Cl **00** *SC* **1.4.x** *P* **20** *L* **29** # 1

Anslow, Pete Ciena

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

comma missing in "IEEE Std 802.3 96.4.4"

SuggestedRemedy

Change to "IEEE Std 802.3, 96.4.4"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **00** *SC* **0** *P* *L* # 2

Anslow, Pete Ciena

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

The convention for headings, table titles and figure titles in 802.3 is to capitalise only the first letter unless they contain a proper noun.

SuggestedRemedy

Correct the capitalisation of the titles of: 96.4.7, 96.5.4, 96.5.4.1, 96.7.1.1, 96.10.4.4, Annex 96A title, 96A.1, 96A.2

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **01** *SC* **1.4.165** *P* **18** *L* **30** # 3

Anslow, Pete Ciena

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

In the 802.3 revision D2.1 an additional definition for "Company Identifier (CID)" has been inserted as 1.4.162. This has had the effect of increasing the subclause number of definitions that were 1.4.162 and higher by one.

SuggestedRemedy

Change the subclause number of all of the existing definitions being modified that have subclause numbers above 1.4.162 by one.
This will result in "1.4.165 Control mode" becoming "1.4.166 Control mode" through to "1.4.397 ternary symbol" becoming "1.4.398 ternary symbol".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **01** *SC* **1.4.x** *P* **20** *L* **16** # 4

Anslow, Pete Ciena

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

For the definitions in 1.4 the colon at the end of the term to be defined should be bold.

SuggestedRemedy

Change the colons after 4B/3B and SYMB_ID to be bold font.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **01** *SC* **1.4.x** *P* **20** *L* **25** # 5

Anslow, Pete Ciena

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

In the definition "1.4.x SYMB_1D", 96.2.5.1 and 96.2.6.1 should be cross-references

SuggestedRemedy

Make 96.2.5.1 and 96.2.6.1 cross-references

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **01** *SC* **1.4.x** *P* **20** *L* **16** # 6

Anslow, Pete Ciena

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

The position for the new definitions should be defined so that the editor applying the amendment knows where they go and they should be given individual numbers so that they can be cross-referenced.

SuggestedRemedy

Change "1.4.x 100BASE-T1" to "1.4.16a 100BASE-T1"
Change "1.4.x 4B/3B" to "1.4.87a 4B/3B"
Change "1.4.x FORCE mode" to "1.4.221a FORCE mode"
Change "1.4.x SYMB_1D:" to "1.4.392a SYMB_1D:"

Give each new definition its own Insert editing instruction. For example make the instruction for 100BASE-T1:
Insert the following new definition into the list after 1.4.16 100BASE-T:

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **01** *SC* **1.5** *P* **20** *L* **36** # 7

Anslow, Pete Ciena

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

The convention used in 1.5 of 802.3 is that the expansion of abbreviations use all lower case font except where the term is a proper noun.
Also, bandwidth, electromagnetic and crosstalk are one word each not two.
See http://www.ieee802.org/3/WG_tools/editorial/requirements/words.html for "crosstalk"

SuggestedRemedy

Change the expansions to lower case (except for FEXT and NEXT).
Change:
"Electro Magnetic" to "electromagnetic"
"Band Width" to "bandwidth"
"Cross Talk" to "crosstalk"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **45** *SC* **45.2.1.10** *P* **23** *L* **38** # 8

Anslow, Pete Ciena

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

In register 1.11, there are only 5 reserved bits remaining. In order to make the best use of the remaining bits, recent projects have used them to "point" to another register for the individual PMD ability bits.
For example:
bit 1.11.9 is "P2MP ability" pointing to register 1.12 where there are 10 PMD ability bits.
bit 1.11.10 is "40G/100G extended abilities" pointing to register 1.13 where there are 14 PMD ability bits

At an informal discussion between the editors of various current 802.3 projects, a suggested allocation of bit 1.11.11 to "BASE-T1 extended
abilities" was made which would indicate that the PMD ability bits can be found in register 1.18 "BASE-T1 PMA/PMD extended ability"
This will enable additional "T1" PMDs without using up more bits in register 1.11.

SuggestedRemedy

In Table 45-13, change the inserted row to:
Bit(s): 1.11.11
Name: BASE-T1 extended abilities
Description:
1 = PMA/PMD has BASE-T1 extended abilities listed in register 1.18
0 = PMA/PMD does not have BASE-T1 extended abilities

Change the title and content of 45.2.1.10.a to:
45.2.1.10.a BASE-T1 extended abilities (1.11.11)
When read as a one, bit 1.11.11 indicates that the PMA/PMD has BASE-T1 extended abilities listed in register 1.18. When read as a zero, bit 1.11.11 indicates that the PMA/PMD does not have BASE-T1 extended abilities.

Insert a new subclause 45.2.1.14b and subclauses after 45.2.1.14 for register 1.18 in a similar was as for register 1.13.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **45** *SC* **45.2.1.10** *P* **23** *L* **27** # 9

Anslow, Pete Ciena

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

The table for PMA/PMD extended ability register bit definitions should be Table 45-14 rather than Table 45-13

SuggestedRemedy

Change to Table 45-14

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **45** *SC* **45.2.1.131** *P* **24** *L* **16** # 10

Anslow, Pete Ciena

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

A comment against P802.3bx D2.0 has changed the Description entry for all Reserved bits in the tables of Clause 45 to "Value always 0", which is different from what is used here. Also, Bit 1.2100.15 has "RW", which should be "R/W"

SuggestedRemedy

In Tables 45-98a and 98b change "Ignore on read" to "Value always 0"
In Table 45-98a Bit 1.2100.15 change "RW" to "R/W"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **96.1.1** *P* **28** *L* **1** # 11

Anslow, Pete Ciena

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

Recent projects have not included a list of objectives such as in 96.1.1, so preferably remove it.

