Response   *Response Status*   **C**
ACCEPT IN PRINCIPLE.

See comment #164

Cl **00**   *SC*   *P* **3**   *L* **1**   # **215**
Law, David   3Com

Comment Type   **E**   *Comment Status*   **A**   *E215*

Please add the 'special symbols' page, this can be copied from IEEE P802.3ah.

SuggestedRemedy

See comment.

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

Cl **00**   *SC* **0**   *P* **1**   *L* **17**   # **126**
Grow, Robert   Intel

Comment Type   **E**   *Comment Status*   **A**   *E126*

Title should not have line break at hyphen

SuggestedRemedy

Insert line feed before ""Type"".

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

Cl **00**   *SC* **0**   *P* **1**   *L* **17**   # **75**
Dawe, Piers   Agilent

Comment Type   **E**   *Comment Status*   **A**   *E126*

Split-up type name

SuggestedRemedy

Can you use a non-breaking hyphen in '10GBASE-CX4' ?

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

See comment #126

Cl **00**   *SC* **0**   *P* **2**   *L* **1**   # **76**
Dawe, Piers   Agilent

Comment Type   **E**   *Comment Status*   **A**   *E76*

Admendment (in header)

SuggestedRemedy

Amendment

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

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

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Cl **00**   *SC* **0**

Cl **00**　　*SC* **0**　　　　　　*P* **2**　　　*L* **1**　　　**#** 137
Grow, Robert　　　　　　　　　Intel

Comment Type **E**　　*Comment Status* **A**　　　　　　*E137*
""Amended"" should be lower case.

SuggestedRemedy
Amended -> amended

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

Cl **00**　　*SC* **0**　　　　　　*P* **2**　　　*L* **1**　　　**#** 77
Dawe, Piers　　　　　　　　　Agilent

Comment Type **E**　　*Comment Status* **A**　　　　　　*E77*
More capitalisation than necessary p2 line 1　Amended p20 line 3　Transmit, Receive p20 line 38　Lane p22 line 37　Loopback (several times) p24 line 22　Informative p26 line 15 Signal Shield p30 line 6　Informative p31 line 18　Informative p38 line 52　Clause p39 line 1　Clause

SuggestedRemedy
I believe these should be lower case.

Proposed Response　　　*Response Status* **C**
ACCEPT IN PRINCIPLE.

All to be change to lower case except:

p26, line 15 "Signal Shield" because that is the exact proper name given in Figure 54-3 on page 25.

And

p38 line 52 "Clause" because that comes from a cross reference to the header for clause 54 on page 17.

This is all subject to final editing by the publications editor.

Cl **00**　　*SC* **FM**　　　　　*P* **2**　　　*L* **6**　　　**#** 164
Thompson, Geoff

Comment Type **E**　　*Comment Status* **A**　　　　　　*E164*
The text: EDITORIAL NOTE?This amendment is based on the current edition of IEEE Std 802.3-2002 plus changes incorporated by IEEE 802.3ae-2002 is incorrect as this amendment needs to be based on all approved corrigenda and amendments to 802.3. This is particularly true for the numbering of items to be folded into Cl. 1

SuggestedRemedy
Change to: EDITORIAL NOTE?This amendment is based on the current edition of IEEE Std 802.3-2002 plus changes incorporated by all approved corrigenda and amendments (IEEE Std 802.3ae-2002, IEEE Std 802.3af-2003, IEEE Std 802.3aj-2003) AND make all appropriate textual changes to the document so that the above is true.

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

Cl **00**　　*SC* **General**　　　　*P*　　　*L*　　　**#** 132
Grow, Robert　　　　　　　　　Intel

Comment Type **E**　　*Comment Status* **A**　　　　　　*E132*
Font/style problems. Many of the titles (section and table) are in a serif font, when the IEEE style is sans serif. Because of different fonts, it is impossible to tell if font size is also a problem. Page 10, line 1 Page 11, lines 6, 20, 28 page 12, lines 1, 14 page 13, line 1 page 14, line 50 page 15, lines 8, 19 page 16, lines 1, 3 page 40, line 3

SuggestedRemedy
Check and apply correct style.

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

Cl **00**　　*SC* **General**　　　　*P*　　　*L*　　　**#** 151
Grow, Robert　　　　　　　　　Intel

Comment Type **TR**　　*Comment Status* **A**　　　　　　*TR151*
Subscripts are used inconsistently in the document. Sometimes ""pp"" is a subscript and sometimes just lower case characters.   I do not believe mVpp is a proper unit. A pdf search only shows it used in Clause 40 (not usually a good precident for specication technique), and never labled as a unit. I believe mV is the unit and pp how it is measured.

SuggestedRemedy
First verify (IEEE Std 260 I think) if mVpp is a valid unit of measurement. If I am correct, each instance of Vpp will need to be inspected with text edited as necessary to include pp parameter.

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

All instances of mVpp and mVp-p with or without subscripts will be replaced with mV and peak-to-peak in the text.

Cl **00**　　*SC* **General**　　　　*P* **4**　　　*L* **3**　　　# **130**

Grow, Robert　　　　　　　　　Intel

Comment Type　**E**　　*Comment Status*　**A**　　　　　*E130*

Improve editing instructions for material modified by amendments.

SuggestedRemedy

page 4, line 3 -- Change 30.5.1.1.2 as modified by IEEE Std 802.3ae-2002, as follows:
page 6, line 3 -- Change 30B.2 as modified by IEEE Std 802.3ae-2002, as follows:

Proposed Response　　　*Response Status*　**C**

ACCEPT.

Will use:
page 4, line 3: "Change 30.5.1.1.2 as amended by IEEE Std 802.3ae-2002, as follows"
and
page 6 line 3: "Change 30B.2 as amended by IEEE Std 802.3ae-2002, as follows:"

Cl **00**　　*SC* **General**　　　　*P* **5**　　　*L* **3**　　　# **127**

Grow, Robert　　　　　　　　　Intel

Comment Type　**E**　　*Comment Status*　**A**　　　　　*E127*

Change instructions chould reference the source amendment as an aid to the reader. Though as new clauses in 802.3ae, these proposed identifications are of significantly less value than the Std 802.3-2002 clauses modified by 802.3ae.

SuggestedRemedy

Consider inserting ""(IEEE Std 802.3ae-2002) following the subclause number in editing instructions at: page 8, lines 3, 11, 27 page 9, lines 4, 20, 47 page 10, lines 12, 34, 48 (insert after ""sections"") page 11, lines 8, 22, 30, 40, 46, 54 page 12, line 12 page 13, line 44 page 14, lines 3, 13, 44, 52 page 15, lines 11, 20, 31 page 16, line 5

Proposed Response　　　*Response Status*　**C**

ACCEPT.

Cl **00**　　*SC* **many**　　　　*P* **5**　　　*L* **9**　　　# **79**

Dawe, Piers　　　　　　　　　Agilent

Comment Type　**E**　　*Comment Status*　**A**　　　　　*E79*

100-Ohm, 100 ohms, 100Omega, 100 Omega, 100 Ohm, 100 ohm

SuggestedRemedy

Pick one. I suggest 100 Omega (using the Greek capital letter).

Proposed Response　　　*Response Status*　**C**

ACCEPT IN PRINCIPLE.

Will use 100 ohms, but will only change that which is explicity written for 10GBASE-CX4 (e.g. will not change 150-ohm for 1000BASE-CX on page 4 line 51).

Cl **01**　　*SC* **01.3**　　　　*P* **3**　　　*L* **9**　　　# **1**

Brown, Benjamin　　　　　　　Independent

Comment Type　**E**　　*Comment Status*　**A**　　　　　*E1*

Incorrect editing instruction per the header text on page 2

SuggestedRemedy

Replace ""Add"" with ""Insert"" here and page 10, line 48 page 11, line 46

Proposed Response　　　*Response Status*　**C**

ACCEPT IN PRINCIPLE.

See comment #129 for page 3, line 9.
page 10, line 48 page 11, line 46 per suggested remedy

Cl **01**　　*SC* **1.3**　　　　*P* **3**　　　*L* **3**　　　# **128**

Grow, Robert　　　　　　　　　Intel

Comment Type　**E**　　*Comment Status*　**A**　　　　　*E128*

Improper editing instruction

SuggestedRemedy

Replace editing instruction with: ""Insert the following paragraph in 1.3 in alphanumeric order:""

Proposed Response　　　*Response Status*　**C**

ACCEPT.

Cl **01**　　*SC* **1.3**　　　　*P* **3**　　　*L* **6**　　　# **78**

Dawe, Piers　　　　　　　　　Agilent

Comment Type　**E**　　*Comment Status*　**A**　　　　　*E78*

Punctuation

SuggestedRemedy

Change '113 .Connectors' to '113, Connectors'

Proposed Response　　　*Response Status*　**C**

ACCEPT.

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

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Cl **01**　　　*SC* **1.3**

Cl **01**   *SC* **1.4**   *P* **3**   *L* **11**   **# 166**

Thompson, Geoff

Comment Type **T**   *Comment Status* **A**   *T165*

The text: 1.4.276 Twinaxial cable: A pair of insulated conductors surrounded by a conductive sheath should not have a specific number. "xxx" is the convention. AND the defining text is insufficient to distinguish twinax from shielded twisted pair.

SuggestedRemedy

Put in new appropriate def'n and number it 1.4.xxx

Proposed Response   *Response Status* **C**

ACCEPT.

Will change text to:

1.4.xxx Twinaxial cable: A cable similar to coaxial cable in construction but containing two insulated inner conductors rather than one.

Cl **01**   *SC* **1.4**   *P* **3**   *L* **6**   **# 165**

Thompson, Geoff

Comment Type **E**   *Comment Status* **A**   *E165*

Missing heading text: Lines after line 5 are not references.

SuggestedRemedy

Put in missing heading for definitions.

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

Will add heading for line 9. Paragraph starting at line 5 is under heading 1.3.

Cl **01**   *SC* **1.4**   *P* **3**   *L* **8**   **# 129**

Grow, Robert   Intel

Comment Type **E**   *Comment Status* **A**   *E129*

Missing section title, and improper editing instruction. 1.4.276 is not the right number after applying 802.3ae delete and inserts.

SuggestedRemedy

Insert: 1.4 Definitions Replace editing instruction with: Insert the following alphabetically into 1.4. Renumber as required. 1.4.xxx Twinaxial cable: ..."″

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **01**   *SC* **1.4.276**   *P* **3**   *L* **11**   **# 169**

Thaler, Pat

Comment Type **TR**   *Comment Status* **A**   *TR169*

If one is defining twinax cable (which carries a single signal pair), then one should also define twinaxial cable assembly (which is the whole cable).

SuggestedRemedy

Add a definition for twinaxial cable assembly Perhaps "An assembly of the media for a single link for a PMD such as 10GBASE-CX4 containing multiple twin axial cables terminated in a connector at each end."

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

Will add definition:

1.4.xxx twinaxial cable assembly: An assembly containing multiple twinaxial cables terminated in a connector at each end, for use as a link segment between MDIs, such as that used in 10GBASE-CX4.

Cl **30B**   *SC* **30B.2**   *P* **6**   *L* **1**   **# 131**

Grow, Robert   Intel

Comment Type **E**   *Comment Status* **A**   *E131*

Annexes are after clauses even in change pages.

SuggestedRemedy

Move to end of change section., before annex 48B change instruction.

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **44**   *SC* **44.3**   *P* **9**   *L* **17**   **# 80**

Dawe, Piers   Agilent

Comment Type **E**   *Comment Status* **R**   *E80*

We don't want to tamper with 802.3ae but as this sentence doesn't affect compliance, we might as well fix it: The sentence 'The speed of light in a vacuum is c = 3 x 10 8 m/s.' is written as a statement of fact and is not quite true.

SuggestedRemedy

Change to 'is nearly' or 'is approximately' or maybe better, 'is very close to'.

Proposed Response   *Response Status* **C**

REJECT.

C is specified correctly for the level of precision offered (i.e. one significant digit).

Cl **44**   *SC* **44.3**   *P* **9**   *L* **44**   **#** **138**
Grow, Robert   Intel

Comment Type **E**   *Comment Status* **R**   *E138*
The new material should probably be added to the LX4 line.

SuggestedRemedy
With appropriate change marking make single table row read: Multi-lane PMD | 512 | 1 | LX4 PMD includes 2 meters of fiber, see 53.2. CX4 PMD, see 54.3.

Proposed Response   *Response Status* **C**
REJECT.

Since CX4 does not contain fiber it should be kept separate.

Cl **45**   *SC* **45.2.1 Table 45-2**   *P* **164**   *L*   **#** **31**
Baumer, Howard   Broadcom Corp

Comment Type **TR**   *Comment Status* **A**   *TR31*
Refering to 802.3ae-2003 register 1-11 in Table 45-2 on page 164 is labeled as reserved but it is the ""10G PMA/PMD extended ability register"".

SuggestedRemedy
Add a change instruction to change table 45-2 to indicate register address 1-11 is the ""10G PMA/PMD extended ability register"".

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

Cl **45**   *SC* **45.2.1.10**   *P* **11**   *L* **46**   **#** **139**
Grow, Robert   Intel

Comment Type **E**   *Comment Status* **A**   *E139*
Add is not one of the four defined change instructions.

SuggestedRemedy
Ewplace instruction with: Insert the following before 45.2.1.10 (IEEE Std 802.3ae). Renumber current 45.2.1.10, renumber current Tables 45-11 through 45-65. Delete the editing instruction on line 54.

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

Cl **45**   *SC* **45.2.1.10**   *P* **11**   *L* **50**   **#** **82**
Dawe, Piers   Agilent

Comment Type **E**   *Comment Status* **A**   *E82*
Grammar

SuggestedRemedy
The assignment ... is shown ...

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

Cl **45**   *SC* **45.2.1.6.1**   *P* **10**   *L* **28**   **#** **134**
Grow, Robert   Intel

Comment Type **E**   *Comment Status* **A**   *E134*
Incomplete marking of changes.

SuggestedRemedy
Need a line in strikethrough (or ""Reserved"" in strikethrough) 0 0 0= Reserved

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

Cl **45**   *SC* **45.2.1.7**   *P* **10**   *L* **34**   **#** **135**
Grow, Robert   Intel

Comment Type **E**   *Comment Status* **A**   *E135*
Confusing change instruction, only one bit is being modified.

SuggestedRemedy
Delete ""(s)"".

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

Cl **45**   *SC* **45.2.1.7**   *P* **10**   *L* **48**   **#** **136**
Grow, Robert   Intel

Comment Type **E**   *Comment Status* **A**   *E136*
Add is not one of the four defined change instructions.

SuggestedRemedy
Replace instruction with: Insert the following before 45.2.1.7.6 (IEEE Std 802.3ae). Renumber current 45.2.17.6 through 45.2.1.7.14.

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

Cl **45**   *SC* **45.2.1.7.4**   *P* **171**   *L*   # **233**

802.3ak Task Force

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

802.3ae 45.2.1.7.4 needs to be changed to include a reference for Transmit Fault to 10GBASE-CX4

SuggestedRemedy

Add editorial instruction to insert "The description of the transmit fault function for the 10GBASE-CX4 PMD is given in 54.4.10." after "The description of the transmit fault function for WWDM PMDs is given in 54.5.10."

Proposed Response   *Response Status*   **C**

ACCEPT.

