Cl **FM** *SC* **FM** *P* **1** *L* **11** # I-29

Ran, Adee
Cisco Systems, Inc.

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

"Amendment: 11" should be "Amendment 11:"

SuggestedRemedy

Change per comment.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **FM** *SC* **FM** *P* **1** *L* **13** # I-30

Ran, Adee
Cisco Systems, Inc.

Comment Type **G** *Comment Status* **D**

The title is "Bidirectional 100 Gb/s Optical Access PHYs" but the project title in the PAR is "Greater than 50 Gb/s Bidirectional Optical Access PHYs". I assume the title should match the PAR.

SuggestedRemedy

Change the title to match the PAR on page 1, in the header of all pages, and elsewhere as necessary.

Proposed Response *Response Status* **W**

PROPOSED REJECT.

The title of the draft standard must be within the scope of the approved PAR and does not have to match the title of the approved PAR.

See D2.0 comment #222.

Cl **FM** *SC* **FM** *P* **16** *L* # I-28

Ran, Adee
Cisco Systems, Inc.

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

Amendments typically include a title page prior to the first clause (right after the "contents" section). As an example, see page 29 of 802.3df-2024. There is no such page here.

SuggestedRemedy

Add the title page per the comment.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Add the title page after the contents with editorial license.

Cl **0** *SC* **0** *P* **7** *L* **38** # I-15

McClellan, Brett
Marvell Semiconductor, Inc.

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

typo, please correct name spelling

SuggestedRemedy

change Mcclellan to McClellan

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **0** *SC* **0** *P* **12** *L* **3** # I-23

McClellan, Brett
Marvell Semiconductor, Inc.

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

802.3dk should be amendment 10 not 11, the prior corrigendum is not considered an amendment.

SuggestedRemedy

change 'Amendment 11' to 'Amendment 10'

Proposed Response *Response Status* **W**

PROPOSED REJECT.

Amendment #11 is assigned to 802.3dk, while Amendment #11 is assigned to 802.3da.

Cl **1** *SC* **1.4** *P* **17** *L* **22** # I-33

Ran, Adee — Cisco Systems, Inc.

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

There are new definitions of 100GBASE-BR10, 100GBASE-BR20, and 100GBASE-BR40, but there is no definition of 100GBASE-BRx, which is used in many places (not just in clause 168).
Unfortunately the base standard does not include definitions for the similar terms 10GBASE-BRx, 25GBASE-BRx, and 50GBASE-BRx either. These terms are used across introduction clauses (44, 56, 157) without being defined first (157.1.3 is not a definition of these specific terms). Definitions for these should be added too. If these additions are out of scope then it could be done by a maintenance request (but it should preferably be done in this project).

SuggestedRemedy

Add an appropriate definition for 100GBASE_BRx in 1.4.
If considered within scope, add similar definitions for 10GBASE-BRx, 25GBASE-BRx, and 50GBASE-BRx. If not, I could open a maintenance request with suggested definitions based on the response to this comment.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Add definitions of 10GBASE-BRx, 25GBASE-BRx, 50GBASE-BRx, and 100GBASE-BRx in CL1.4 after 1.4.34c with editorial license.

Cl **30** *SC* **30.5.1.1.2** *P* **18** *L* **18** # I-27

Ran, Adee — Cisco Systems, Inc.

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

The editorial instruction "Insert" is used for adding new material without changing existing material, so existing content should not be included. The text in the amendment looks as if the types 50GBASE-SR and 100GBASE-CR2 are inserted, but these are existing types. If this content is included in the amendment then the instruction should be "Change" and the new content should be underlined (this would be an alternative to the suggested remedy).

SuggestedRemedy

Delete the items 50GBASE-SR and 100GBASE-CR2.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See D2.1 comment #122.

Cl **30** *SC* **30.5.1.1.16** *P* **18** *L* # I-32

Ran, Adee — Cisco Systems, Inc.