If it is not removed "ISO16750" should be "ISO 16750" and there should be an entry in the references subclause 1.3 added for it

SuggestedRemedy

Either:
remove 96.1.1
or:
change "ISO16750" to "ISO 16750" and add an entry in the references subclause 1.3 added for it.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Remove 96.1.1

Cl **96** *SC* **96.1.2** *P* **28** *L* **33** # 12

Anslow, Pete Ciena

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

Space missing in "Clause 22MII"

SuggestedRemedy

Change to "Clause 22 MII"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **95.5.3** *P* **61** *L* **14** # 13

Anslow, Pete Ciena

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

In Figures 96-18 and 96-19 "10K O" should be "10 kO" where "O" stands for capital omega

SuggestedRemedy

In Figures 96-18 and 96-19, change "10K O" to "10 kO" where "O" stands for capital omega

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **96.5.4.4** *P* **65** *L* **32** # 14

Anslow, Pete Ciena

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

In equations 96-4, 96-5, 96-6, 96-7, 96-8, 96-9, 96-10, and 96-11 there are spaces missing between the number and "MHz"

SuggestedRemedy

In equations 96-4, 96-5, 96-6, 96-7, 96-8, 96-9, 96-10, and 96-11 add a space between the number and "MHz" for all instances per equation.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **96.5.5.3** *P* **67** *L* **5** # 15

Anslow, Pete Ciena

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

Figure 96-24 has some text in block capitals

SuggestedRemedy

Change text in block capital to normal case.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **96.10.4.1** *P* **73** *L* **31** # 16

Anslow, Pete Ciena

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

In the Value/Comment columns of the various PICS tables, the entry should start with a capital letter

SuggestedRemedy

Make the first letter of the entry in the Value/Comment columns of the various PICS tables a capital letter.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **96.10.4.2** *P* **75** *L* **6** # 17

Anslow, Pete Ciena

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

Item PCR1 has "See Figure 96–10a and Figure 96–10a"
Presumably, this should be: "See Figure 96–10a and Figure 96–10b"

SuggestedRemedy

Change to "See Figure 96–10a and Figure 96–10b"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **96.4.2** *P* **55** *L* **24** # 18

Anslow, Pete Ciena

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

As 45.2.1.7.4 is in the draft, this should be a cross-reference rather than green text.

Same issue for:
45.2.1.7.5 in 96.4.3 (Page 55, line 47)
45.2.1.7.4 in 96.10.4.3 (Page 75, line 31)
45.2.1.7.5 in 96.10.4.3 (Page 75, line 34)
Figure 96-16 in 96.10.4.3 (Page 75, line 36)

SuggestedRemedy

Change:
45.2.1.7.4 in 96.4.2 (Page 55, line 24)
45.2.1.7.5 in 96.4.3 (Page 55, line 47)
45.2.1.7.4 in 96.10.4.3 (Page 75, line 31)
45.2.1.7.5 in 96.10.4.3 (Page 75, line 34)
Figure 96-16 in 96.10.4.3 (Page 75, line 36)
to cross-references

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **96.10.4.4** *P* **77** *L* **14** # 19

Anslow, Pete Ciena

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

The +/- symbol should not be separated from "100 ppm"

SuggestedRemedy

Move the +/- symbol to the next line

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96A** *SC* **96A** *P* **80** *L* **1** # 20

Anslow, Pete Ciena

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

Annex 96A has the wrong draft number and the wrong date in the header.
(Of course, this would not happen if the method used in the 802.3 template had not been changed.)

SuggestedRemedy

Make the headers consistent throughout the draft.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Editor to follow up with commenter to make sure the appropiate method is followed.

Cl **99** *SC* *P* **1** *L* **1** # 21

Anslow, Pete Ciena

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

The P802.3bw amendment will be an amendment to the result of the P802.3bx revision project. This is correctly reflected in the draft from page 17 onwards, but not in the frontmatter or TOC

SuggestedRemedy

Change the base_year variable in the frontmatter and TOC files to 201x

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **99** *SC* *P* **10** *L* **37** # 22

Anslow, Pete Ciena

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

In "At the date of IEEE Std 802.3xx-20xx publication...", the "802.3xx" should be "802.3bw"

SuggestedRemedy

Change "802.3xx" to "802.3bw"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **99** *SC* *P* **11** *L* **22** # 23

Anslow, Pete Ciena

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

"This amendment includes [complete]" should be replaced by a brief description of the content of the amendment

SuggestedRemedy

Replace "This amendment includes [complete]" with a brief description of the content of the amendment.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change to
"This amendment adds a point-to-point 100 Mb/s Physical Layer (PHY) specification and management parameters for operation on a single balanced twisted-pair."

Cl **99** *SC* *P* **13** *L* **1** # 24

Anslow, Pete Ciena

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

The table of contents does not reflect the contents of the latest draft (page numbers wrong, headings wrong)

SuggestedRemedy

Make the TOC update properly. (I can help do this if required).