Cl **45**   *SC* **45.2.1.7.5**   *P* **171**   *L*   # **234**

802.3ak Task Force

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

802.3ae 45.2.1.7.5 needs to be changed to include a reference for Receive Fault to 10GBASE-CX4

SuggestedRemedy

Add editorial instruction to insert "The description of the receive fault function for the 10GBASE-CX4 PMD is given in 54.4.11." after "The description of the receive fault function for WWDM PMDs is given in 54.5.11."

Proposed Response   *Response Status*   **C**

ACCEPT.

Cl **45**   *SC* **45.2.1.8**   *P* **11**   *L* **18**   # **81**

Dawe, Piers   Agilent

Comment Type   **T**   *Comment Status*   **A**   *T81*

Use of 'lane': 802.3ae has applied it to both optical and electrical signals. Phrase that seems to apply too widely.

SuggestedRemedy

line 18: Might change to 'multiple lane electrical PMDs': but anyway, this could be construed to define a XAUI tx disable. Assuming it doesn't, change to '10GBASE-CX4 PMDs'.

Proposed Response   *Response Status*   **C**

ACCEPT IN PRINCIPLE.

Will use: "4-Lane electrical PMDs", Because this is used in 44.1.4.4, Table 44-1.

Cl **45**   *SC* **45.2.1.8**   *P* **173**   *L*   # **235**

802.3ak Task Force

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

802.3ae 45.2.1.8 needs to be changed to include a reference for the transmit disable function to 10GBASE-CX4

SuggestedRemedy

Add editorial instruction to insert "The transmit disable function for the 10GBASE-CX4 PMD is described in 54.5.6 and 54.5.7." after "The transmit disable function for wide wavelength division multiplexing (WWDM) PMDs is described in 53.4.7."

Proposed Response   *Response Status*   **C**

ACCEPT.

Cl **45**   *SC* **45.5.5.3**   *P* **12**   *L* **44**   # **140**

Grow, Robert   Intel

Comment Type   **E**   *Comment Status*   **A**   *E140*

The PICS items are now out of section order. The intent of not changing the PICS number is laudable, but with inserts we usually go to a letter suffix.

SuggestedRemedy

Suggest changing the editing instructions to: Change PICS item MM43 in 45.5.5.3 (IEEE Std 802.3-2002) as follows: Then move current MM44 above current newly modified MM43 and renumber MM43a and MM43b.

Proposed Response   *Response Status*   **C**

ACCEPT.

Cl **45**   *SC* **Table 45-7**   *P* **10**   *L* **28**   # **2**

Brown, Benjamin   Independent

Comment Type   **E**   *Comment Status*   **A**   *E134*

Missing deletion

SuggestedRemedy

When assiging the value 10GBASE-CX4 to 000, you deleted the word Reserved. This word should still appear with strikethrough.

Proposed Response   *Response Status*   **C**

ACCEPT.

See comment #134

Cl **45**　　*SC* **Table 45-8**　　*P* **10**　　*L* **39**　　# **3**
Brown, Benjamin　　　　　　　　Independent

Comment Type **E**　　*Comment Status* **A**　　　　　*E3*
I believe it is typical to reproduce the entire table when a change is made to it, as was done to 45-7. At least, that's what I've been TR'ed on in EFM.

SuggestedRemedy
Reproduce the entire Table 45-8.

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

Cl **48**　　*SC* **48.1.2**　　*P* **14**　　*L* **13**　　# **219**
Law, David　　　　　　　　3Com

Comment Type **E**　　*Comment Status* **A**　　　　　*E219*
The editorial instruction should be replace, not change. If change is being used the changes need to be shown in underscore and strikethrough

SuggestedRemedy
Suggest that the text 'Change Figure 48-1 as follows (added 10GBASE-CX4 below 10GBASE-LX4):' should read 'Replace Figure 48-1 with the following (added 10GBASE-CX4 below 10GBASE-LX4):'.

Proposed Response　　*Response Status* **C**
ACCEPT IN PRINCIPLE.

According to the editorial instructions "change" is used when small changes are being made and "replace" is used when large sections of text are being used. Will add underline to "10GBASE-CX4"

Cl **48**　　*SC* **Figure 48-1**　　*P* **14**　　*L* **19**　　# **84**
Dawe, Piers　　　　　　　　Agilent

Comment Type **E**　　*Comment Status* **A**　　　　　*E84*
Obsolete style of diagram refers to ""LLC - LOGICAL LINK CONTROL"" as the exclusive MAC CLIENT for 802.3.

SuggestedRemedy
See fig 40-1 and e.g. 802.3ah D2.0 comment 989.

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

Will use Figure 40-1 wording

Cl **48**　　*SC* **Figure 48-1**　　*P* **14**　　*L* **19**　　# **83**
Dawe, Piers　　　　　　　　Agilent

Comment Type **E**　　*Comment Status* **A**　　　　　*E83*
Some of the dashed lines didn't print out and appear to be in grey in the pdf.

SuggestedRemedy
Change them to black. Also if convenient, change the grey fill to hatching per published 802.3ae.

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

Will consult with other framemaker experts to resolve this printout issue.

Cl **48**　　*SC* **Figure 48-1**　　*P* **14**　　*L* **37**　　# **85**
Dawe, Piers　　　　　　　　Agilent

Comment Type **E**　　*Comment Status* **R**　　　　　*E85*
10GIGABIT

SuggestedRemedy
10 GIGABIT

Proposed Response　　*Response Status* **C**
REJECT.

This is a comment against how the text is in 802.3ae. We are not fixing anything in 802.3ae, this should be done through a maintenance request.

Cl **54**　　*SC* **12.3.1**　　*P* **40**　　*L* **8**　　# **12**
Brown, Benjamin　　　　　　　　Independent

Comment Type **E**　　*Comment Status* **A**　　　　　*E12*
There is a PICs item, CC1, without a corresponding shall

SuggestedRemedy
Each shall needs exactly 1 PICS item

Proposed Response　　*Response Status* **C**
ACCEPT IN PRINCIPLE.

Will change text of 10.1 to "The data pattern for jitter measurements shall be the CJPAT ..."

Cl **54**   *SC* **54.1**   *P* **18**   *L* **8**   **#** **86**

Dawe, Piers   Agilent

Comment Type   **T**   *Comment Status*   **A**   *T86*

In EFM, the equivalent sentences to the following have been modified for two reasons:
1. The physical layer contains the RS while the PHY does not - as shown in e.g. Fig. 54-1, and;   2. The word ""integrated"" is troublesome. We think it was intended to mean connected with, but engineers will read it as meaning combined within the same physical unit - and that partitioning choice is an implementation choice and out of the scope of the standard. It was felt that the 'incorporated by reference' part had little value. Noting that EFM is likely to make clause 45 registers accessible through a clause 22 MDIO, we can pick up 54.5.8's neat phrase '45 or equivalent'. In the remedy below I also propose changing some words in the sentence to lower case. In order to form a complete PHY (physical layer device), a PMD is combined with the 100BASE-X PCS and PMA of Clause 24*ref*, and optionally combined with the management functions which may be accessible through the Management Interface defined in Clause 22*ref**.

SuggestedRemedy

Change: In order to form a complete PHY (physical layer device), the PMD shall be integrated with the appropriate physical sublayers (see Table 54-1) and with the management functions which are optionally accessible through the Management Interface defined in Clause 45, all of which are hereby incorporated by reference. to: In order to form a complete PHY (physical layer device), a PMD is combined with the appropriate sublayers (see Table 54-1), and with the management functions which are optionally accessible through the management interface defined in Clause 45, or equivalent. I think this means that PICS items XGE, XGXS and PCS can go. And I suppose the title to table 54-1 should be changed from '... physical layer clauses' to '... PHY (physical layer device) clauses'.

Proposed Response   *Response Status*   **C**

ACCEPT IN PRINCIPLE.

Change second sentence to:
"In order to form a complete PHY (physical layer device), a PMD is combined with the appropriate sublayers (see Table 54-1), and with the management functions which are optionally accessible through the management interface defined in Clause 45, or equivalent."

Change table 54-1 title to:
'PHY (physical layer) clauses associated with the 10GBASE-CX4 PMD'

Change "PCS" pics status to "O".

Cl **54**   *SC* **54.1**   *P* **19**   *L* **1**   **#** **221**

Law, David   3Com

Comment Type   **E**   *Comment Status*   **A**   *E221*

Suggest the text '.. of the PMD and ..' should be changed to read '.. of the 10GBASE-CX4 PMD and ..'.

SuggestedRemedy

See comment.

Proposed Response   *Response Status*   **C**

ACCEPT.

Cl **54**   *SC* **54.1**   *P* **19**   *L* **1**   **#** **220**

Law, David   3Com

Comment Type   **T**   *Comment Status*   **A**   *T220*

This text states '.. shows the relationship of the PMD and MDI sublayers ..' but is the MDI really a sublayer.

SuggestedRemedy

Clarify if the MDI is a sublayer and if it is not update the text appropriately.

Proposed Response   *Response Status*   **C**

ACCEPT.

Will change text to read "... the PMD sublayers and MDI ..."

Cl **54**   *SC* **54.1**   *P* **19**   *L* **16**   **#** **18**

Dove, Daniel   HP ProCurve Networki

Comment Type   **E**   *Comment Status*   **A**   *E18*

In figure 54-1, the box containing the words ""10GBASE-X PCS"" needs to be sized up a bit to contain the words completely. Right now the final ""S"" is covered by the line.

SuggestedRemedy

Resize the boxes containing PCS, PMA and PMD.

Proposed Response   *Response Status*   **C**

ACCEPT.

Cl **54**   *SC* **54.1.2**   *P* **19**   *L* **30**   # **171**

Dawe, Piers   Agilent

Comment Type **E**   *Comment Status* **R**   *E171*

Bearing in mind that: This addition may be published separately; Even if not, 802.3 is split into separate pdf files; and PMD clause readers often have more expertise in the matter in hand than in Ethernet generally; in EFM we have found it helpful to give guidance to the reader so that he can find the support material elsewhere in 802.3

SuggestedRemedy

Add a new subclause 54.1.3 Terminology and conventions. The following list contains references to terminology and conventions used in this clause: Basic terminology and conventions, see Clause 1.1 and Clause 1.2. Normative references, see Clause 1.3. Definitions, see Clause 1.4. Abbreviations, see Clause 1.5. Informative references, see Annex A. Introduction to 10 Gb/s baseband network, see Clause 44.

Proposed Response   *Response Status* **C**

REJECT.

This comment will be referred to the publications editor.

Cl **54**   *SC* **54.10**   *P* **38**   *L* **39**   # **42**

Baumer, Howard   Broadcom Corp

Comment Type **E**   *Comment Status* **A**   *E42*

This sub-clause only has one sub section. Standard outlining practices have 2 or more sub sections. This section does not explicity call out which patterns and procedures of Annex 48A are to be used.

SuggestedRemedy

Move this sub-clause to after 54.7.3.8 numbering it 54.7.3.9 and renumber all following sections accordingly. Change: ""... the CJPAT pattern defined in Annex 48A"" to ""... the CJPAT pattern defined in Annex 48A.5""

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.12**   *P* **39**   *L* **2**   # **124**

Dawe, Piers   Agilent

Comment Type **E**   *Comment Status* **A**   *E124*

Punctuation

SuggestedRemedy

Change 54., to 54,

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.12.2**   *P* **42**   *L* **7**   # **69**

Bradshaw, Peter   BitBlitz Communicatio

Comment Type **E**   *Comment Status* **A**   *TR54*

MF1: Global_PMD_Disable is optional (see 54.5.6, line 10), but the PICS treats it as mandatory.

SuggestedRemedy

Change the MF1 'Status' to MD:O, and allow a 'No [ ]' Support value

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

See comment $54

Cl **54**   *SC* **54.12.2.1**   *P* **39**   *L* **53**   # **74**

Bradshaw, Peter   BitBlitz Communicatio

Comment Type **E**   *Comment Status* **A**   *E74*

The Copyright release for PICS proforma uses 'in this annex'; it should be 'in this subclause' (as for 8.8.3.1, 14.10.1.4, 15.8.3.1, 17.5, 22.7.2.3, 45.5.4.2, ... & many more) (there is a use of 'in this clause' in 16.6.3.1, 18.5.2.2) In 802.3-2002, 'Annex' only appears in the PICS for Annex 31B & Annex 43B (correctly) and (incorrectly) in 43.7.2.1, whence it appears to have been copied into much of 802.3ae-2002.

SuggestedRemedy

Change 'in this annex' to 'in this subclause'

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.12.3.1**   *P* **40**   *L* **3**   # **43**

Baumer, Howard   Broadcom Corp

Comment Type **E**   *Comment Status* **A**   *E43*

There is only one sub-clause item, there should be 2 or more to have sub-clause items

SuggestedRemedy

Remove sub-clause 54.12.3.1 heading, leaving the table and its text under sub-clause 54.12.3

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.12.3.1**   *P* **40**   *L* **8**   # **44**
Baumer, Howard   Broadcom Corp

Comment Type **E**   *Comment Status* **A**   *E44*
Pics item CC1 is placed in the wrong section.

SuggestedRemedy
Move CC1 to 54.12.4.3 and place after DS14 renumber DS15 and up accordingly.

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

Cl **54**   *SC* **54.12.4**   *P* **40**   *L* **18**   # **159**
Grow, Robert   Intel

Comment Type **E**   *Comment Status* **A**   *E159*
The XGE major option is confusing because of the use of ""compatibility"".

SuggestedRemedy
Remove ""compatibility"" in both Feature and Value columns.

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

Cl **54**   *SC* **54.12.4**   *P* **40**   *L* **21**   # **45**
Baumer, Howard   Broadcom Corp

Comment Type **E**   *Comment Status* **A**   *E45*
Feature entry says ""XAUI / XGXS"" which is not what is in 54.1 Table 54-1

SuggestedRemedy
Changed ""XAUI / XGXS"" to ""XGXS and XAUI"" so it matches what is in Table 54-1

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

Cl **54**   *SC* **54.12.4**   *P* **40**   *L* **26**   # **46**
Baumer, Howard   Broadcom Corp

Comment Type **T**   *Comment Status* **A**   *T46*
Duplicat pics. This is covered by CA14. Further more there is no shall statement in for this pics.

SuggestedRemedy
Remove the pics item ""LANE""

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

Cl **54**   *SC* **54.12.4**   *P* **40**   *L* **30**   # **47**
Baumer, Howard   Broadcom Corp

Comment Type **E**   *Comment Status* **A**   *E47*
What is the purpose of the ""*"" in front of ""MD""?

SuggestedRemedy
Change ""*MD"" to ""MD""

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

Cl **54**   *SC* **54.12.4**   *P* **40**   *L* **36**   # **48**
Baumer, Howard   Broadcom Corp

Comment Type **T**   *Comment Status* **A**   *T48*
TP1 and TP4 pics have no textual reference.

SuggestedRemedy
Remove pics items TP1 & TP4.

Proposed Response   *Response Status* **C**
ACCEPT IN PRINCIPLE.

Will remove TP1 & TP4 pics. Comment is being corrected as 54.8 does reference TP1 & TP4.

Cl **54**   *SC* **54.12.4.1**   *P* **41**   *L* **16**   # **161**
Grow, Robert   Intel

Comment Type **E**   *Comment Status* **A**   *E161*
Typo.

SuggestedRemedy
Change ""SL0<p>/1"" to ""SL0<p>/<n>"".