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

RS-FEC-Int is mentioned in 30.5.1.1.16 (as amended by 802.3ck-2022) but it is not included in this amendment.
100GBASE-BRx should be added to the list of PHYs in the second paragraph of the " BEHAVIOUR DEFINED AS:" section of 30.5.1.1.16.

SuggestedRemedy

Bring in the subclause from 802.3ck-2022 and apply the necessary additions, with editorial license.

Proposed Response *Response Status* **W**

For group discussion.

The "BASE-R enabled", "RS-FEC enabled" and "RS-FEC-Int enabled" are only used by PHYs which support more than one type of FEC operation. While for 100GBASE-BRx, RS-FEC is required and RS-FEC-Int is optional.

Cl **45** *SC* **45.2.1** *P* **23** *L* # I-2

Tandon, Jas — Individual

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

The draft exposes multiple FEC options (Clause 91 RS-FEC required; Clause 161 RS-FEC-Int optional; Clause 152 inverse RS-FEC optional) but lacks a priority/selection rule. Multi-vendor OLT/ONU interop will suffer.

SuggestedRemedy

Define in 91.5.2.7 (or 168.5) an ordering: default to Clause 91; upgrade to 161 only if both ends assert "100G RS-FEC-Int ability" (1.201.5) and a new "FEC preference" MDIO bit is set. Add a PICS item for mandatory support of the default rule.

Proposed Response *Response Status* **W**

For group discussion.

Cl **45** *SC* **45.2.1.33** *P* **22** *L* **24** # I-8

Effenberger, Frank — Futurewei Technologies

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

1.35.5 50GBASE-BR50-U ability should be "BR40" - but it is already existing text so it likely just a typo.

SuggestedRemedy

Change "BR50" to "BR40"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **45** *SC* **45.2.1.117.7a** *P* **23** *L* **50** # I-31

Ran, Adee — Cisco Systems, Inc.

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

The new "100G RS-FEC-Int ability" bit definition says "applies to 100GBASE-BRx" but it does not say what happens in other PHYs.
Most other PHYs do not have RS-FEC-Int, but there are two (100GBASE-CR1 and 100GBASE-KR1) that do, and for these it is mandatory, not optional, so there is no "ability" bit, so this bit is reserved and reading it would return 0; this can be confusing.

Also in 161.6.10a, which contains similar text describing a variable.

SuggestedRemedy

Add the following paragraph:
"For physical layers other than 100GBASE-BRx, this bit is always 0".
Add a similar paragraph in 161.6.10a but with "variable".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Add "For physical layers other than 100GBASE-BRx, this bit is always 0." at the end of the paragraph in 45.2.1.117.7a.

Add "For physical layers other than 100GBASE-BRx, this variable doesn't apply." at the end of the paragraph in 161.6.10a.

Cl **45** *SC* **45.2.1.145** *P* **26** *L* **3** # I-34

Ran, Adee — Cisco Systems, Inc.

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

Subclause 45.2.1.145 is not changed so it should be be included in the amendment text

SuggestedRemedy

Delete the heading "45.2.1.145 PMA precoder request Tx input status (Register 1.606)".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **45** *SC* **45.2.1.145a** *P* **24** *L* **7** # I-44

Dawe, Piers J G — NVIDIA

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

Some interfaces have mandatory precoding ability without this bit. This is likely to cause confusion unless explained.

SuggestedRemedy

Insert: This register applies to 100GBASE-BRx.
Add "PMA Tx precoding ability bit applies to 100GBASE-BRx" in 45.2.1.145a.1.
Add "PMA Rx precoding ability bit applies to 100GBASE-BRx" in 45.2.1.145a.2.
Implement with editorial license.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
See D2.3 withdrawn comment #2.

Cl **45** *SC* **45.2.1.145a** *P* **24** *L* **15** # I-35

Ran, Adee — Cisco Systems, Inc.

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

For PMA precoding, the existing subclauses 45.2.1.139 through 45.2.1.145 use the terms "input" and "output" an addition to "Tx" and "Rx". "Tx" and "Rx" are the directions of the PMA. interface It is not clear what "Tx" and "Rx" mean in the newly added subclauses. I assume the intent is to enable precoding on the medium (below the PMA), so it is the output in the Tx direction and input in the Rx direction. If the intent is also to enable optional precoding on the AUI (above the PMA) then additional bits would be required (not included in the suggested remedy).