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **96.1.1** *P* **28** *L* **16** # 25

Iwaoka, Mitsuru — Yokogawa Electric Cor

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

ISO16750 is refered here, but not listed in 1.3 nor Annex.A.

SuggestedRemedy

Add following document to Annex.A, and insert the references to these documents after "ISO16750" in page 28, line 16.

[B__] ISO 16750-2:2012, Road vehicles -- Environmental conditions and testing for electrical and electronic equipment -- Part 2: Electrical
[B__] ISO 16750-3:2012, Road vehicles -- Environmental conditions and testing for electrical and electronic equipment -- Part 3: Mechanical

Proposed Response *Response Status* **W**

PROPOSED REJECT.

See comment #11

Cl **96** *SC* **2** *P* **32** *L* **1** # 26

Wu, Peter — Marvell Semiconducto

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

Figure 96-3-100BASE-T1 PHY interfaces in draft 1.3 "Technology Dependent Interface" was changed to "Technology Dependent Interface (Clause 28)" however 100BASE-T1 does not interface to Clause 28 which requires two twisted pairs.

SuggestedRemedy

Remove reference to Clause 28.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Remove the "Clause 28" reference from Figure 96-2, 96-3, and 96-13.

Cl **96** *SC* **4.7.1** *P* **56** *L* **46** # 27

Wu, Peter — Marvell Semiconducto

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

link_status is defined with three possible values: READY, OK or FAIL
However the value READY is never assigned in Figure 96-17-Link Monitor state diagram.

SuggestedRemedy

Delete the value READY from the definition.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **2.1.2.1** *P* **30** *L* **47** # 28

Wu, Peter — Marvell Semiconducto

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

PMA_LINK.indication (link_status) is defined with three possible values: READY, OK or FAIL
However the value READY is never assigned in Figure 96-17-Link Monitor state diagram

SuggestedRemedy

Delete the value READY from the definition.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Use commenters suggested remedy.

Additionally, Change
"The link_status parameter can take on one of three values: FAIL, READY, or OK."
to
"The link_status parameter can take on one of two values: FAIL or OK."

Cl **96** *SC* **3.3.4** *P* **52** *L* **18** # 29

Wu, Peter Marvell Semiconducto

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

"Furthermore, it also changes the sign of its transmitted signals (TAn, TBn)." We have a requirement on the transmitter place in a section marked "optional". Is this a suggestion? Is this normative or informative?

SuggestedRemedy

Change text to:
"Furthermore, it shall invert its transmitted signals (TAn, TBn)."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **45** *SC* **2.1.131** *P* **24** *L* **12** # 30

Wu, Peter Marvell Semiconducto

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

change RW to R/W

SuggestedRemedy

change RW to R/W

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See response to comment #10.

Cl **96** *SC* **1.2** *P* **28** *L* **32** # 31

Wu, Peter Marvell Semiconducto

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

missing space
Clause 22MII

SuggestedRemedy

Change to "Clause 22 MII"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See the response to comment #12.

Cl **96** *SC* **6** *P* **67** *L* **24** # 32

Wu, Peter Marvell Semiconducto

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

In Clause 45 new register space was defined for the 100BASE-T PHY, 1.2100 to 1.2102. It is not clear which previously defined registers (like 1.1.2 Receive link status) also apply or do not apply to 100BASE-T1.

SuggestedRemedy

Insert a table listing Clause 45 registers associated with 100BASE-T1.

Proposed Response *Response Status* **W**

PROPOSED REJECT.

CL96 uses all CL45 registers that are not PMD specific. No other PMD clauses specify such a table.

Cl **96** *SC* **3** *P* **53** *L* **1** # 33

Wu, Peter Marvell Semiconducto

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

No PCS loopback is normatively required. At D1.3, an internal loopback was list at 96A.1 set as informative . We understand the loopback is not required at normal mode, but it is very useful for host side debug. And MII and GMII do have a register bit for it and have PCS loopback

SuggestedRemedy

Add a new section 96.3.4 as PCS management, and add in the loopback mode or Move 96A.1 to this section. Use Register bit 3.0.14 for the mode. Default is zero for Normal mode.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

see comment #37.

Cl **96** *SC* **96.5.5.3** *P* **66** *L* **45** # 34

Zimmerman, George CME Consulting, Inc.

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

Alien crosstalk test is ill-specified. Multiple defects exist. For example, transmission characteristics of test cable is not specified (is it worst-case meeting the link segment specs?), distance from injection point to receive MDI is not specified, interface at which bit error rate is measured is not identified (note, generally not defined for ethernet systems, (frame error rate is)), Further, reiterating earlier comment, test would nominally produce a ternary signal which does not adequately represent the result of alien crosstalk coupling, which produces a more Gaussian noise.

SuggestedRemedy

Fully specify intended test, including specify transmission characteristics of link segment, location of injection, frame error rate and packet size at MAC/PLS service interface, and preferably replace 100BASE-T1 transceiver with gaussian noise source of the appropriate level.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Page 66 line 1
change "The receive DUT is connected to a 100BASE-T1 transmitter with the test cable." to "The receive DUT is connected to a 100BASE-T1 transmitter with the link segment as defined in 96.7"
Page 66 line 2
Add at the end of paragraph " The noise is added at MDI of the device under test."
Also add after "The BER shall be less than 10–10." the following
"This specification shall be satisfied by a frame error ratio less than 10-7 for 125 octet frames measured at MAC/PLS service interface."