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

Cl **54**   *SC* **54.12.4.1**   *P* **41**   *L* **20**   # **162**
Grow, Robert   Intel

Comment Type **E**   *Comment Status* **A**   *E162*
Incorrect language for the referenced shall. The first paragraph is about converting the electrical signals to PMD_UNITDATA.indicate signals.

SuggestedRemedy
Change ""Convey"" to ""Convert"".

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

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

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Cl **54**   *SC* **54.12.4.1**

Cl **54**   *SC* **54.12.4.1**   *P* **41**   *L* **30**   **#** **163**
Grow, Robert   Intel

Comment Type **E**   *Comment Status* **A**   *E163*
Improve the Comment.

SuggestedRemedy
Chante to read: ""Report state via PMD_SIGNAL.indicate(SIGNAL_DETECT)""

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

Cl **54**   *SC* **54.12.4.1**   *P* **41**   *L* **35**   **#** **49**
Baumer, Howard   Broadcom Corp

Comment Type **E**   *Comment Status* **A**   *E49*
PF11-18 numbering is not sequentially numbered from PF1-8.

SuggestedRemedy
Renumber PF11+ to be sequintial starting with PF9

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

Cl **54**   *SC* **54.12.4.1**   *P* **41**   *L* **35**   **#** **50**
Baumer, Howard   Broadcom Corp

Comment Type **TR**   *Comment Status* **A**   *TR50*
PF11 has no shall statement behind it.

SuggestedRemedy
Remove PF11

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

Cl **54**   *SC* **54.12.4.1**   *P* **41**   *L* **39**   **#** **51**
Baumer, Howard   Broadcom Corp

Comment Type **E**   *Comment Status* **A**   *E51*
Value / Comment field is incomplete and doesn't match the text of 54.5.4

SuggestedRemedy
Change: ""... at least 1 UI"" to ""... at least 1 UI on each of the 4 lanes""

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

Cl **54**   *SC* **54.12.4.1**   *P* **41**   *L* **44**   **#** **52**
Baumer, Howard   Broadcom Corp

Comment Type **E**   *Comment Status* **A**   *E52*
Value / Comment field is incomplete and doesn't match the text of 54.5.4

SuggestedRemedy
Change: ""... 250ms to 500ms"" to ""... 250ms to 500ms on any lane""

Proposed Response   *Response Status* **C**
ACCEPT IN PRINCIPLE.

Change: ""... 250us to 500us"" to ""... 250us to 500us on any of the 4 lanes""

Cl **54**   *SC* **54.12.4.1**   *P* **41**   *L* **47**   **#** **53**
Baumer, Howard   Broadcom Corp

Comment Type **TR**   *Comment Status* **A**   *TR53*
This pics item, PF16, is dependent on whether the MDIO is present or not and therefore should not be in this section with a status of ""M"".

SuggestedRemedy
Move pics item, PF16, to the mdio section, number accordingly, and set status to ""MD:M""

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

Cl **54**   *SC* **54.12.4.1**   *P* **41**   *L* **47**   **#** **13**
Brown, Benjamin   Independent

Comment Type **E**   *Comment Status* **A**   *TR53*
Missing predicate on PICs item, PF16

SuggestedRemedy
Replace Status ""M"" with ""MD:M""

Proposed Response   *Response Status* **C**
ACCEPT IN PRINCIPLE.

See comment #53

Cl **54**   *SC* **54.12.4.1**   *P* **41**   *L* **5**   **#** **28**
Dove, Daniel   HP ProCurve Networki

Comment Type **E**   *Comment Status* **A**   *E28*
The word Supp   ort should be corrected to ""Support""

SuggestedRemedy
Resize table to get Support into a single line.

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

Cl **54**　　*SC* **54.12.4.1**　　　　*P* **41**　　　*L* **7**　　　# **160**

Grow, Robert　　　　　　　　　　　Intel

Comment Type **E**　　*Comment Status* **A**　　　　　　　*E160*

Incorrect language for the referenced shall. The first paragraph is about converting the PMD_UNITDATA.request signals to electrical signals.

SuggestedRemedy

Change ""Convey"" to ""Convert"".

Proposed Response　　*Response Status* **C**

ACCEPT.

Cl **54**　　*SC* **54.12.4.2**　　　　*P* **42**　　　*L* **10**　　　# **55**

Baumer, Howard　　　　　　　　　　Broadcom Corp

Comment Type **TR**　　*Comment Status* **A**　　　　　　*TR55*

MF2 PICS is incorectly specified, this function is not dependent upon the MDIO management being implemented. Per the text of sub-clause 54.5.6 this function is optional; however this PICS does not reflect that.

SuggestedRemedy

Move this to 54.12.4.1, number accordingly, and change status to ""O"" and Support to ""Yes [ ] / No [ ]"" Renumber MFn entries accordingly.

Proposed Response　　*Response Status* **C**

ACCEPT.

Cl **54**　　*SC* **54.12.4.2**　　　　*P* **42**　　　*L* **13**　　　# **56**

Baumer, Howard　　　　　　　　　　Broadcom Corp

Comment Type **TR**　　*Comment Status* **A**　　　　　　*TR56*

MF3 PICS is incorectly specified, this function is not dependent upon the MDIO management being implemented.

SuggestedRemedy

Move this to 54.12.4.1, number accordingly, and change status to M and Support to Yes [ ] Renumber MFn entries accordingly.

Proposed Response　　*Response Status* **C**

ACCEPT.

Cl **54**　　*SC* **54.12.4.2**　　　　*P* **42**　　　*L* **16**　　　# **57**

Baumer, Howard　　　　　　　　　　Broadcom Corp

Comment Type **TR**　　*Comment Status* **A**　　　　　　*TR57*

MF4 PICS is incorectly specified, this function is not dependent upon the MDIO management being implemented.

SuggestedRemedy

Move this to 54.12.4.1, number accordingly, and change status to M and Support to Yes [ ] Renumber MFn entries accordingly.

Proposed Response　　*Response Status* **C**

ACCEPT.

Cl **54**　　*SC* **54.12.4.2**　　　　*P* **42**　　　*L* **19**　　　# **58**

Baumer, Howard　　　　　　　　　　Broadcom Corp

Comment Type **TR**　　*Comment Status* **A**　　　　　　*TR58*

MF5 PICS is incorectly specified, this function is not dependent upon the MDIO management being implemented.

SuggestedRemedy

Move this to 54.12.4.1, number accordingly, and change status to ""O"" and Support to ""Yes [ ] / No [ ]"" Renumber MFn entries accordingly.

Proposed Response　　*Response Status* **C**

ACCEPT.

Cl **54**　　*SC* **54.12.4.2**　　　　*P* **42**　　　*L* **24**　　　# **60**

Baumer, Howard　　　　　　　　　　Broadcom Corp

Comment Type **TR**　　*Comment Status* **A**　　　　　　*TR60*

There is no pics item for optional loopback control through MDIO, see 54.5.8, page 22, line 45.

SuggestedRemedy

Create a pics item with status of MD:O for loopback control.

Proposed Response　　*Response Status* **C**

ACCEPT IN PRINCIPLE.

See comment #145

Cl **54**   *SC* **54.12.4.2**   *P* **42**   *L* **29**   # **71**

Bradshaw, Peter   BitBlitz Communicatio

Comment Type **E**   *Comment Status* **A**   *E71*

MF8: the 'PMD_Transmit_fault_n' bits are described as dependant on 'transmit path x'. The use of 'n' and 'x' is confusing, and apparently incorrect. The ending '_n' seems to imply a lane-by-lane function, and the 'x' to imply a similar meaning. But the functions described in 802.3akD5P0 54.5.10 and 802.3ae 53.4.10 and 45.2.1.7.4 are all one bit functions. It appears that the text was copied from 802.3ae 53.15.4.3 MR6, which also appears similarly confused (like MR7, which uses '_x' in place of '_n').

SuggestedRemedy

Remove both the '_n' and the 'x', so that it reads 'Sets PMD_Transmit_fault to a logical 1 if any local fault is detected on the transmit path, otherwise set to 0'

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.12.4.2**   *P* **42**   *L* **29**   # **73**

Bradshaw, Peter   BitBlitz Communicatio

Comment Type **T**   *Comment Status* **R**   *T73*

For all other PMD types, the PMD_Transmit_Fault and PMD_Receive_Fault functions are specificaly listed as 'optional' (see 45.2.1.7.4:5, 52.4.8:9, 53.4.10:11, 53.15.4.3: MR6:7), and the existence of bits 1.8.13:12 implies the same. I cannot find anything in Clause 54 saying that these functions are mandatory for a CX4 PMD type. The PICS entries however list them as mandatory, unlike the entries in 52.15.3.2 (MD4:5), 53.15.4.3 (MR6:7), where they are optional, and 45.5.5.3 (MM26,28) where 'Yes' & 'N/A' are allowed for 'zero ... if unable to detect', implying that some devices may be 'unable'.

SuggestedRemedy

Change the MF8 and MF9 'Status' to MD:O, and allow a 'No [ ]' Support value

Proposed Response   *Response Status* **C**

REJECT.

The text at 54.5.10 and 54.5.11 specifically states ".. the PMD shall set the PMD_transmit_fault ..." and ".. the PMD shall set the PMD_receive_fault ...". The shalls force the Pics to have a status of MD:M.

Cl **54**   *SC* **54.12.4.2**   *P* **42**   *L* **33**   # **72**

Bradshaw, Peter   BitBlitz Communicatio

Comment Type **E**   *Comment Status* **A**   *E72*

MF9: the 'PMD_Receive_fault_n' bits are described as dependant on 'receive path x'. The use of 'n' and 'x' is confusing, and apparently incorrect. The ending '_n' seems to imply a lane-by-lane function, and the 'x' to imply a similar meaning. But the functions described in 802.3akD5P0 54.5.11 and 802.3ae 53.4.11 and 45.2.1.7.5 are all one bit functions. It appears that the text was copied from 802.3ae 53.15.4.3 MR6 and 7, which also appear similarly confused (MR7 uses '_x' in place of '_n').

SuggestedRemedy

Remove both the '_n' and the 'x', so that it reads 'Sets PMD_Receive_fault to a logical 1 if any local fault is detected on the receive path, otherwise set to 0'

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.12.4.2**   *P* **42**   *L* **7**   # **54**

Baumer, Howard   Broadcom Corp

Comment Type **TR**   *Comment Status* **A**   *TR54*

MF1 PICS is incorectly specified, this function is not dependent upon the MDIO management being implemented. Per the text of sub-clause 54.5.6 this function is optional; however this PICS does not reflect that.

SuggestedRemedy

Move this to 54.12.4.1, number accordingly, and change status to ""O"" and Support to ""Yes [ ] / No [ ]"" Renumber MFn entries accordingly.

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.12.4.2**   *P* **42**   *L* **7**   # **68**

Bradshaw, Peter   BitBlitz Communicatio

Comment Type **E**   *Comment Status* **A**   *E68*

The 'Not Applicable' designation in this subclause uses 'NA' All other PICS tables I can find (certainly all in 802.3ae) use 'N/A' for not applicable items, and section 8.8.3.4 of 802.3-2002 also calls for this usage. Conformance enhances the user's ability to scan long documents for such a category of PICS items.

SuggestedRemedy

Replace 'NA' by 'N/A' throughout

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.12.4.2**   *P* **42**   *L* **9**   *#* **14**

Brown, Benjamin   Independent

Comment Type **E**   *Comment Status* **A**   *TR55*

This PICs item, MF2, is optional, not mandatory, just like MF5

SuggestedRemedy

Replace Status ""MD:M"" with ""MD:O""

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

See comment #55

Cl **54**   *SC* **54.12.4.2**   *P* **42**   *L* **9**   *#* **70**

Bradshaw, Peter   BitBlitz Communicatio

Comment Type **TR**   *Comment Status* **A**   *TR55*

PMD_Fault disable transmitter is optional (see 54.5.6, line 15, :- 'b) If a PMD_Fault is detected, then the PMD may turn off the electrical transmitter in all lanes'), but the PICS MF2 treats it as mandatory. I feel strongly that it should remain optional, since otherwise many systems might suffer the 'Johnny can't go in the water till he can swim' lockout.

SuggestedRemedy

Change the MF2 'Status' to MD:O, and allow a 'No [ ]' Support value

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

See comment #55

Cl **54**   *SC* **54.12.4.3**   *P* **43**   *L* **14**   *#* **61**

Baumer, Howard   Broadcom Corp

Comment Type **E**   *Comment Status* **A**   *E61*

""Feature"" and ""Value / comment"" fields are not consistent with text.

SuggestedRemedy

Change: ""Maximum transmitter output amplitude"" to ""Maximum transmitter differential peak-to-peak output amplitude"" Change: ""... mVppd"" to ""... mVpp""

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change: ""Maximum transmitter output amplitude"" to ""Maximum transmitter differential peak-to-peak output amplitude"" Change: ""... mVppd"" to ""... mV""

Cl **54**   *SC* **54.12.4.3**   *P* **43**   *L* **17**   *#* **62**

Baumer, Howard   Broadcom Corp

Comment Type **T**   *Comment Status* **A**   *T62*

""Feature"" and ""Value / comment"" fields are inconsistent with the text.

SuggestedRemedy

Change: ""Minimum transmitter output amplitude"" to ""Minimum transmitter differential peak-to-peak output amplitude"" Change: ""... mVppd"" to ""... mVpp""

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

Will use suggested remedy except will change "... mVppd" to "mV", see comment #151

Cl **54**   *SC* **54.12.4.3**   *P* **43**   *L* **19**   *#* **63**

Baumer, Howard   Broadcom Corp

Comment Type **T**   *Comment Status* **A**   *T63*

""Feature"" and ""Value / comment"" fields are inconsistent with the text.

SuggestedRemedy

Change: ""Maximum transmitter amplitude difference"" to ""Maximum transmitter differential peak-to-peak amplitude difference"" Change: ""... mVppd"" to ""... mVpp""

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

Will use suggested remedy except will change "... mVppd" to "mV", see comment #151

Cl **54**   *SC* **54.12.4.3**   *P* **43**   *L* **32**   *#* **64**

Baumer, Howard   Broadcom Corp

Comment Type **TR**   *Comment Status* **A**   *TR64*

""Item"", ""Feature"" and ""Value / comment"" fields are inconsistent with the text.

SuggestedRemedy

Change: ""Transition time"" to ""Rising edge transition time"" Add pics item for ""Falling edge transition time"".

Proposed Response   *Response Status* **C**

ACCEPT.

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

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Cl **54**   *SC* **54.12.4.3**

Cl **54**   *SC* **54.12.4.3**   *P* **43**   *L* **34**   # **16**
Brown, Benjamin   Independent

Comment Type   **E**   *Comment Status*   **A**   *E16*
    There is a PICs item, DS14, without a corresponding shall

SuggestedRemedy
    Each shall needs exactly 1 PICS item

Proposed Response   *Response Status*   **C**
    ACCEPT IN PRINCIPLE.

    The shall is in 54.7.3.8, will change subclause entry to 54.7.3.8

Cl **54**   *SC* **54.12.4.5**   *P* **44**   *L* **39**   # **17**
Brown, Benjamin   Independent

Comment Type   **T**   *Comment Status*   **A**   *T17*
    There are 4 PICs items, CA10, CA11, CA12 & CA13, for a single shall

SuggestedRemedy
    Each shall needs exactly 1 PICS item

Proposed Response   *Response Status*   **C**
    ACCEPT IN PRINCIPLE.

    Task force has elevated this comment to "Technical". The resolution of this comment
    involves rewording 54.9.1 which will include appropriate directions to obtain the plug and
    connector specification.

    Put into reference section
    IEC 61076-3-113: tbd date [48B Secretariat 1327], etc.

    Add foot note: Presently this is a committee draft

    replace 54.9.1 paragraph with
    "The connector for each end of the cable assembly shall be the latch type plug with the
    mechanical mating interface defined by IEC 61076-3-113. The connector for the MDI shall
    be the latch type recepticle with the mechanical mating interface defined by IEC 61076-3-
    113. These connectors have a pinout matching that in Table 54–7, and the signal quality
    and electrical requirements of 54.6 and 54.7"

    change pics CA10, CA11, CA12 & CA13 to reflect "shall" changes.

Cl **54**   *SC* **54.12.4.5**   *P* **44**   *L* **41**   # **65**
Baumer, Howard   Broadcom Corp

Comment Type   **TR**   *Comment Status*   **A**   *TR65*
    CA11,CA12 do not have any ""shall"" statement in the text of the draft, specifically sub-
    clause 54.9.1.

SuggestedRemedy
    Remove pics or insert ""shall"" statement.

Proposed Response   *Response Status*   **C**
    ACCEPT IN PRINCIPLE.

    Pics CA11 and Ca12 will be removed.

    See comment #17.

Cl **54**   *SC* **54.12.42.2**   *P* **42**   *L* **22**   # **59**
Baumer, Howard   Broadcom Corp

Comment Type   **TR**   *Comment Status*   **A**   *TR59*
    MF6 PICS is incorectly specified, this function is not dependent upon the MDIO
    management being implemented.

SuggestedRemedy
    Move this to 54.12.4.1, number accordingly, and change status to M and Support to Yes [ ]
    Renumber MFn entries accordingly.

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

Cl **54**   *SC* **54.2**   *P* **19**   *L* **34**   # **89**
Dawe, Piers   Agilent

Comment Type   **T**   *Comment Status*   **A**   *T89*
    This is only half true: 'The 10GBASE-CX4 PMD uses the same PMD interface as
    10GBASE-LX4.'

SuggestedRemedy
    Change 'PMD interface' to 'PMD service interface'

Proposed Response   *Response Status*   **C**
    ACCEPT IN PRINCIPLE.

    See comment #222

Cl **54** *SC* **54.2** *P* **19** *L* **34** *#* **222**

Law, David 3Com

Comment Type **E** *Comment Status* **A** *E222*

Suggest this paragraph be change to read: The 10GBASE-CX4 PMD utilizes the PMD service interface defined in 53.1.1. The PMD service interface is summarized below: PMD_UNITDATA.request PMD_UNITDATA.indicate PMD_SIGNAL.indicate

SuggestedRemedy

See comment.

Proposed Response *Response Status* **C**

ACCEPT.

Cl **54** *SC* **54.3** *P* **19** *L* **42** *#* **90**

Dawe, Piers Agilent

Comment Type **T** *Comment Status* **A** *T90*

1. Sentence overlooks the RS. 2. Sentence can be misread as applying to a mixture of layers and people. The remedy below may need a little more wordsmithing to be correct about use of layer and sublayer.

SuggestedRemedy

Change to: This implies that implementers of MAC, MAC Control sublayer, and physical layers must ...

Proposed Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change second sentence to:
"This implies that MAC, MAC Control sublayer, and PHY implementers must consider the delay maxima, and that network planners and administrators consider the delay constraints regarding the cable topology and concatenation of devices."

Cl **54** *SC* **54.3** *P* **19** *L* **46** *#* **92**

Dawe, Piers Agilent

Comment Type **E** *Comment Status* **A** *E92*

Broken quantity

SuggestedRemedy

Use nonbreaking space in '512 BT'. Also p29 line 34, '0.270 UI' (where can prune a trailing 0).

Proposed Response *Response Status* **C**

ACCEPT.

Cl **54** *SC* **54.3** *P* **19** *L* **47** *#* **91**

Dawe, Piers Agilent

Comment Type **E** *Comment Status* **R** *E91*

Please add cross reference as service to the reader to explain terminology and give associated information.

SuggestedRemedy

Add new sentence: 'See 44.3.'

Proposed Response *Response Status* **C**

REJECT.

This would cause a circular cross reference as 44.3 references 54.3.

Cl **54** *SC* **54.4** *P* **19** *L* **51** *#* **93**

Dawe, Piers Agilent

Comment Type **E** *Comment Status* **A** *E93*

as ... as needs a comma

SuggestedRemedy

... 10GBASE-LX4, as defined ...

Proposed Response *Response Status* **C**

ACCEPT.

Cl **54** *SC* **54.5** *P* **20** *L* **3** *#* **225**

Law, David 3Com

Comment Type **E** *Comment Status* **R** *E225*

The text states '.. Transmit and Receive functions which convey data between the PMD service interface and the MDI ..' however it is the transmit that conveys data from PMD service interface to the MDI, the receive function conveys data from the MDI to the PMD service interface.

SuggestedRemedy

Reword as required.

Proposed Response *Response Status* **C**

REJECT.

It is the transmit that conveys data from the PMD to the MDI and it is the receive that conveys data from the MDI to the PMD, however, when both transmit and receive functions are taken together they convey data between the PMD and the MDI or it could be reworded as they convey data between the MDI and the PMD. The "between" implies data is being conveyed in both directions.

TYPE: TR/technical required T/technical E/editorial   COMMENT STATUS: D/dispatched A/accepted R/rejected   SORT ORDER: Clause, Page, Line, Subclause

RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

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Cl **54** *SC* **54.5**

Cl **54**   *SC* **54.5**   *P* **20**   *L* **4**   *#* 172

Bill Quackenbush   Cisco Systems, Inc.

Comment Type **E**   *Comment Status* **A**   *E172*

The text would be clearer if "plus various management functions" was changed to "and provides various management functions".

SuggestedRemedy

See comment.

Proposed Response   *Response Status* **C**

ACCEPT.

Will change:
"... MDI plus various management functions ..."
to
"... MDI, and provides various management functions ..."

Cl **54**   *SC* **54.5.1**   *P* **20**   *L* **26**   *#* 141

Grow, Robert   Intel

Comment Type **E**   *Comment Status* **A**   *E141*

I think all text in figures is supposed to be Helvetica, (though rummored to be changing to Arial).

SuggestedRemedy

Change font style to sans serif. Correct note style ""NOTE--""

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.5.1**   *P* **20**   *L* **9**   *#* 223

Law, David   3Com

Comment Type **T**   *Comment Status* **A**   *T223*

The text states 'The PMD block diagram is shown in Figure 54-2 ..' however this figure doesn't seem to be a block diagram, there are no sub-functions shown and only half the PMD is included, and even the title of the figure doesn't state that it is a block diagram.

SuggestedRemedy

Change the text 'The PMD block diagram is shown in Figure 54-2.'. to 'A 10GBASE-CX4 link is shown in Figure 54-2.'.

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.5.1**   *P* **20**   *L* **9-41**   *#* 175

Bill Quackenbush   Cisco Systems, Inc.

Comment Type **E**   *Comment Status* **A**   *T223*

Figure 54-2 is not a block diagram of the PMD, it is a block diagram of a one side of a CX4 link, as the title of the figure states, and the PMD portion of the diagram in NOT specifically identified. The text in lines 9-15 deals with link issues, not with the PMD.

SuggestedRemedy

Change the title of the subsection to "Link Block Diagram" and change the text of the first sentence accordingly. Specifically indicate the blocks in the diagram that are portions on of the PMD.

Proposed Response   *Response Status* **C**

ACCEPT.

See comment #223

UI has already been defined by 802.3ae.

Cl **54**   *SC* **54.5.2**   *P* **20**   *L* **48**   *#* 227

Law, David   3Com

Comment Type **T**   *Comment Status* **A**   *T227*

The signals SLn<p> and SLn<n> are shown in figure 54-2 as being the internal PMD service interface yet here the implications is that these are the actually connector signals.

SuggestedRemedy

Please clarify if there are internal or externally observable signals and update the text and Figure 54-2 as required.

Proposed Response   *Response Status* **C**

ACCEPT.

See comment #226 for interface naming. Will move SLn<p>, etc to TP1 and DLn<p>, etc to TP4.

Cl **54**   *SC* **54.5.2**   *P* **20**   *L* **52**   *#* 94

Dawe, Piers   Agilent

Comment Type **E**   *Comment Status* **A**   *E94*

Broken quantity

SuggestedRemedy

Ask EFM or staff editor whether template can be fixed to stop line breaks at / as in: SL2<p>/ <n>

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.5.3**   *P* **21**   *L* **4**   # **95**

Dawe, Piers   Agilent

Comment Type **E**   *Comment Status* **A**   *E95*

Broken quantity

SuggestedRemedy

Try removing the space in 'PMD_UNITDATA.indicate (rx_bit<0:3>)' or using nonbreaking space. If the result looks bad, forget it!

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

The result looks bad if the space is removed.

Cl **54**   *SC* **54.5.4**   *P* **21**   *L* **14**   # **96**

Dawe, Piers   Agilent

Comment Type **E**   *Comment Status* **A**   *E142*

font size

SuggestedRemedy

... of Global_PMD_signal_detect. Also p42 line 12, Global_PMD_transmit_disable (in value/comment column) and line 22, PMD_transmit_disable_n

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.5.4**   *P* **21**   *L* **14**   # **4**

Brown, Benjamin   Independent

Comment Type **E**   *Comment Status* **A**   *E142*

Wrong size font

SuggestedRemedy

Correct the font size on the variable ""Global_PMD_signal_detect""

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.5.4**   *P* **21**   *L* **14**   # **5**

Brown, Benjamin   Independent

Comment Type **E**   *Comment Status* **A**   *E5*

There are 2 PICS items PF8 and PF11 for this 1 shall

SuggestedRemedy

Each shall needs exactly 1 PICS item

Proposed Response   *Response Status* **C**

ACCEPT.

PF11 will be deleted.

Cl **54**   *SC* **54.5.4**   *P* **21**   *L* **14**   # **142**

Grow, Robert   Intel

Comment Type **E**   *Comment Status* **A**   *E142*

Font size problem

SuggestedRemedy

Correct.

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.5.4**   *P* **21**   *L* **20**   # **66**

Bradshaw, Peter   BitBlitz Communicatio

Comment Type **TR**   *Comment Status* **A**   *TR66*

The SIGNAL_DETECT function is inherently a function of the input voltage. Line 20 refers to '..the absolute differential peak-to-peak output voltage on each of the four lanes at the MDI has exceeded 175 mV...' The reference should be to the 'input voltage' istead. Line 26 refers to the output voltage also, and should refer to the 'input voltage. I have marked it as a 'TR', though it is arguably merely a 'E'; however, it has remained uncorrected (unnoticed?) since the D4P01 WG version, and the D4P1 'public' version.

SuggestedRemedy

Replace 'output voltage' by 'input voltage' on lines 20 and 26

Proposed Response   *Response Status* **C**

ACCEPT.

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

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Cl **54**   *SC* **54.5.4**

Cl **54**   *SC* **54.5.4**   *P* **21**   *L* **21**   # **194**

Law, David   3Com

Comment Type   **T**   *Comment Status*   **A**   *T194*

The text 'The transition from SIGNAL_DETECT = FAIL to SIGNAL_DETECT = OK shall occur within 100µs after the condition for SIGNAL_DETECT = OK has been received.' seems to be a circular definition. It seems to say the transition to SIGNAL_DETECT = OK shall occur 100us after the transition to SIGNAL_DETECT = OK since the condition for SIGNAL_DETECT = OK includes the 100us delay.

SuggestedRemedy

Please clarify the text.

Proposed Response   *Response Status*   **C**

ACCEPT IN PRINCIPLE.

Will change the second sentence of the second paragraph of 54.5.4 to:

"The PMD receiver is not required to verify whether a compliant 10GBASE-CX4 signal is being received, however, it shall assert SIGNAL_DETECT = OK within 100us after the absolute differential peak-to-peak input voltage on each of the four lanes at the MDI has exceeded 175mV for at least 1 UI."

And delete the last sentence of the same paragraph.

Cl **54**   *SC* **54.5.4**   *P* **21**   *L* **21**   # **97**

Dawe, Piers   Agilent

Comment Type   **E**   *Comment Status*   **A**   *E97*

Missing spaces between quantities and their units

SuggestedRemedy

Insert (nonbreaking) space into: 175mVpp   100us   50mVpp 50mVpp 250us 50mVpp 50mVpp 500us. And p24 line 14, '15m'. And p25 line 34, p28 line 13 and following, p31 line 14.

Proposed Response   *Response Status*   **C**

ACCEPT.

Cl **54**   *SC* **54.5.4**   *P* **21**   *L* **21**   # **109**

Dawe, Piers   Agilent

Comment Type   **E**   *Comment Status*   **A**   *E109*

Some readers have been caught out by 'UI'. It's in the abbreviations list, and I hope 802.3ah will add 'unit interval' to the definitions list, but to be kind to the reader, as this is the first use in 802.3ak,

SuggestedRemedy

Change: at least 1 UI to: at least 1 UI (unit interval).   If ak is going to beat ah to publication, add 'unit interval' to the definitions list 1.4: The period of time allocated for transmission of one symbol; the inverse of signalling [signaling] rate.

Proposed Response   *Response Status*   **C**

ACCEPT.

Cl **54**   *SC* **54.5.4**   *P* **21**   *L* **22**   # **193**

Law, David   3Com

Comment Type   **E**   *Comment Status*   **A**   *E193*

Typo.

SuggestedRemedy

Suggest the text '.. shall occur within 100µs after the condition for SIGNAL_DETECT = OK has been received.' should read '.. shall occur within 100µs of the condition for SIGNAL_DETECT = OK being met.'.

Proposed Response   *Response Status*   **C**

ACCEPT.

See comment #194

Cl **54**   *SC* **54.5.4**   *P* **21**   *L* **25**   # **6**

Brown, Benjamin   Independent

Comment Type   **E**   *Comment Status*   **A**   *E6*

There is 1 PICs item, PF14, for 2 shalls, this one and the one on line 27

SuggestedRemedy

Each shall needs exactly 1 PICS item

Proposed Response   *Response Status*   **C**

ACCEPT.

Cl **54**   *SC* **54.5.4**   *P* **21**   *L* **48**   **#** **33**

Baumer, Howard   Broadcom Corp

Comment Type **E**   *Comment Status* **A**   *E33*

As part of the resolution to D4.0 comment #116, which with refinement during D4.1 comment resolution, an informative NOTE was left out of D4.2.

SuggestedRemedy

Add in the agreed upon informative note: Note: SIGNAL_DETECT may not activate with a continuous 1010… pattern such as the high frequency pattern of 48A.1, but it will trigger durning the IPG.