Cl **96** *SC* **96.4.7.1** *P* **56** *L* **45** # 35

Zimmerman, George CME Consulting, Inc.

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

link_status values are inconsistent. This section says it is READY, OK or FAIL, subclause 96.2.1.2 also says READY, OK or FAIL, 96.3.2.3.1 says READY or OK (no FAIL), and no state diagrams show the value READY being set.

SuggestedRemedy

Delete READY value in 96.4.7.1 and 96.2.1.2
(alternatively, provide state diagram where ready is set)

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See responses to comments #27 & #28.

Cl **96** *SC* **96.3.2.4.2** *P* **44** *L* **42** # 36

Zimmerman, George CME Consulting, Inc.

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

Shall statement is ill defined. States "shall conform to the encoding rules, when applicable, from 40.3.1.3.2 and 40.3.1.3.3" , but doesn't address when they are applicable, or what the condition is.

SuggestedRemedy

Delete "when applicable".
(alternatively, specify the excluded cases)

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Remove "when applicable".

Cl **96** *SC* **96.5.6** *P* **67** *L* **22** # 37

Chini, Ahmad Broadcom

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

There were suggestions to make the loop back tests normative.

SuggestedRemedy

1- Move the material in Annex 96A to page 67 line 22 under new sub clause 96.5.6. Then remove Annex 96A

2- For the new sub caluse "96.5.6 System level test modes" modify the fisrt sentence to read;

"The 100BASE-T1 PHY shall support two loopback test modes to assist the MAC in testing PHY functionality without the need to have a link partner.

3- Extend the pics to include support for these two test modes.

4- Assign Clause-45 registers to enable these two test modes.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Move material from 96A to new subclause "96.5.6 Loopback Testmodes".

Change "Internal Loopback" to "Internally facing PCS Loopback".

Change "External Loopback" to "Internally facing PMA Loopback".

Modify the first sentence to read:
"The 100BASE-T1 PHY shall support two loopback test modes to assist the MAC in testing PHY functionality without the need to have a link partner."

Extend the pics to include support for these two test modes.

Assign Clause 45 registers to enable these two test modes.

Editor Additional observations:
1. Curved lines in both figures are unnecessary and should be removed.
2. Figure 96A-2 needs a mux, like 96A-1

Cl **96** *SC* **96.5.4.6** *P* **65** *L* **27** # 38

Chini, Ahmad Broadcom

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

Missing a limit on peak transmit signal level

SuggestedRemedy

Add new sub clause 96.5.4.6 on page 65 line 22 as given in chini_3bw_09_032015.pdf

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **96.8.3** *P* **70** *L* **17** # 39

Chini, Ahmad Broadcom

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

Missing a clause on MDI fault tolerance

SuggestedRemedy

Add new sub clause 96.8.3 on page 70 line 17 as given in chini_3bw_09_032015.pdf

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **96.8.2.2** *P* **70** *L* **16** # 40

Chini, Ahmad Broadcom

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

Missing a clause on MDI mode conversion loss

SuggestedRemedy

Add new sub clause 96.8.2.2 on page 70 line 16 as given in chini_3bw_09_032015.pdf

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **96.5.4.4** *P* **64** *L* **21** # 41

Chini, Ahmad Broadcom

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

"pseudo random" should be "pseudo-random", same as page 59 line 30.

SuggestedRemedy

Change "pseudo random" to "pseudo-random" on page 64 line 21.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **96.1.1** *P* **27** *L* **18** # 42

Chini, Ahmad Broadcom

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

"100ms" should be "100 ms"

SuggestedRemedy

Change "100ms" to "100 ms" on page 27 line 18

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **96.9** *P* **70** *L* **21** # 43

Chini, Ahmad Broadcom

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

Delay constraint for TX and RX path needs to be updated.

SuggestedRemedy

Change "240 ns" to "360 ns"
Change "780 ns" to "960 ns"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **96.3.1.1** *P* **49** *L* **47** # 44

Chini, Ahmad Broadcom

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

missing value definition for Variables below:
mii_fc_err (line 47)
pcs_rx_er (line 50)
pcs_rx_dv (line 51)
receiving (line 52)
rcv_jab_detected (page 50, line 1)

SuggestedRemedy

1. at page 49 line 47, insert "Values: TRUE or FALSE"
2. at page 49 line 50, insert "Values: TRUE or FALSE"
3. at page 49 line 51, insert "Values: TRUE or FALSE"
4. at page 49 line 53, insert "Values: TRUE or FALSE"
5. at page 50 line 1, insert "Values: TRUE or FALSE"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Subclause 96.3.3.1.1, not 96.3.1.1.

Cl **01** *SC* **1.4** *P* **17** *L* **21** # 45

Chini, Ahmad Broadcom

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

incorrect subclause number for the title from page 17 line 21 to page 19 line 10. For example, “code-group” should be 1.4.142 in page 18 line 21 and the “Control mode” should be 1.4.157 in page 18 line 30.
It was correct in D1.2. Need to fix all of them from page 17 line 21 to page 19 line 10 according to the D1.2.

SuggestedRemedy

Change "1.4.150 code-group" to "1.4.142 code-group"
Change "1.4.165 Control mode" to "1.4.157 Control mode"
and etc. until page 19 line 10 according to D1.2.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change subclause numbers to
1.4.142 code-group:
1.4.157 Control mode:
1.4.163 Data mode:
1.4.183 End-of-Stream Delimiter (ESD):
1.4.313 Physical Coding Sublayer (PCS):
1.4.314 Physical Layer entity (PHY):
1.4.315 Physical Medium Attachment (PMA) sublayer:
1.4.340 receiver training:
1.4.350 retraining:
1.4.377 Start-of-Stream Delimiter (SSD):
1.4.380 symbol:
1.4.381 symbol period:
1.4.382 symbol rate (SR):
1.4.385 ternary symbol:

Cl **96** *SC* **96.3.2.2** *P* **38** *L* **39** # 46

Chini, Ahmad Broadcom

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

keep consistent format for value of ternary symbol

SuggestedRemedy

Change
"(–1, 0, 1)"
to
"{–1, 0, or 1}"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **96.3.1.1** *P* **50** *L* **4** # 47
Chini, Ahmad Broadcom

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

typo for sychronous

SuggestedRemedy

Change
"sychronous"
to
"synchronous"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **TOC** *P* **12** *L* # 48
Chini, Ahmad Broadcom

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

Page 12 in the document is missing.

SuggestedRemedy

Renumber document pages.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See the response to comment #76.

Cl **96** *SC* **96.5.4.4** *P* **64** *L* **28** # 49
Chini, Ahmad Broadcom

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

There is an error in sweep time. It says ">1 s", where it should have said ">1 min"

SuggestedRemedy

Change "1> s" to ">1 min"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change
">1 s"
to
">60 s"

Cl **96** *SC* **96.5.4.4** *P* **64** *L* **29** # 50
Chini, Ahmad Broadcom

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

A period is missing at the end of sentence

SuggestedRemedy

Add a period on page 64 line 29.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **01** *SC* **1.4.171** *P* **18** *L* **48** # 51
Chini, Ahmad Broadcom

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

TXD<3:0> should be reffered to as nibbles, not octets.

SuggestedRemedy

Change "octets" to "nibbles"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **96.1.2** *P* **27** *L* **31** # 52
Chini, Ahmad Broadcom

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

Typo in the text.

SuggestedRemedy

Change "100BASE-T1" to "100BASE-TX"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **96.3.2.3.3** *P* **43** *L* **42** # 53
Estes, Dave Spirent Communicatio

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

The definition for RSPCD belongs in the Receive Function definition

SuggestedRemedy

Move the definition for RSPCD to Subclause 96.3.3.1.3

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **96.4.7.1** *P* **58** *L* **35** # 54

Estes, Dave Spirent Communicatio

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

The "NOT_OK" value for scr_status was deleted

SuggestedRemedy

Add the "NOT_OK" value for scr_status.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Page 57 line 38, insert
"NOT_OK: The descrambler is not synchronized."

Cl **96** *SC* **96.4.7.1** *P* **56** *L* **40** # 55

Estes, Dave Spirent Communicatio

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

The definitions for the varibles config and tx_mode should not have been deleted. These variables are set by the PMA and used by the PCS. See the similar defitions in Clause 40 as a reference.

SuggestedRemedy

Add the definitions for config and tx_mode.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

1) Page 55 line 41, add the following definition:
"config
The PMA shall generate this variable continuously and pass it to the PCS via the PMA_CONFIG.indication primitive.
Values: MASTER or SLAVE"
2) Page 57 line 38, add the following definition:
"tx_mode
PCS Transmit sends code-groups according to the value assumed by this variable.
Values: SEND_N: This value is continuously asserted when code-group sequences representing a PCS code-group in PCS transmit function, control information, or idle mode are transmitted.
SEND_I: This value is continuously asserted when transmission of sequences of code-groups representing the idle mode is to take place.
SEND_Z: This value is asserted when transmission of zero code-groups is to take place."

Cl **96** *SC* **96.4.7.1** *P* **56** *L* **40** # 56

Estes, Dave Spirent Communicatio

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

The definitions for the varibles tx_enable should not have been deleted. These variables are set by the PCS and used by the PMA. See the similar defitions in Clause 40 as a reference.

SuggestedRemedy

Add the definition for tx_enable

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Page 57 line 38, add the following definition:
"tx_enable
The tx_enable parameter generated by PCS Transmit as shown in Figure 96-8.
Values: TRUE or FALSE."

Cl **01** *SC* **1.4.325** *P* **19** *L* **12** # 57

Estes, Dave Spirent Communicatio

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

Type, "lause" should be "Clause"

SuggestedRemedy

Change "lause" to "Clause"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **01** *SC* **1.4.326** *P* **19** *L* **21** # 58

Estes, Dave Spirent Communicatio

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

Type, there should be a comma separating Clause 65 and Clause 66.

SuggestedRemedy

Insert a comma between Clause 65 and Clause 66

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **01** *SC* **1.4.x** *P* **20** *L* **19** # 59
Estes, Dave Spirent Communicatio

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

Typo, remove "the" before "100BASE-T1

SuggestedRemedy

Change "technique used by the 100BASE-T1" to "technique used by 100BASE-T1"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **01** *SC* **1.5** *P* **20** *L* **39** # 60
Estes, Dave Spirent Communicatio

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

Electromagnetic is one work

SuggestedRemedy

Change "Electro Magnetic" to "Electromagnetic"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See the response to comment #7.