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.5.4**   *P* **21**   *L* **52**   **#** **228**

Law, David   3Com

Comment Type **T**   *Comment Status* **A**   *T228*

The note that is to be added that will state 'Note: SIGNAL_DETECT may not activate with a continuous 1010… pattern such as the high frequency pattern of 48A.1, but it will trigger durning the IPG.' appears to be in conflict with the conformance requirement stated in subclause 54.5.4 that '.. it shall assert SIGNAL_DETECT = OK when the absolute differential peak-to-peak output voltage on each of the four lanes at the MDI has exceeded 175mVpp for at least 1 UI.'. I don't see how a continuous 1010… pattern cannot be required to assert SIGNAL_DETECT = OK when the shall statement states that it shall be asserted after the MDI has exceeded 175mVpp for at least 1 UI.

SuggestedRemedy

Please clarify which statement is correct and either reword the shall statement or the note.

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

See comment #99.

If the high frequency test pattern of Annex 48A.1 is used to check the SIGNAL_DETECT function through a worst case channel the resultant amplitude and pulse width at the receiver will not necessarily meet the criteria.

Cl **54**   *SC* **54.5.4**   *P* **21**   *L* **52**   **#** **143**

Grow, Robert   Intel

Comment Type **E**   *Comment Status* **A**   *E33*

Insert Jonathan's as indicated in editor's note.

SuggestedRemedy

Insert, but correct style to IEEE NOTE -- format and correct the spelling of during (sic, durning).

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.5.4**   *P* **21**   *L* **52**   **#** **99**

Dawe, Piers   Agilent

Comment Type **T**   *Comment Status* **A**   *T99*

Comments on the proposed note. Note looks good in principle but needs wordsmithing, particularly the 'may not' which is ambiguous; is that an injunction or just a description of something?

SuggestedRemedy

Maybe this: SIGNAL_DETECT is not required to activate ...

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

Note to be reworded as follows:
"Note: SIGNAL_DETECT may not be activated by a continuous 1010... pattern such as the high frequency pattern of 48A.1, but it will be activated by an IPG."

Cl **54**   *SC* **54.5.4**   *P* **21**   *L* **53**   **#** **192**

Law, David   3Com

Comment Type **E**   *Comment Status* **A**   *E192*

Typo.

SuggestedRemedy

Suggest the text '.. trigger durning ..' should read '.. trigger during ..'.

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

See comment #99

Cl **54**   *SC* **54.5.4**   *P* **21**   *L* **53**   **#** **19**

Dove, Daniel   HP ProCurve Networki

Comment Type **E**   *Comment Status* **A**   *E19*

Spelling error ""durning"" is not a word.

SuggestedRemedy

Replace with the word ""during"".

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.5.4 Table 54-2**   *P* **21**   *L* **32**   # **32**
Baumer, Howard   Broadcom Corp

Comment Type **T**   *Comment Status* **A**   *T32*
Table 54-2 is an informative table but it is not labled as one.

SuggestedRemedy
Add ""(Informative)"" to the table title.

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

Cl **54**   *SC* **54.5.4 Table 54-2**   *P* **21**   *L* **32**   # **173**
Bill Quackenbush   Cisco Systems, Inc.

Comment Type **TR**   *Comment Status* **A**   *TR173*
The table needs to be marked "Informative" to avoid dual specification.

SuggestedRemedy
See comment.

Proposed Response   *Response Status* **U**
ACCEPT.

Cl **54**   *SC* **54.5.5**   *P* **22**   *L* **3**   # **198**
Law, David   3Com

Comment Type **T**   *Comment Status* **A**   *T198*
Not sure what the text 'Various implementations of the Signal Detect function are permitted by this standard.' is hinting at, I thought we always permit various implementations of functions. Also while it is stated that various implementations of the Signal Detect function are permitted I don't seem to be able to find any definition of the Signal Detect function, only the Global PMD signal detect function in subclause 54.5.4.

SuggestedRemedy
Please clarify this text.

Proposed Response   *Response Status* **C**
ACCEPT IN PRINCIPLE.

Will remove first sentence "Various ...".

Cl **54**   *SC* **54.5.5**   *P* **22**   *L* **4**   # **197**
Law, David   3Com

Comment Type **E**   *Comment Status* **A**   *E100*
Suggest that text '.. each PMD_signal_detect_n, where n represents the lane number in the range 0:3, value shall ..' should read '.. each PMD_signal_detect_n value, where n represents the lane number in the range 0:3, shall ..' (move the word value).

SuggestedRemedy
See comment.

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

See comment #100

Cl **54**   *SC* **54.5.5**   *P* **22**   *L* **4**   # **100**
Dawe, Piers   Agilent

Comment Type **E**   *Comment Status* **A**   *E100*
This doesn't read well:　each PMD_signal_detect_n, where n represents the lane number in the range 0:3, value shall ...

SuggestedRemedy
Move the 'value':　each PMD_signal_detect_n value, where n represents the lane number in the range 0:3, shall ...

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

Cl **54**   *SC* **54.5.5**   *P* **22**   *L* **5**   # **196**
Law, David   3Com

Comment Type **E**   *Comment Status* **A**   *E196*
The text states '.. be continuously set in response to the ..' however it is usual in 802.3 to 'set to 1' and 'clear to 0'.

SuggestedRemedy
Reword as required.

Proposed Response   *Response Status* **C**
ACCEPT IN PRINCIPLE.

'.. be continuously updated in response to the ..'

Cl **54**   *SC* **54.5.6**   *P* **22**   *L* **10**   # 174

Bill Quackenbush   Cisco Systems, Inc.

Comment Type **E**   *Comment Status* **A**   *E174*

The text would be clearer if the sentence was changed to "The
Global_PMD_transmit_disable function is optional. When implemented, it allows all of the
transmitters to be disabled with a single control bit."

SuggestedRemedy

See comment.

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

Will change to:
"The Global_PMD_transmit_disable function is optional. When implemented, it allows all
of the transmitters to be disabled with a single variable."

Cl **54**   *SC* **54.5.6**   *P* **22**   *L* **15**   # 195

Law, David   3Com

Comment Type **E**   *Comment Status* **A**   *E195*

Suggest a cross refernce be added for PMD_fault.

SuggestedRemedy

Suggest the text '.. PMD_fault ..' should read '.. PMD_fault (54.5.9).

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.5.6**   *P* **22**   *L* **16**   # 34

Baumer, Howard   Broadcom Corp

Comment Type **E**   *Comment Status* **A**   *E34*

Grammar correction: ""Loopback as defined in 54.5.8 ..."" s/b ""Loopback, as defined, in
54.5.8 ...""

SuggestedRemedy

Change ""Loopback as defined in 54.5.8 ..."" to ""Loopback, as defined, in 54.5.8 ...""

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change ""Loopback as defined in 54.5.8 ..."" to ""Loopback, as defined in 54.5.8, ...""

Cl **54**   *SC* **54.5.7**   *P* **22**   *L* **24**   # 35

Baumer, Howard   Broadcom Corp

Comment Type **TR**   *Comment Status* **A**   *TR35*

PMD_transmit_disable_n is incorrectly specifying to turn off all transmitters not just its
associated one.

SuggestedRemedy

Change ""... variable such that each transmitter drives ..."" to ""... variable such that the
corresponding transmitter drives ...""

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.5.7**   *P* **22**   *L* **29**   # 15

Brown, Benjamin   Independent

Comment Type **E**   *Comment Status* **A**   *TR59*

There is a shall statement without a PICs item

SuggestedRemedy

Each shall needs exactly 1 PICS item There may be some overlap between this shall and
the shalls in bullets a) and c) - my point being that this shall effectively removes the MD
optional predicate on PICs items MF4 and MF6. I don't know how to fix this but it seems a
little weird.

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

There is no shall on page 21, line 29. The shall is on line 27 and is covered by comment
#6.

See comment #57 and #59 for remedy of MF4 and MF6.

Cl **54**   *SC* **54.5.7**   *P* **22**   *L* **29**   *#* **36**

Baumer, Howard   Broadcom Corp

Comment Type   **TR**   *Comment Status* **A**   *TR36*

There is no pics item for this shall: ""If the PMD_transmit_disable_n function is not implemented in MDIO, an alternative method shall be provided to independently disable each transmit lane.""

SuggestedRemedy

Create the appropriate pics item.

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change the first paragraph of 54.5.7 to:
"The PMD_transmit_disable_n function is optional. It allows the electrical transmitters in each lane to be selectively disabled."

Delete paragraph above the "note"

Change pic MF4 status to "O".

From comment #170 the PMD_transmit_disable_n function is nolonger required to be mandatory, hence the change to optional.

Cl **54**   *SC* **54.5.7**   *P* **22**   *L* **32**   *#* **20**

Dove, Daniel   HP ProCurve Networki

Comment Type   **E**   *Comment Status* **A**   *E20*

Consistency: The word ""highly"" is highly unnecessary and highly inconsistent with the similar statement on line 52.

SuggestedRemedy

remove the word ""highly"".

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.5.8**   *P* **22**   *L* **37**   *#* **144**

Grow, Robert   Intel

Comment Type   **E**   *Comment Status* **A**   *E144*

Needs a comma.

SuggestedRemedy

Insert a comma after ""When loopback mode is selected"".

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.5.8**   *P* **22**   *L* **45**   *#* **67**

Bradshaw, Peter   BitBlitz Communicatio

Comment Type   **E**   *Comment Status* **A**   *E67*

... through the MDIO management interface of 45 or equivalent.' I do not think the Scottish Highlander's attempt to place Bonnie Prince Charlie on the UK throne will help with controlling Loopback Mode (on second thoughts... Hmmm)

SuggestedRemedy

Insert 'Clause ' before '45'

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.5.8**   *P* **22**   *L* **45**   *#* **145**

Grow, Robert   Intel

Comment Type   **E**   *Comment Status* **A**   *E145*

Unnecessary reduncancy on optionality of MDIO.

SuggestedRemedy

Replace with a simple cross reference to appropriate subclause of 45. ""Control of the Loopback function is specified in Clause 45.x.x.""

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.6**   *P* **22**   *L*   *#* **232**

Taich, Dimitry

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

The first sentence of the paragraph says "The Global_PMD_transmit_disable function is optional and allows all of the transmitters to be disabled". However, PICs form (page 42, items MF1 & MF2) defines Global_PMD_transmit_disable feature as mandatory (in case that MDIO is implemented). It seems to be contradictable set of requirements.

SuggestedRemedy

Change PICs form, page 42, items MF1 and MF2, "status" field to "O" instead of "M"

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

See comments #54 & #55

Cl **54** *SC* **54.6** *P* **23** *L* **16-45** # **177**

Bill Quackenbush   Cisco Systems, Inc.

Comment Type **E**   *Comment Status* **A**   *E177*

Since the MDI passes through the connector, the connector pinout should be in the section on the MDI

SuggestedRemedy

See comment.

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54** *SC* **54.6** *P* **23** *L* **19** # **101**

Dawe, Piers   Agilent

Comment Type **E**   *Comment Status* **A**   *E101*

Missing period

SuggestedRemedy

54.9.1. The ...

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54** *SC* **54.7** *P* **24** *L* **1** # **182**

Bill Quackenbush   Cisco Systems, Inc.

Comment Type **E**   *Comment Status* **A**   *E182*

The title of this section appears to be incorrect. The MDI is the interface between the PMD and the medium. The specifications in this clause apply to the MDI. PMD should not be in the title.

SuggestedRemedy

Change the title to "MDI Electrical Specifications ......"

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54** *SC* **54.7.1** *P* **24** *L* **5** # **230**

Taich, Dimitry

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

As written one may interpret this clause as requiring AC coupling between PMD and MDI for BOTH Tx and Rx paths. But the intention was to enforce AC coupling only on the receive path (see 54.7.4.3).

SuggestedRemedy

Rephrase clause 54.7.1 as follows: The 10 GBASE-CX4 MDI is a low-swing AC-coupled differential interface. Transmitter to receiver path AC-coupling (as defined in 54.7.4.3) allows for interoperability between components operating from different supply voltages. Low-swing differential signaling provides noise immunity and improved electromagnetic interference (EMI)."

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

Will change the begininng of paragraph 2 to:
"Transmitter to receiver path AC-coupling, as defined in 54.7.4.3, allows ..." with the appropriate reference.

Cl **54** *SC* **54.7.1** *P* **24** *L* **6** # **102**

Dawe, Piers   Agilent

Comment Type **E**   *Comment Status* **R**   *E102*

Dubious advertising claim in 'Low-swing differential signaling provides noise immunity and improved electromagnetic interference (EMI).' If the noise comes from somewhere else, a low swing is liable to be worse not improved. I'm sure this standard will sell on solid merits.

SuggestedRemedy

Low-swing differential signaling assists electromagnetic compatibility.' or 'Low-swing differential signaling may reduce noise generation and assist electromagnetic compatibility.' or strike the sentence.

Proposed Response   *Response Status* **C**

REJECT.

Task force believes the text as stated is appropriate.

Cl **54**   *SC* **54.7.2**   *P* **24**   *L* **19**   **#** **199**

Law, David   3Com

Comment Type **E**   *Comment Status* **A**   *E146*

Typo.

SuggestedRemedy

Table54-4' should read 'Table 54-4'.

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

See comment #146.

Cl **54**   *SC* **54.7.3**   *P* **24**   *L* **18**   **#** **103**

Dawe, Piers   Agilent

Comment Type **T**   *Comment Status* **A**   *TR103*

Continued wordsmithing. We want the want the 'shall' s and the PICS to certify what the compliant product does, all the time, not to tie the hands of factory test departments. This suggested remedy is consistent with that accepted by EFM and seems both strong and clear. Also missing space in 'Table54-4'.

SuggestedRemedy

Change 'Transmitter characteristics shall be measured at TP2, unless otherwise noted, and are summarized in Table 54-4 and detailed in the following subclauses.' to: 'Transmitter shall meet specifications at TP2, unless otherwise noted. The specifications [or characteristics] are summarized in Table 54-4 and detailed in the following subclauses.'

Proposed Response   *Response Status* **U**

ACCEPT.

Changed comment type from "TR" to "T" since commenter is not in the Sponsor Ballot Group.

Cl **54**   *SC* **54.7.3**   *P* **24**   *L* **19**   **#** **7**

Brown, Benjamin   Independent

Comment Type **E**   *Comment Status* **A**   *E146*

missing space

SuggestedRemedy

Replace ""Table54-4"" with ""Table 54-5""

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

See comment #146

Cl **54**   *SC* **54.7.3**   *P* **24**   *L* **19**   **#** **146**

Grow, Robert   Intel

Comment Type **E**   *Comment Status* **A**   *E146*

Possible missing cross references.

SuggestedRemedy

Line 19 -- Insert space in Table54-4. (The lack of a space indicates that this is probably not a FrameMaker cross reference.) Line 41 -- Capitalization. The lower case indicates perhaps not a FrameMaker cross reference.)

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.7.3**   *P* **24**   *L* **27**   **#** **181**

Bill Quackenbush   Cisco Systems, Inc.

Comment Type **E**   *Comment Status* **A**   *E181*

"+/- 100 ppm" is a tolerance, not a range.

SuggestedRemedy

Change "range" to "tolerance"

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

Will replace "range" with "per lane", and change value to 3.125 +/- 100ppm to be consistent with 10GBASE-LX4.

Cl **54**   *SC* **54.7.3.1**   *P* **25**   *L* **3**   **#** 106
Dawe, Piers   Agilent

Comment Type   **T**   *Comment Status*   **A**   *TR106*

Concern with 'functional equivalent' here: you want a test rig that presents the right impedances (an electrical rather than functional equivalent) or calibrates for its impedance (like a network analyser; you don't know what its actual return loss is but it's calibrated out for you) - not sure what sort of equivalent this is. As you have an 'or equivalent' in the figure, that may be enough. Also concern with the 'shall be used for measuring' as in another comment.