Cl **01** *SC* **1.5** *P* **20** *L* **46** # 61
Estes, Dave Spirent Communicatio

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

Bandwidth is one word

SuggestedRemedy

In the definitions for RBW and VBW, change "Band Width" to Bandwidth"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See the response to comment #7.

Cl **01** *SC* **1.5** *P* **20** *L* **50** # 62
Estes, Dave Spirent Communicatio

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

Crosstalk is one word

SuggestedRemedy

Change "Cross Talk" to "Crosstalk"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See the response to comment #7.

Cl **96** *SC* **96.3.2.2.2** *P* **39** *L* **26** # 63
Estes, Dave Spirent Communicatio

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

The word "packet" was incorrectly changed to "frame". The difference between a packet and a frame is illustrated in Subclause 3.1.1 Figure 3-1. A packet includes Preamble and SFD. This is significant in this clause because stuff bits need to be added when the number of bits in a packet (not a frame) is not a multiple of 3.

SuggestedRemedy

Change all instances of frame to packet in Subclauses 96.3.2.2.2, 96.3.2.3, 96.3.2.4.10, 96.3.3.1, 96.3.3.2, and 96.3.3.5.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **96.3.2.3.1** *P* **41** *L* **23** # 64
Estes, Dave Spirent Communicatio

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

Variables are not defined in the proper place. RAn, rem_rcvr_status, rxerror_status, RX_DV, RX_ER, rx_symb_vector, and RXD are not used by the Transmit function.

SuggestedRemedy

Move or remove these definitions

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

1) Page 40 line 48: Remove "RAn" definition.
2) Page 40 lines 50 and 51: Remove "rem_rcvr_status" definition.
3) Page 40 lines 52 and 53: remove "rxerror_status" definition.
4) Page 42 line 1 and 2, move "RX_DV" and "RX_ER" definitions to page 49 line 35.
5) Page 42 line 6 , move "RXD" definition to page 49 line 35.
6) Page 42 line 3,4 and 5, move "rx_symb_vector" definition to page 50 line 3.

Cl **96** *SC* **96.1.2** *P* **27** *L* **32** # 65

Amason, Dale — Freescale

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

Need space between Clause 22 & MII

SuggestedRemedy

Change "Clause 22MII" to "Clause 22 MII"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See the response to comment #12.

Cl **96** *SC* **96.3.2.3** *P* **39** *L* **32** # 66

Amason, Dale — Freescale

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

Figures 96-6a, 96-6b, 96-6c should follow subclause 96.3.2.2.2 where they are referenced.

SuggestedRemedy

Move figures to follow subclause 96.3.2.2.2

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **96.3.2.4** *P* **43** *L* **34** # 67

Amason, Dale — Freescale

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

Figure 96-8 is drawn with different type face (Times Roman) than other figures in document (Helvetica/Arial).

SuggestedRemedy

Change type in Figure to be consistent with document.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **96.4.1** *P* **53** *L* **4** # 68

Amason, Dale — Freescale

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

Clause 28 referenced in Figure 96-13 is not highlighted in green as in other figures.

SuggestedRemedy

Update figure to be consistent with other figures.

Proposed Response *Response Status* **W**

PROPOSED REJECT.

The Clause 28 reference is deleted per comment #26.

Cl **96** *SC* **96.5.3** *P* **61** *L* **10** # 69

Amason, Dale — Freescale

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

Figure 96-20 is drawn with Times Roman type instead of Helvetica.

SuggestedRemedy

Redraw with Helvetica type to be consistent with other figures in document.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **96** *SC* **96.5.4.3** *P* **64** *L* **16** # 70

Amason, Dale — Freescale

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

Figure 96-22 drawn with Times Roman font instead of Helvetica.

SuggestedRemedy

Redraw figure to be consistent with other figures.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **95** *SC* **96.5.1.1** *P* **58** *L* **17** # 71

Dawe, Piers Mellanox

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

This says "The sensitivity of the PMA's receiver to radio frequency CM RF noise shall be tested according to...". This isn't a test spec: an 802.3 standard specifies what a thing has to do, not how to make it do it. It's OK to require that a thing should pass a test if or when tested, which is actually what matters, but not to require the testing. I expect testing each and every PMA's receiver would not be cost-effective anyway.
There is an equivalent problem in 96.5.1.2.

SuggestedRemedy

Change:
The sensitivity of the PMA's receiver to radio frequency CM RF noise shall be tested according to...
to:
The sensitivity of the PMA's receiver to radio frequency CM RF noise shall meet the specifications of ??? if tested according to...
Or if the spec limits are in the same document, it may be possible to simplify this to:
The sensitivity of the PMA's receiver to radio frequency CM RF noise shall meet the specifications given in ...
Make a similar change in 96.5.1.2

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

In lines 17 and 22 page 58

change "shall" with "may"

Cl **96** *SC* **96.5.1** *P* **8** *L* **8** # 72

Dawe, Piers Mellanox

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

This says "A system integrating the 100BASE-T1 PHY shall comply with applicable local and national codes, or as agreed between customer and supplier, for the limitation of electromagnetic interference." I don't believe that's feasible: this is supposed to be a standard, not a procurement spec nor an offer for sale. No "customer" or "supplier" are identified. All the standard can do is require what the system integrating the 100BASE-T1 PHY shall do, and it has to do that pretty much universally. In this case regional variations may be allowed, but those variations are public knowledge, and the same for all. Of course there can be particular customer requirements, but they must be outside this document.

SuggestedRemedy

Delete "or as agreed between customer and supplier"
Also in 96.5.1.1 and 96.5.1.2.

Proposed Response *Response Status* **W**

PROPOSED REJECT.

Suppliers must be aware that OEMs may have requirements that go beyond local and national codes.

Cl **96** *SC* **96.5.3** *P* **60** *L* **37** # 73

Dawe, Piers Mellanox

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

This isn't a test spec so it can't say that any test fixture "shall be used".

SuggestedRemedy

In "The fixtures shown in Figure 96–18, Figure 96–19, and Figure 96–20, or their equivalents, shall be used...", change "shall" to "are". Doing so doesn't weaken compliance because there is another "shall" in 96.5.4 and more in e.g. 96.5.4.1, but you could have text in 96.5.4 like:
The transmitter shall meet the requirements of this section if measured with the appropriate test fixture specified in 96.5.3.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change "shall be" to "are".

Text will read as
"The fixtures shown in Figure 96–18, Figure 96–19, and Figure 96–20, or their equivalents, are used..."

Cl **96** *SC* **96.5.3** *P* **60** *L* **37** # 74

Dawe, Piers — Mellanox

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

We don't give tolerances for VNA impedance, voltage limits and so on. This case isn't different. Although +/-1% is good advice to a test fixture builder, it's not this standard's problem - because this isn't a test spec.
See 1.2.6, Accuracy and resolution of numerical quantities
"Unless otherwise stated, numerical limits in this standard are to be taken as exact, with the number of significant digits and trailing zeros having no significance."

SuggestedRemedy

If we don't give a tolerance, the limit is exact. We are saying what the e.g. droop should be if measured with an infinitely accurate test fixture as well as the infinitely linear voltmeter that's already implied in 96.5.4.1. Of course neither test fixture nor voltmeter are perfect - those doing the test know that and can give the tolerances of their measurements in test reports, if it matters.

Proposed Response *Response Status* **W**

PROPOSED REJECT.

The text that the commenter is referring to was not changed in this draft. Your similar comment was responded in D1.2 (comment #599). That response is still valid.

Cl **96** *SC* **96.5.4.3** *P* **64** *L* **48** # 75

Dawe, Piers — Mellanox

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

This says: "For all jitter measurements, the RMS value shall be measured over an interval..." This is off topic, because this isn't a test spec and the measurement is not a requirement - only the compliance is. The "shall" that the section needs is already in place above: "When in test mode 2, ... JTXOUT ... shall be less than 50 ps."

SuggestedRemedy

Change:
the RMS value shall be measured over an interval of not less than 1 ms
to:
the RMS value is defined over an interval of not less than 1 ms

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **00** *SC* **0** *P* **0** *L* **12** # 76

Thompson, Geoff — GraCaSI S.A.

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

Page 12 (blank?) is missing. This throws off the match between page numbers for the rest of the document. Please fix. I suspect that the printer test table was supposed to be inserted here and was forgotten as the document was being assembled.

SuggestedRemedy

Insert 1 page printer test table chart at this location.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

The printer test table was removed from D1.1 due to Comment number #xxx from the D1.2 circulation. The numbering of the pages will be corrected without adding the printer test table.

Cl **01** *SC* **1.4xx** *P* **19** *L* **27** # 77

Thompson, Geoff — GraCaSI S.A.

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

The new definition of FORCE mode is too specific to 100BASE-T1.
It is a function that might well be used in any set of link partners and is very likely to be used for 1000BASE-T1. Change the wording to make it more generally applicable. With that change I don't believe that the specific clause reference is required or appropriate.

SuggestedRemedy

Change wording to read:
FORCE mode is a PHY initialization procedure used for manual configuration of MASTER-SLAVE assignment to achieve link acquisition between two link partners that require MASTER-SLAVE assignment.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **30** *SC* **30.5.1.1.4** *P* **21** *L* **45** # 78

Thompson, Geoff GraCaSI S.A.

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

Where it says:
30.5.1.1.4 aMediaAvailable
Insert into the third paragraph in BEHAVIOUR DEFINED AS section of 30.5.1.1.4 as follows:
BEHAVIOUR DEFINED AS:
For 100BASE-T1 PHYs the enumerations match the states within the link monitor state diagram Figure 96-17.
In Figure 96-17 (which is on page 58).
The states specifically are:
LINK DOWN
HYSTERESIS
LINK UP

None of these match any of the existing syntax enumerations.
Are we supposed to create new (and redundant) enumerations just because you have not defined the mapping? If so then these have not yet been specified.
If we are supposed to map the state labels list above to existing syntax enumerations then the mappings need to be defined definitively and explicitly.

SuggestedRemedy

My guesses would be that:
LINK DOWN would map to: not available
HYSTERESIS would map to: other or unknown (I'm not sure pick one)
LINK UP would map to: available

Appropriate insertion text should be generated by the CRG so that the final text is not up to the editor.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Map link_status
FAIL > Not Available
OK > Available

CL30 pg 434 (5.1.1.4?)
Behaviour defines as
For 100BASE-T1, a link_status value of FAIL maps to the enumeration not available. A value of link_status of OK maps to the enumeration available. Reference 96.4.7.1.

Cl **96** *SC* **96.10.4.4** *P* **75** *L* **40** # 79

Thompson, Geoff GraCaSI S.A.