SuggestedRemedy

Change: The test fixture of Figure 54–3, or its functional equivalent, shall be used for measuring the transmitter specifications described in 54.7.3.   to: The transmitter shall meet the specifications of 54.7.3 when connected to the test fixture of Figure 54–3.

Proposed Response   *Response Status*   **U**

ACCEPT IN PRINCIPLE.

Change:
"The test fixture of Figure 54–3, or its functional equivalent, shall be used for measuring the transmitter specifications
described in 54.7.3."

to:
"The test fixture of Figure 54–3, or its functional equivalent, is required for measuring the transmitter specifications described in 54.7.3."

The corresponding pics, DS2, will be removed.

Changed comment type from "TR" to "T" since commentor is not in the sponsor Ballot Group.

Cl **54**   *SC* **54.7.3.2**   *P* **25**   *L* **33**   **#** 178
Bill Quackenbush   Cisco Systems, Inc.

Comment Type   **E**   *Comment Status*   **R**   *E178*
Change "differential impedance" to "differential input impedance" for greater clarity.

SuggestedRemedy
See comment.

Proposed Response   *Response Status*   **C**
REJECT.

This is the test fixture impedance and not a specific input impedance.

Cl **54**   *SC* **54.7.3.2**   *P* **29**   *L* **27**   **#** 107
Dawe, Piers   Agilent

Comment Type   **E**   *Comment Status*   **A**   *E107*
Compare '100 MHz to 2000 MHz' and '60 and 130 ps'. I think the style guide expresses a preference for repeating the unit or not (I don't have it with me to check).

SuggestedRemedy
Be consistent

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

Will change to "... 60 ps and 130 ps ..."

Cl **54**   *SC* **54.7.3.3**   *P* **25**   *L* **38**   **#** 108
Dawe, Piers   Agilent

Comment Type   **E**   *Comment Status*   **A**   *E108*
GBaud or GBd? Mostly using GBd.

SuggestedRemedy
Change GBaud to GBd

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

Cl **54**   *SC* **54.7.3.3**   *P* **25**   *L* **38**   **#** 200
Law, David   3Com

Comment Type   **E**   *Comment Status*   **A**   *E200*
On line 38 the symbol 'GBaud' is used yet on page 24, Line 26 the symbol 'GBd' is used. The same issue exists for ohms (line 33) and the omega symbol (page 31, line 9) and 'Gbps' (page 30, line 41).

SuggestedRemedy
Please use a consistent symbol. It appears 'GBd', the omega symbol and 'Gb/s' were used in IEEE Std 802.3ae-2002 Clause 47. Please correct this globally.

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

Cl **54**   *SC* **54.7.3.4**   *P* **26**   *L* **11**   # **180**

Bill Quackenbush   Cisco Systems, Inc.

Comment Type   **E**   *Comment Status*   **A**   *E180*

For greater specificity, change the sentence to "Figure 54-4 illustrates the definition of differential peak-to-peak voltage."

SuggestedRemedy

See comment.

Proposed Response   *Response Status*   **C**

ACCEPT IN PRINCIPLE.

Will change to: "... the definition ...".

Cl **54**   *SC* **54.7.3.4**   *P* **26**   *L* **5**   # **149**

Grow, Robert   Intel

Comment Type   **T**   *Comment Status*   **A**   *TR151*

Inconsistent nomenclature

SuggestedRemedy

Change p-p to pp subscript. The ""pp"" in line 10 is not subscripted. Search document for p-p and replace as necessary.

Proposed Response   *Response Status*   **C**

ACCEPT IN PRINCIPLE.

See comment number 151.

Cl **54**   *SC* **54.7.3.4**   *P* **26**   *L* **7**   # **203**

Law, David   3Com

Comment Type   **E**   *Comment Status*   **A**   *TR151*

Either use the term mVp-p (line 7) or mVPP (page 24, line 32). Please correct this globally.

SuggestedRemedy

Please use a consistent symbol. It appears Vp-p was used in Clause 47. Please correct this globally.

Proposed Response   *Response Status*   **C**

ACCEPT IN PRINCIPLE.

See comment #151.

Cl **54**   *SC* **54.7.3.5**   *P* **27**   *L* **1**   # **29**

Dove, Daniel   HP ProCurve Networki

Comment Type   **TR**   *Comment Status*   **X**   *TR29*

I am concerned that our specification is too general in that ReturnLoss is specified for a cable assembly that goes from 0m to 15m and presentations have indicated that the minimum return loss is based upon interaction between near end connectors and far end connectors in a short cable. Thus we are allowing much sloppier long-cables than we should.

SuggestedRemedy

Redefine ReturnLoss as a function of frequency and some other parameter that is dependent on cable length. Either use the length explicitly, or InsertionLoss or some other factor.

Proposed Response   *Response Status*   **Z**

WITHDRAWN by commentor.

Cl **54**   *SC* **54.7.3.5**   *P* **27**   *L* **12**   # **207**

Law, David   3Com

Comment Type   **T**   *Comment Status*   **A**   *T207*

The text states that the return loss requirement is from 100MHz to 2000MHz, the text on line 12 states 54-1 is for 100MHz <= f therefore including 100MHz however line 20 states 54-2 is for f < 2000MHz therefore excluding 2000MHz. This doesn't seem consistent.

SuggestedRemedy

Change the text '625 MHz <- f < 2000 MHz' to read '625 MHz <- f <= 2000 MHz'.

Proposed Response   *Response Status*   **C**

ACCEPT.

Cl **54**   *SC* **54.7.3.5**   *P* **27**   *L* **3**   # **110**

Dawe, Piers   Agilent

Comment Type   **E**   *Comment Status*   **A**   *E110*

Another style thing: f is in italics in the equation but not in the main text.

SuggestedRemedy

Consider putting f in italics (several times)

Proposed Response   *Response Status*   **C**

ACCEPT IN PRINCIPLE.

Current text versus equation font style appears to be consistent with other clauses (i.e. Clause 40). Will request the publications editor to check all equations for font consistency.

Cl **54**　　*SC* **54.7.3.5**　　　　*P* **27**　　*L* **4**　　# **209**
Law, David　　　　　　　　3Com

Comment Type **T**　　*Comment Status* **A**　　　　　*T209*

Is the use of a 100 Ohm reference impedance during the return loss measurement mandatory.

SuggestedRemedy

Is the use of a 100 Ohm reference impedance in mandatory a shall statement should be added here.

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

Will change text to read "... measurements shall be 100 ohms" and add the appropriate Pics item.

Cl **54**　　*SC* **54.7.3.5**　　　　*P* **27**　　*L* **4**　　# **206**
Law, David　　　　　　　　3Com

Comment Type **T**　　*Comment Status* **R**　　　　　*T206*

The text states that '.. the transmitter shall meet Equation 54–1 and Equation 54–2.' however wouldn't a transmitter that exceeds these requirements also be acceptable. If this is correct then Figure 54-5 should also be updated to show a template rather than just as plot of the function. In addition there is no reference to Figure 54-5 in the text which should be added.

SuggestedRemedy

Suggest the text '.. the transmitter shall meet Equation 54–1 and Equation 54–2.' should be changed to read '.. the transmitter shall meet or exceed Equation 54–1 and Equation 54–2.', Figure 54-4 should be updated to be either a template or a limit and the text 'The transmit differential output return loss limit is illustrated in Figure 54-4' should be added to subclause 54.7.3.5. Similar changes need to be done to 54.7.4.5 as this subclause also references 54-1 and 54-2.

Proposed Response　　　*Response Status* **C**
REJECT.

Equations 54-1 and 54-2 are inequalities and therefore an "or exceeds" is not necessary. The figure is an informative figure and as such does not need a textual reference.

Cl **54**　　*SC* **54.7.3.5**　　　　*P* **27**　　*L* **4**　　# **208**
Law, David　　　　　　　　3Com

Comment Type **T**　　*Comment Status* **R**　　　　　*T208*

While the intent of the text '.. shall meet Equation 54–1 and Equation 54–2.' can be deduced it does seem odd to state with a shall statement that both equations apply even though in fact only one ever applies dependent on the frequency under consideration.

SuggestedRemedy

Suggest this text be reworded, in a similar case in XAUI (subclause 47.4.1) only one equation was stated avoiding the need to reference two.

Proposed Response　　　*Response Status* **C**
REJECT.

The transmitter must satisfy both equations and hence the shall specifies both.

Cl **54**　　*SC* **54.7.3.5 Figure 54-5**　　*P* **27**　　*L* **39**　　# **183**
Bill Quackenbush　　　　　　Cisco Systems, Inc.

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

The minimum specification for return loss is hard to see between 100 and 625 MHz.

SuggestedRemedy

Make the line representing the minimum return loss wider so that it is distinct from the grid lines.

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

Cl **54**　　*SC* **54.7.3.5 Figure 54-5**　　*P* **27**　　*L* **48**　　# **184**
Bill Quackenbush　　　　　　Cisco Systems, Inc.

Comment Type **E**　　*Comment Status* **R**　　　　　*E184*

The title should be "Minimum Transmit output differential return loss (informative)"

SuggestedRemedy

See comment

Proposed Response　　　*Response Status* **C**
REJECT.

This is an informative graph and the limits are set in the text.

Cl **54**   *SC* **54.7.3.6**   *P* **28**   *L* **11**   # 117

Dawe, Piers   Agilent

Comment Type **T**   *Comment Status* **R**   *T117*

Steps 1 and 7 seem mutually redundant

SuggestedRemedy

Delete one?

Proposed Response   *Response Status* **C**

REJECT.

Steps 1 and 7 are not mutually redundant. After normalization the waveform may not line up on the time axis (x-axis) in the optimal spot, therefore step 7 is provided to allow this alignment to take place.

Cl **54**   *SC* **54.7.3.6**   *P* **28**   *L* **13**   # 115

Dawe, Piers   Agilent

Comment Type **E**   *Comment Status* **A**   *E115*

2.5UIs

SuggestedRemedy

2.5 UI

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.7.3.6**   *P* **28**   *L* **16**   # 116

Dawe, Piers   Agilent

Comment Type **E**   *Comment Status* **A**   *E116*

Can you hold these mini-equations each on one line: Voff = (Vlowp + Vlowm) / 2.   and Normalized Waveform = (Original Waveform - Voff) * (0.69 / Vnorm).

SuggestedRemedy

per comment, if practicable.

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**   *SC* **54.7.3.6**   *P* **28**   *L* **25**   # 21

Dove, Daniel   HP ProCurve Networki

Comment Type **E**   *Comment Status* **A**   *E21*

Three significant digits are not necessary and inconsistent with other figures.

SuggestedRemedy

Reformat the axes to zero significant digits to be consistent with other figures.

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

Will reformat so both x-axis and y-axis are one significant digit after the decimal point.

Cl **54**   *SC* **54.7.3.6**   *P* **28**   *L* **26**   # 23

Dove, Daniel   HP ProCurve Networki

Comment Type **E**   *Comment Status* **A**   *E23*

For Piers Dawe: Use of half-tone in figures is unnecessary and inconsistent with IEEE 802.3 documents.

SuggestedRemedy

Please reformat figures to black and white.

Proposed Response   *Response Status* **C**

ACCEPT.

Will reformat in B&W.

Cl **54**　　*SC* **54.7.3.6**　　　　*P* **28**　　*L* **5**　　　# `170`

Thaler, Pat

Comment Type **TR**　　*Comment Status* **A**　　　　*TR114*

I assume that the test states "with all other transmitters disabled" because there was a concern that crosstalk would interfer with the measurement. Unfortunately, a mesurement of the transmitter waveform with the other transmitters off may not accurately reflect the performance with in real operation. Someone might implement an inadequate power and grounding plan. The chip output in that case might look fine when just one transmitter was operating but when power was being sourced to all transmitters at the same time, the waveform might change substantially and not meet the template. Also, one might have excessive internal interaction between the transmitters. If one only tests a single transmitter at a time, one could find that the device was compliant but didn't work.

SuggestedRemedy

The standard should require testing transmitter waveform in a normal operating condition - all transmitters active.

Proposed Response　　*Response Status* **C**

ACCEPT IN PRINCIPLE.

See comment #114 for text.

See comment #55 against D5.2

Cl **54**　　*SC* **54.7.3.6**　　　　*P* **28**　　*L* **50**　　　# `22`

Dove, Daniel　　　　　　　HP ProCurve Networki

Comment Type **E**　　*Comment Status* **A**　　　　*T118*

Unnecessary term ""as measured"" in description of figure.

SuggestedRemedy

Remove ""as measured"".

Proposed Response　　*Response Status* **C**

ACCEPT IN PRINCIPLE.

See comment #118

Cl **54**　　*SC* **54.7.3.6**　　　　*P* **28**　　*L* **6**　　　# `114`

Dawe, Piers　　　　　　　Agilent

Comment Type **T**　　*Comment Status* **A**　　　　*TR114*

Continuing with the wordsmithing; see other comments for rationale and apologies for making such an issue of it.

SuggestedRemedy

Change: These measurements are to be made for each pair while observing the differential signal output at TP2 using the transmitter test fixture shown in Figure 54–3 and with all other transmitters disabled. to: The signals on each pair at TP2 shall meet specifications when connected to the transmitter test fixture shown in Figure 54–3, with all other transmitters disabled. Thanks!

Proposed Response　　*Response Status* **U**

ACCEPT IN PRINCIPLE.

Will use the following text:
"The signals on each pair at TP2 shall meet the transmit template specifications when connected to the transmitter test fixture shown in Figure 54-3, with all other transmitters active."

Changed end to "all other transmitters active" to address comment #170.

Changed comment type from "TR" to "T" since commentor is not in the sponsor Ballot Group.

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

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Cl **54**　　*SC* **54.7.3.6**

Cl **54**　　　*SC* **54.7.3.7**　　　　　*P* **29**　　　*L*　　　# **231**

Taich, Dimitry

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

Initially transition times were defined based on the 20%-80% thresholds of the transition. The current definition of transition time measurement suffers from the fact that for different pre-emphasis values you get different transition times (while the transmitter remains the same). More over at low pre-emphasis values the measured transition time differs substantially from the 20%-80% measurement. Additionally you may have templates that fit the template limits but fail the transition time limits - which is contrary to the original intention.

SuggestedRemedy

Rephrase clause 54.7.3.7 as follows: The rising edge transition time shall be between 60 and 130 ps. The rising edge transition time will be measured by using the following procedure:
1. Measure the peak normalized template between 0.5UI and 2.5UI - called Vp
2. Compute the lower threshold of the positive transition
　　th_low_p= -0.69 + 0.2*(Vp + 0.69)
3. Compute the upper threshold of the positive transition
　　th_up_p = -0.69 + 0.8*(Vp + 0.69)
4. Measure the rising time of the normalized template transition from the lower to upper thresholds defined above.

The falling edge transition time shall be between 60 and 130 ps.
The falling edge transition time will be measured by using the following procedure:
1. Measure the peak of the absolute of the normalized template between 5.5UI and 7.5UI - called Vn
2. Compute the upper threshold of the negative transition
　　th_up_n= 0.69 - 0.2*(Vp + 0.69)
3. Compute the lower threshold of the negative transition
　　th_low_n= 0.69 - 0.8*(Vn + 0.69)
4. Measure the falling time of the normalized template transition from the upper to lower thresholds defined above.