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

PME6 There should be specific explicit place to record the value "N" used in the Value/Comment field of this PICs item.

SuggestedRemedy

Add text something like:
Value of "N" used ( )

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Editors Note: Modify CL96 text & PIC to reflect 500ns of repeating 1's can be achieved with a minimum N value of 34.

Cl **96** *SC* **96.5.3** *P* **59** *L* **38** # 80

Thompson, Geoff GraCaSI S.A.

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

The text:
"There may be passive components between PHY and MDI as long as 100BASE-T1 PHY transmitter specification compliance can be attained at the MDI."

would seem to imply that the PHY contains no passive components and is fully encompassed within a silicon chip. Such is not the case. The PHY is everything behind the MDI until you get to the next layer up. Whether or not a portion is encompassed within the chip(s) is an implementation decision.

SuggestedRemedy

The 100BASE-T1 PHY transmitter specification compliance point is at the MDI.
or just delete the sentence entirely.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Remove
"There may be passive components between PHY and MDI as long as 100BASE-T1 PHY transmitter specification compliance can be attained at the MDI."

Cl **00** *SC* **00** *P* **1** *L* **1** # 81

Grow, Bob — RMG Consulting

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

Title page still indicates this will be an amendment to 802.3-2012 yet the response to initial ballot comment #131 indicated the amendment will be to 802.3-2015.

SuggestedRemedy

Replace 802.3-2012 throughout document (title page headers etc.) with 802.3-20xx which is the convention for indication of a yet to be approved standard or 802.3-201x as appears on page 11.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See the response to comment #21.

Cl **00** *SC* **00** *P* **12** *L* **1** # 82

Grow, Bob — RMG Consulting

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

There is no document page 12 thus continuing the confusion of PDF page or document page number. Initial ballot comment #198 was not properly implemented.

SuggestedRemedy

Something in the front matter is forcing the page number perhaps a TOC problem. Fix it please so that the 802.3 convention of consecutive arabic page numbers is followed.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Numbering will be fixed

Cl **00** *SC* *P* **11** *L* **22** # 83

Grow, Bob — RMG Consulting

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

The description of 802.3bw has not been provided as requested in initial ballot comment #131. Note that no response to this request was included in initial ballot responses (the response only addressed one of the points of the comment.

SuggestedRemedy

Please write a description acceptable to the P802.3bw TF so that the description can be used in subsequent amendments.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See the response to comment #23.

Cl **30** *SC* **30.3.2.1.2** *P* **21** *L* **11** # 84

Grow, Bob — RMG Consulting

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

The editing instruction still is not precise.

SuggestedRemedy

Indicate insert point in the list. For example, insert after the 100BASE-T2 line.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change
"Insert entry in APPROPRIATE SYNTAX as follows:"
to
"Insert entry in APPROPRIATE SYNTAX as follows and insert entry below 100BASE-T2:"

Cl **30** *SC* **30.5.1.1.4** *P* *L* # 85

Grow, Bob — RMG Consulting

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

The editing instruction still is not precise. Where in the paragraph.

SuggestedRemedy

Indicate insert point in the paragraph. For example insert after the 100BASE-TX etc. sentence.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change
"Insert into the third paragraph in BEHAVIOUR DEFINED AS section of 30.5.1.1.4 as follows:"
to
"Insert into the third paragraph in BEHAVIOUR DEFINED AS section of 30.5.1.1.4 after the second sentence as follows:"

Cl **00** *SC* *P* *L* # 86

Grow, Bob
RMG Consulting

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

The rejection of initial ballot comment #130 did not address the portion of the comment that P802.3bw introduces ambiguities into IEEE Std 802.3. The choice to use Clause 45 registers and the Clause 45 MDIO interface is incompatible with text in clause 22. Unlike the GMII in Clause 35 the Clause 22 specifications require complete implementation of the MII including the management interface. <CR><CR>Clauses 22 34 and 35 include statements that are in conflict with the proposed use of Clause 45 registers and the MDIO interface to access them. The GMII as specified in Std 802.3 includes use of the management interface specified in Clause 22.

SuggestedRemedy

The attached file includes proposed text changes to avoid P802.3bw P802.3bp and P802.3bv introducing ambiguities. While only the Clause 22 changes are required for P802.3bw all text changes are included in the hope that P802.3bw will join with P802.3bp and P802.3bv in proposing common changes for all three projects. These changes can be requested in the P802 revision initial Sponsor ballot but to have a reasonable chance of the Maintenance committee accepting the proposed changes all three TFs should enforse them. If the text is acceptable the Clause 22 PICS will also have to be modified to introduce optionality of portions of the MII as has been done for Clause 35 GMII by approved 1000 Mb/s projects done after the initial set of PHYs approved in 1999 and 1998.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

The issue with Clause 22 affects many approved 802.3 amendments. For example 802.3az EEE uses MDIO Interface rather than the Clause 22 MII Management Interface so 100BASE-T devices with EEE need the Clause 45 MDIO interface. This is a cross IEEE 802.3 issue that is out of the scope of 802.3bw and should be handled by the maintenance committee. The maintenance committee is working on it. It is up to them and the WG to decide whether the solution should be incorporated in the current 802.3 revision or through a separate maintenance corrigenda or amendment.

The 802.3bw task group supports the resolution of the issue in the maintenance group.