Proposed Response　　　*Response Status*　**C**

ACCEPT IN PRINCIPLE.

Change "... -0.35 to the 0.66 normalized levels as specified in 54.6.3.6" in the 1st sentence of 54.7.3.7" to "... at the 20% and 80% levels of the peak-to-peak differential value of the waveform using the high frequency test pattern of 48A.1."

Change "... 0.35 to the -0.66 normalized levels as specified in 54.6.3.6" in the 2nd sentence of 54.7.3.7" to "... at the 80% and 20% levels of the peak-to-peak differential value of the waveform using the high frequency test pattern of 48A.1."

Motion to: "Accept in principal" this suggested remedy with appropriate word smithing.
Moved by: Peter Bradshaw
Second by: Dimitry Taich

All:

　　Y _____　N _____　A _____

Motion to table above:
Moved by: Peter Bradshaw
Second by: Tony Zortea
All:

　　Y __9___　N ___1__　A ___2__

Motion to:　"Accept in principal" this suggested remedy with the modification to specify using 20% to 80% limits of the high frequency test pattern of 48A.1. And appropriate word smithing.

Moved by: Dimitry Taich
Second by: Peter Bradshaw
All:

　　Y ___9__　N ___2__　A ___2__

Passes.

Cl **54**　　　*SC* **54.7.3.7**　　　　　*P* **29**　　　*L* **27**　　　# **8**

Brown, Benjamin　　　　　　　　　　　Independent

Comment Type　**E**　　　*Comment Status*　**A**　　　　　　　　*E8*

There is 1 PICs item, DS13, for 2 shalls, this one and the one on line 28

SuggestedRemedy

Each shall needs exactly 1 PICS item

Proposed Response　　　*Response Status*　**C**

ACCEPT.

Pics item DS13 will be broken into 2 pics items, one for rising transition time and one for falling transition time.

Cl **54**　　　*SC* **54.7.3.8**　　　　　*P* **29**　　　*L* **33**　　　# **37**

Baumer, Howard　　　　　　　　　　　Broadcom Corp

Comment Type　**TR**　　　*Comment Status*　**A**　　　　　　　*TR37*

The sentence: ""The transmitter shall satisfy the jitter requirements with ..."" does not specify or point to which ""jitter requirements"".

SuggestedRemedy

Change ""The transmitter shall satisfy the jitter requirements with ..."" to ""The transmitter shall satisfy the jitter requirements of 54.10.1 with ...""

Proposed Response　　　*Response Status*　**C**

ACCEPT.

Cl **54**   *SC* **54.7.3.8**   *P* **29**   *L* **33**   # **9**

Brown, Benjamin   Independent

Comment Type **E**   *Comment Status* **A**   *E9*

There is 1 shall for 3 PICs items, DS15, DS16 & DS17

SuggestedRemedy

Each shall needs exactly 1 PICS item

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

Will collapse DS15,16,17 into one Pics item.

Cl **54**   *SC* **54.7.4**   *P* **30**   *L* **13**   # **185**

Bill Quackenbush   Cisco Systems, Inc.

Comment Type **E**   *Comment Status* **A**   *E185*

"+/- 100 ppm" is a tolerance, not a range.

SuggestedRemedy

Change "range" to "tolerance"

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

Will replace "range" with "per lane", and change value to 3.125 +/- 100ppm to be consistent with the response to comment #181.

Cl **54**   *SC* **54.7.4.1**   *P* **30**   *L* **29**   # **125**

Dawe, Piers   Agilent

Comment Type **T**   *Comment Status* **A**   *T125*

NOTE is good advice but could do with wordsmithing.   I would prefer some form of words like ""The BER limit is met with ..."" rather than ""BER should be tested with ..."". Also, return loss, NEXT and FEXT are ratios already; if reflected signal is higher for short cable, ""return loss"" would be lower not higher. Why would NEXT depend significantly on cable length?   It's probably easier to delete some detail than address all these points.

SuggestedRemedy

Change: Note: BER should be tested with worst case insertion loss, long cable, as well as a low loss, short, cable. The low loss cable may be a more stringent test on the system due to a higher ratio of return loss, NEXT and FEXT to the amplitude of the low frequency components within the transmitted signal.   to: NOTE -dash- The BER limit is met with a worst case insertion loss, long cable, as well as a low loss, short, cable. The low loss cable may be a more stringent requirement on the system due to higher [larger effects of] reflections and crosstalk than with long cables.

Proposed Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

Will change to:
NOTE -dash- The BER limit should be met with a worst case insertion loss, long cable, as well as a low loss, short cable. The low loss cable may be a more stringent requirement on the system due to higher [larger effects of] reflections and crosstalk than with long cables.

Cl **54**   *SC* **54.7.4.1**   *P* **30**   *L* **29**   # **10**

Brown, Benjamin   Independent

Comment Type **E**   *Comment Status* **A**   *E10*

Extra comma

SuggestedRemedy

Replace ""loss, short, cable"" with ""loss, short cable""

Proposed Response   *Response Status* **C**

ACCEPT.

Cl **54**　　*SC* **54.7.4.1**　　　　　*P* **30**　　*L* **29**　　# 24
Dove, Daniel　　　　　　　　　HP ProCurve Networki

Comment Type　**E**　　*Comment Status*　**A**　　　　　*T125*

For Piers Dawe: ""This note seems like good advice even though I can't see a comment that triggers its addition. I would prefer some form of words like ""The BER limit is met with ..."" rather than ""BER should be tested with ..."". Return loss, NEXT and FEXT are ratios already; if reflected signal is higher for short cable, ""return loss"" would be lower not higher. Why would NEXT depend significantly on cable length?""

SuggestedRemedy

Consider rewording the note.

Proposed Response　　　*Response Status*　**C**

ACCEPT IN PRINCIPLE.

See comment #125

Cl **54**　　*SC* **54.7.4.1**　　　　　*P* **30**　　*L* **30**　　# 156
Grow, Robert　　　　　　　　　Intel

Comment Type　**E**　　*Comment Status*　**A**　　　　　*E156*

Incorrect style.

SuggestedRemedy

Apply proper IEEE NOTE style. Also fix on line 45.

Proposed Response　　　*Response Status*　**C**

ACCEPT.

Cl **54**　　*SC* **54.7.4.3**　　　　　*P* **30**　　*L* **46**　　# 11
Brown, Benjamin　　　　　　　Independent

Comment Type　**E**　　*Comment Status*　**A**　　　　　*E11*

Extra comma

SuggestedRemedy

Replace ""receiver, that"" with ""receiver that"" - see the IEEE standards style manual, 13.2

Proposed Response　　　*Response Status*　**C**

ACCEPT IN PRINCIPLE.

Change to: "... receiver which ..."

Cl **54**　　*SC* **54.7.4.4**　　　　　*P* **30**　　*L* **50**　　# 186
Bill Quackenbush　　　　　　　Cisco Systems, Inc.

Comment Type　**TR**　　*Comment Status*　**A**　　　　*TR186*

The text requires that the receiver accept an unattenuated transmit signal, but does not state the acceptance criteria. Must the acceptance be without damage to the receiver, without receiver malfunction or what?

SuggestedRemedy

State acceptance requirement clearly.

Proposed Response　　　*Response Status*　**U**

ACCEPT.

Will add to the end of the first sentence: "... , and still meet the BER requirement specified in 54.7.4.1."

Cl **54**　　*SC* **54.7.4.5**　　　　　*P* **31**　　*L* **9**　　# 157
Grow, Robert　　　　　　　　　Intel

Comment Type　**E**　　*Comment Status*　**A**　　　　　*E157*

Missing period (full stop).

SuggestedRemedy

Insert "".""

Proposed Response　　　*Response Status*　**C**

ACCEPT.

Cl **54**　　*SC* **54.8 Table 54-7**　　　*P* **31**　　*L* **23**　　# 187
Bill Quackenbush　　　　　　　Cisco Systems, Inc.

Comment Type　**T**　　*Comment Status*　**A**　　　　　*R187*

There is no indication whether the first and second items in the table are minimums or maximums.

SuggestedRemedy

Add "Minimum" or "Maximum" to items 1 and 2 in the table as appropriate.

Proposed Response　　　*Response Status*　**C**

ACCEPT.

Cl **54**　　*SC* **54.8.1**　　　　　*P* **32**　　*L* **3**　　　# **25**

Dove, Daniel　　　　　　　　　　HP ProCurve Networki

Comment Type **E**　　*Comment Status* **R**　　　　　*E25*

Consistency: The word ohm should be replaced by the symbol for omega.

SuggestedRemedy

Replace with the omega symbol.

Proposed Response　　*Response Status* **C**

REJECT.

Will use ohms through out document.

Cl **54**　　*SC* **54.8.2**　　　　　*P* **32**　　*L* **11**　　　# **210**

Law, David　　　　　　　　　　3Com

Comment Type **E**　　*Comment Status* **A**　　　　　*E121*

Please use a 'x' symbol rather than '.' for multiplication.

SuggestedRemedy

See comment.

Proposed Response　　*Response Status* **C**

ACCEPT.

See comment #121

Cl **54**　　*SC* **54.8.2**　　　　　*P* **32**　　*L* **11**　　　# **121**

Dawe, Piers　　　　　　　　　　Agilent

Comment Type **E**　　*Comment Status* **A**　　　　　*E121*

I'm told that style guide prefers x to . to represent multiplication in equations.

SuggestedRemedy

Check (sorry not to be more complete for you!)

Proposed Response　　*Response Status* **C**

ACCEPT IN PRINCIPLE.

See comment #158

Cl **54**　　*SC* **54.8.2**　　　　　*P* **32**　　*L* **7**　　　# **211**

Law, David　　　　　　　　　　3Com

Comment Type **T**　　*Comment Status* **R**　　　　　*T211*

The text states that 'The insertion loss, in dB with f in MHz, of each pair of the 10GBASE-CX4 cable assembly shall be:' however wouldn't a cable that exceeds these requirements also be acceptable. If this is correct then Figure 54-7 should also be updated to show a template or a limit rather than just as plot of the function. In addition there is no reference to Figure 54-7 in the text which should be added.

SuggestedRemedy

Suggest the text 'The insertion loss, in dB with f in MHz, of each pair of the 10GBASE-CX4 cable assembly shall be:' should be changed to read 'The insertion loss, in dB with f in MHz, of each pair of the 10GBASE-CX4 cable assembly shall meet or exceed:', Figure 54-7 should be updated to be either a template or a limit and the text 'The cable assembly insertion loss is illustrated in Figure 54-7.' should be added to subclause 54.8.2. Similar changes need to be done to 54.8.3 & Figure 54-8, 54.8.4.2 & Figure 54-9 and 54.8.5.2 & Figure 54-10.

Proposed Response　　*Response Status* **C**

REJECT.

Equations 54-3 is an inequality and therefore an "or exceeds" is not necessary. The figure is an informative figure and as such does not need a textual reference.

Cl **54**　　*SC* **54.8.3**　　　　　*P* **33**　　*L* **19**　　　# **27**

Dove, Daniel　　　　　　　　　　HP ProCurve Networki

Comment Type **E**　　*Comment Status* **A**　　　　　*E27*

Format of figure 54-8 Y axis was supposed to be changed to zero trailing zeroes.

SuggestedRemedy

Change axis to be from 10dB to 25dB with no decimal point or trailing zeroes or exponents.

Proposed Response　　*Response Status* **C**

ACCEPT.

Cl **54**　　*SC* **54.8.3**　　　　　*P* **33**　　*L* **7**　　　# **212**

Law, David　　　　　　　　　　3Com

Comment Type **T**　　*Comment Status* **A**　　　　　*T212*

The text states that the return loss requirement is from 100MHz to 2000MHz, the text on line 7 states 54-4 is for 100MHz <= f therefore including 100MHz however line 14 states 54-5 is for f < 2000MHz therefore excluding 2000MHz. This doesn't seem consistent.

SuggestedRemedy

Change the text '400 MHz <- f < 2000 MHz' to read '400 MHz <- f <= 2000 MHz'.

Proposed Response　　*Response Status* **C**

ACCEPT.

Cl **54**　　*SC* **54.8.3**　　　　　　*P* **33**　　　*L* **7**　　　*#* 122
Dawe, Piers　　　　　　　　　　　Agilent

Comment Type **E**　　*Comment Status* **A**　　　　　　　　E122
For consistency,

SuggestedRemedy
Insert subscript 10 after 'log' in the equations where you have not already done so.

Proposed Response　　　*Response Status* **C**
ACCEPT IN PRINCIPLE.

See comment #158

Cl **54**　　*SC* **54.8.3**　　　　　　*P* **33**　　　*L* **7**　　　*#* 38
Baumer, Howard　　　　　　　　　Broadcom Corp

Comment Type **T**　　*Comment Status* **A**　　　　　　　　TR26
The slope for the cable assembly return loss of 17.17 creates a return loss = 12.01 at 400MHz. This s/b 12.

SuggestedRemedy
Change the the return loss slope to 17.19 to get the return loss at 400MHz = 12. This has a no affect on the link performance.

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

See comment #26

Cl **54**　　*SC* **54.8.3**　　　　　　*P* **33**　　　*L* **7**　　　*#* 26
Dove, Daniel　　　　　　　　　　HP ProCurve Networki

Comment Type **TR**　　*Comment Status* **A**　　　　　　　TR26
The ReturnLoss calculation as defined yields a discontinuity at 400MHz.

SuggestedRemedy
Replace ""17.17"" with ""17.19""

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

Cl **54**　　*SC* **54.8.4.2**　　　　　*P* **34**　　　*L* **30**　　*#* 123
Dawe, Piers　　　　　　　　　　　Agilent

Comment Type **E**　　*Comment Status* **A**　　　　　　　　E123
For consistency,

SuggestedRemedy
Index i in italics or not?

Proposed Response　　　*Response Status* **C**
ACCEPT IN PRINCIPLE.

See comment #158

Cl **54**　　*SC* **54.8.4.2**　　　　　*P* **34**　　　*L* **30**　　*#* 188
Bill Quackenbush　　　　　　　　Cisco Systems, Inc.

Comment Type **T**　　*Comment Status* **A**　　　　　　　　T188
The "i" in the exponent of the summation of equation 54-8 should be a subscript.

SuggestedRemedy
Fix.

Proposed Response　　　*Response Status* **C**
ACCEPT IN PRINCIPLE.

See comment #158

Cl **54**　　*SC* **54.8.4.2**　　　　　*P* **34**　　　*L* **9**　　　*#* 30
Dove, Daniel　　　　　　　　　　HP ProCurve Networki

Comment Type **TR**　　*Comment Status* **X**　　　　　　　TR30
I am concerned that our specification is too general in that MDNEXT is specified for a cable assembly that goes from 0m to 15m and presentations have indicated that the minimum MDNEXT loss is based upon interaction between near end connectors and far end connectors in a short cable. Thus we are allowing much sloppier long-cables than we should.

SuggestedRemedy
Redefine MDNEXT as a function of frequency and some other parameter that is dependent on cable length. Either use the length explicitly, or InsertionLoss or some other factor.

Proposed Response　　　*Response Status* **Z**
WITHDRAWN by commentor.

Cl **54**   *SC* **54.8.5.1**   *P* **35**   *L* **38**   **#** **158**
Grow, Robert   Intel

Comment Type **E**   *Comment Status* **A**   *E158*
Style usage. I believe usage of italics for V is incorrect.

SuggestedRemedy
Fix six instances on this page.

Proposed Response   *Response Status* **C**
ACCEPT IN PRINCIPLE.

10GBASE-CX4 Editor is instructed to check and make sure all equations are formatted consistent with IEEE style guides.

Cl **54**   *SC* **54.8.5.1**   *P* **35**   *L* **45**   **#** **39**
Baumer, Howard   Broadcom Corp

Comment Type **E**   *Comment Status* **A**   *E39*
Missing ""the"".

SuggestedRemedy
Change: "".. voltage of disturbing signal ..."" to "".. voltage of the disturbing signal ...""

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

Cl **54**   *SC* **54.8.5.1**   *P* **35**   *L* **46**   **#** **40**
Baumer, Howard   Broadcom Corp

Comment Type **E**   *Comment Status* **A**   *E40*
Missing ""the"".

SuggestedRemedy
Change: ""... at far end of disturbed ..."" to ""... at the far end of the disturbed ...""

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

Cl **54**   *SC* **54.8.5.1**   *P* **35**   *L* **47**   **#** **41**
Baumer, Howard   Broadcom Corp

Comment Type **E**   *Comment Status* **A**   *E41*
Mising ""the""

SuggestedRemedy
Change: ""... loss of disturbed ..."" to ""... loss of the disturbed ...""

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

Cl **54**   *SC* **54.8.5.2**   *P* **36**   *L* **32**   **#** **191**
Bill Quackenbush   Cisco Systems, Inc.

Comment Type **T**   *Comment Status* **A**   *T191*
The "i" in the exponent of the summation of equation 54-11 should be a subscript.

SuggestedRemedy
Fix.

Proposed Response   *Response Status* **C**
ACCEPT IN PRINCIPLE.

See comment #158

Cl **54**   *SC* **54.8.7**   *P* **37**   *L* **51**   **#** **189**
Bill Quackenbush   Cisco Systems, Inc.

Comment Type **E**   *Comment Status* **A**   *E189*
The title of Figure 54-11 should be "Default Cable Wiring"

SuggestedRemedy
See comment.

Proposed Response   *Response Status* **C**
ACCEPT IN PRINCIPLE.

Default denotes that there are other optional alternatives. This is the one and only cable wiring allowed. "default" will be removed from line 35 so text and figure title match.

Cl **54**   *SC* **54.9.1**   *P* **38**   *L* **27**   **#** **190**
Bill Quackenbush   Cisco Systems, Inc.

Comment Type **E**   *Comment Status* **A**   *E190*
For correctness, change "connector" to "recepticle" or "socket".

SuggestedRemedy
See comment

Proposed Response   *Response Status* **C**
ACCEPT IN PRINCIPLE.

Will use recepticle.

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

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Cl **54**   *SC* **54.9.1**

Cl **54**　　*SC* **54.x**　　　　　　　*P* **multiple**　　*L*　　　# **176**
Bill Quackenbush　　　　　　　Cisco Systems, Inc.

Comment Type　**E**　　*Comment Status*　**A**　　　　　*E176*
　The terms "lane" and "channel" are both used and appear to refer to the same thing.

SuggestedRemedy
　Pick one term, I suggest "lane", and use it consistently.

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

Cl **54**　　*SC* **54.x**　　　　　　　*P* **numerous**　　*L*　　　# **179**
Bill Quackenbush　　　　　　　Cisco Systems, Inc.

Comment Type　**E**　　*Comment Status*　**R**　　　　　*E179*
　I think it would be better to use the phrase "signaling rate" rather that the phrase "signaling speed".

SuggestedRemedy
　Change each instance of "signaling speed" to "signaling rate".

Proposed Response　　　*Response Status*　**C**
　REJECT.

　Rate and speed are synonymous in these contexts, therefore no change is needed.

Cl **54**　　*SC* **Figure 54-1**　　　*P* **19**　　*L* **14**　　# **88**
Dawe, Piers　　　　　　　　Agilent

Comment Type　**E**　　*Comment Status*　**R**　　　　　*E88*
　The XGMII sublayer is much taller than most sublayers in most layer diagrams (I guess it was inherited from 53-1 which may have once been like 52-1).

SuggestedRemedy
　Shrink the height of the XGMII sublayer, reducing the height of the LAN stack and the whole figure.

Proposed Response　　　*Response Status*　**C**
　REJECT.

　The drawing will stay as is so that the bottom of the two model stacks remain horizontally alligned.

Cl **54**　　*SC* **Figure 54-14**　　*P* **38**　　*L* **30**　　# **213**
Law, David　　　　　　　　3Com

Comment Type　**E**　　*Comment Status*　**A**　　　　　*E213*
　Why is the board connection footprint shown - it is not a compliance point and isn't any footprint that meets the performance requirements acceptable.

SuggestedRemedy
　Remove Figure 54-14.

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

Cl **54**　　*SC* **Figure 54-2**　　*P* **20**　　*L* **25**　　# **224**
Law, David　　　　　　　　3Com

Comment Type　**T**　　*Comment Status*　**A**　　　　　*T224*
　Isn't the box marked 'CX4 receive connection including AC-coupling' actually more than just a 'connection' but actually a 10GBASE-CX4 PMD receive function. In addition isn't the box marked 'CX4 transmit connection' also more than just a connection but actually the transmit portion of the PMD.

SuggestedRemedy
　Suggest the text in the box that reads 'CX4 receive connection including AC-coupling' be changed to read '10GBASE-CX4 PMD receive function' and the box marked 'CX4 transmit connection' be changed to read '10GBASE-CX4 PMD transmit function'.

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

Cl **54**　　*SC* **Figure 54-2**　　*P* **20**　　*L* **26**　　# **226**
Law, David　　　　　　　　3Com

Comment Type　**T**　　*Comment Status*　**A**　　　　　*T226*
　The interface on the left and right had sides of this figure is marked 'PMD Service interface' yet the signal shown are not from the definition of the PMD Service interface found in 53.1.1.

SuggestedRemedy
　Update the interface to use the primitives from the PMD Service interface referenced.

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

Cl **54**   *SC* **Figure 54-3**   *P* **25**   *L* **6**   # **148**
Grow, Robert   Intel

Comment Type **E**   *Comment Status* **A**   *E148*
   Fix style.

SuggestedRemedy
   Serif font used in figure. Correct capitalization of title ""Transmit test fixture""

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

Cl **54**   *SC* **Figure 54-4**   *P* **26**   *L* **25**   # **201**
Law, David   3Com

Comment Type **E**   *Comment Status* **A**   *E201*
   Note sure why the note text is included within '[' and ']'. Also shouldn't the note appear after
   the figure (need to check with IEEE editor to confirm this).

SuggestedRemedy
   See comment.

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

   Will remove "[" & "]" and fix format to conform to IEEE note style.

Cl **54**   *SC* **Figure 54-4**   *P* **26**   *L* **29**   # **202**
Law, David   3Com

Comment Type **T**   *Comment Status* **A**   *T202*
   The figure title doesn't seem correct as the are no voltage limits shown.

SuggestedRemedy
   Suggts the title be changed to read 'Transmitter differential peak-to-peak output voltage
   definition'.

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

Cl **54**   *SC* **Figure 54-4**   *P* **27**   *L* **23**   # **112**
Dawe, Piers   Agilent

Comment Type **E**   *Comment Status* **A**   *E112*
   Template is hard to see where it coincides with grid line, 100 to 625 MHz.

SuggestedRemedy
   Use thicker lines for templates.

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

Cl **54**   *SC* **Figure 54-4**   *P* **27**   *L* **23**   # **113**
Dawe, Piers   Agilent

Comment Type **E**   *Comment Status* **A**   *E113*
   Labels and titles are hard to read (especially legend on fig 54-9).

SuggestedRemedy
   Use bigger fonts.

Proposed Response   *Response Status* **C**
   ACCEPT IN PRINCIPLE.

   Will change text to 10pt sans serif font.

Cl **54**   *SC* **Figure 54-5**   *P* **27**   *L* **23**   # **111**
Dawe, Piers   Agilent

Comment Type **E**   *Comment Status* **A**   *E111*
   Filesize bloat D5.0 complete: 44 pages, 1056 KB D5.0 without the pages with graphs: 38
   pages, 635 KB or 16.7 KB/page Difference: 6 pages for 421 KB or 70 KB/page

SuggestedRemedy
   Is there less data-hungry way to incorporate the graphs?

Proposed Response   *Response Status* **C**
   ACCEPT IN PRINCIPLE.

   Graphs will be converted from grey scale to black and white.

Cl **54**   *SC* **Figure 54-5**   *P* **27**   *L* **38**   # **150**
Grow, Robert   Intel

Comment Type **E**   *Comment Status* **A**   *E112*
   Hard to tell if Equation-1 is plotted.

SuggestedRemedy
   Fix.

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

   See comment #112

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

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Cl **54**   *SC* **Figure 54-5**

Cl **54**　　*SC* **Figure 54-5**　　*P* **27**　　*L* **48**　　# **205**

Law, David　　　　　3Com

Comment Type **E**　　*Comment Status* **A**　　*E205*

Please check with the IEEE project editor that these figures can be edited as they appear to be from some tool other than Frame. Also note that the format of the numbers such as '1,000' on the axis isn't in IEEE style and may need to be edited prior to publication.

SuggestedRemedy

Check this and other similar figures with the IEEE project editor.

Proposed Response　　　*Response Status* **C**

ACCEPT.

See editor's note on page 17 line 5 as well as comment #136.

Cl **54**　　*SC* **Figure 54-6**　　*P* **28**　　*L* **46**　　# **119**

Dawe, Piers　　　　　Agilent

Comment Type **E**　　*Comment Status* **A**　　*E21*

Redundant trailing zeroes

SuggestedRemedy

Please remove the .000's

Proposed Response　　　*Response Status* **C**

ACCEPT IN PRINCIPLE.

See comment #21

Cl **54**　　*SC* **Figure 54-6**　　*P* **28**　　*L* **50**　　# **204**

Law, David　　　　　3Com

Comment Type **E**　　*Comment Status* **A**　　*T118*

Suggest that the title be changed to simply read 'Normalized transmit template' or 'Normalized transmit template at TP2'. The information that it is 'as measured at TP2 using Figure 54–3' is specified clearly in the text related to this figure and doesn't need to appear in the figure title.

SuggestedRemedy

See comment.

Proposed Response　　　*Response Status* **C**

ACCEPT IN PRINCIPLE.

See comment #118

Cl **54**　　*SC* **Figure 54-6**　　*P* **28**　　*L* **50**　　# **118**

Dawe, Piers　　　　　Agilent

Comment Type **T**　　*Comment Status* **A**　　*T118*

Per other comments, would prefer removal of 'as measured'

SuggestedRemedy

Please remove 'as measured' from figure caption.

Proposed Response　　　*Response Status* **C**

ACCEPT IN PRINCIPLE.

Will change figure title to: "Normalized transmit template". The "as measure at TP2 using figure 54-3" has already been stated in the text.

Cl **54**　　*SC* **General**　　*P*　　*L*　　# **153**

Grow, Robert　　　　　Intel

Comment Type **E**　　*Comment Status* **A**　　*E153*

Not using subscripts seems to be common for other parameters, I am expect I only list part of them below.

SuggestedRemedy

Search appropriate strings and make variable names consistent to IEEE style.　Candidate searches include: Vlowp, Vlowm, Voff, Vnorm, Vpds, Vpcn.　Please include any others the TF is aware of.

Proposed Response　　　*Response Status* **C**

ACCEPT.

Cl **54**　　*SC* **Table 54-1**　　*P* **18**　　*L* **22**　　# **87**

Dawe, Piers　　　　　Agilent

Comment Type **E**　　*Comment Status* **R**　　*E87*

In order to avoid wasted space...

SuggestedRemedy

Please make the table wider, to use fewer lines for its footnote.

Proposed Response　　　*Response Status* **C**

REJECT.

Space is not being waisted, there is not enough room for the following figure even if the footnote only took one line.

Cl **54**　　　*SC* **Table 54-2**　　　*P* **21**　　　*L* **36**　　　**# 98**
Dawe, Piers　　　　　　　　　　Agilent

Comment Type **E**　　　*Comment Status* **A**　　　　　　*E98*
　Table width

SuggestedRemedy
　Redo table 'shrink to fit' and save a line

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

Cl **54**　　　*SC* **Table 54-4**　　　*P* **24**　　　*L* **47**　　　**# 147**
Grow, Robert　　　　　　　　　Intel

Comment Type **T**　　　*Comment Status* **A**　　　　　　*T147*
　Incorrect Units?

SuggestedRemedy
　Shouldn't unit simply be UI, not UIpp? If peak-to-peak is needed, it probably belongs in
　Parameter column.

Proposed Response　　　*Response Status* **C**
　ACCEPT IN PRINCIPLE.

　Units will go to UI.
　Peak-to-peak will be added to the parameter.

Cl **54**　　　*SC* **Table 54-5**　　　*P* **29**　　　*L* **10**　　　**# 152**
Grow, Robert　　　　　　　　　Intel

Comment Type **E**　　　*Comment Status* **A**　　　　　　*E152*
　Inconsistent application of table line styles.

SuggestedRemedy
　Fix

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

Cl **54**　　　*SC* **Table 54-5**　　　*P* **29**　　　*L* **8**　　　**# 120**
Dawe, Piers　　　　　　　　　　Agilent

Comment Type **E**　　　*Comment Status* **A**　　　　　　*E152*
　Line thicknesses

SuggestedRemedy
　Please use the thick or double line between 2nd and 3rd columns and between 6th and
　7th. Please reset line thickness under '0.740'.

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

Cl **54**　　　*SC* **Table 54-56**　　　*P* **30**　　　*L* **11**　　　**# 154**
Grow, Robert　　　　　　　　　Intel

Comment Type **E**　　　*Comment Status* **A**　　　　　　*E154*
　Inconsistent application of table line styles.

SuggestedRemedy
　Fix both horizontal and vertical lines in table body.

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

Cl **54**　　　*SC* **Table 54-7**　　　*P* **24**　　　*L* **36**　　　**# 105**
Dawe, Piers　　　　　　　　　　Agilent

Comment Type **E**　　　*Comment Status* **A**　　　　　　*E105*
　Notational problems: the capital S, the implication of a function   Signal<x>, the implication
　of division with /. Simple fix!

SuggestedRemedy
　Delete 'Signal<p>/<n>' leaving 'Common mode voltage limits'.

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

Cl **54**　　　*SC* **Table 54-7**　　　*P* **24**　　　*L* **41**　　　**# 104**
Dawe, Piers　　　　　　　　　　Agilent

Comment Type **E**　　　*Comment Status* **A**
　References with wrong Frame style/format? in '[See figure (54–6) and table (54–9)]

SuggestedRemedy
　See Figure 54–6 and Table 54–9'. Also p30 Table 54-6.

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

Cl **54**　　　*SC* **Table 54-7**　　　*P* **31**　　　*L* **23**　　　**# 155**
Grow, Robert　　　　　　　　　Intel

Comment Type **E**　　　*Comment Status* **A**　　　　　　*E155*
　Inconsistent application of table line styles.

SuggestedRemedy
　Fix both horizontal and vertical lines in table body.

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

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