Also, "Rx" and "Tx" should not be used in the text as abbreviations. These appear only in variable names, register names, etc., or as parts of compound labels (e.g. "Rx input precoder"). See 45.2.1.89 for an example: the "RX" is part of the register name but the term "receive" is used in the text.

SuggestedRemedy

Change the description of 1.607.1 from "1 = Precoding is supported by Rx" to "1 = Precoding at Rx input is supported", and apply similar changes for other descriptions in the table and in the new subclauses (45.2.1.145a.1 and 45.2.1.145a.2).

Change any other instances of "Tx" and "Rx" as abbreviations to "transmitter" and "Receiver" (or as appropriate).

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Cl **56** *SC* **56.1.3** *P* **26** *L* **1** # I-36

Ran, Adee — Cisco Systems, Inc.

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

The editorial instruction is incorrect. Splitting a table into two is not a simple insertion of new material ("Insert" instruction), nor is it a simple correction of existing test ("Change" instruction).

This is also done in 80.1.4, 80.4 and maybe other places.

SuggestedRemedy

Change the editorial instruction to "Replace Table 56-1 with the following table (for P2P):" and after the replacement table add a new editorial instruction "insert new Table 56-1a (for P2MP) after Table 56-1 as follows"
In both tables, there is no need to use underline or strikethrough, because this is a "replace" instruction.

Apply similar changes in 80.1.4, 80.4, and elsewhere if necessary.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Change the editorial instruction in 56.1.3, 80.1.4, 80.4 with editorial license.

Cl **56** *SC* **56.1.3** *P* **30** *L* **27** # I-45

Dawe, Piers J G — NVIDIA

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

As this table includes 161 RS-FEC-Int, it should include152 Inverse RS-FEC also

SuggestedRemedy

Insert 152 Inverse RS-FEC, between 91 and 161, optional for the three PHY types of this project.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

See D2.3 withdrawn comment #5.

Cl **80** *SC* **80.1.4** *P* **32** *L* **30** # I-37

Ran, Adee — Cisco Systems, Inc.

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

The order of rows in Table 80-1a is not consistent with the original table and the amendments (which use the "Illuminati order" defined in <https://www.ieee802.org/3/WG_tools/editorial/requirements/words.html#phy_sort>).
For example, KR2 should appear before KR1, and CR10, CR4, and CR2 should appear before CR1. (there are other required swaps)

Also in Table 80-7a and maybe others.

SuggestedRemedy

Reorder the rows to match the Illuminati order in all tables.

Proposed Response *Response Status* **W**

For group discussion.

The row orders of Table 80-1 as amended by 802.3ck is not following the Illuminati order.

Cl **91** *SC* **91.7.3** *P* **41** *L* **27** # I-38

Ran, Adee — Cisco Systems, Inc.

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

New content in "*KP4 / Feature" is not underlined

SuggestedRemedy

Add underline for ", 100GBASE-BR10, 100GBASE-BR20, or 100GBASE-BR40"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **91** *SC* **91.7.4.1** *P* **42** *L* **15** # I-39

Ran, Adee — Cisco Systems, Inc.

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

The content of "TF11 / Status" is already "KP4:M" in 802.3-2022, 802.3ck-2022, and 802.3db-2022. No need to change it.

Similarly for RF4 in 91.7.4.2.

SuggestedRemedy

Delete the letter "R" and remove the change indication in both places.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **135** *SC* **135.5.7.2** *P* **44** *L* **24** # I-9

Brown, Matthew — Alphawave Semi

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

The wording on the last sentence is awkward as the exception is on the PMA not the stated requirement.
I would further challenge with this optional (permitted) functionality is worth including in this standard. If it is optional then the receiver cannot count on it and must assume desired performance must be achievable without it. The precoding is conventionally not mandatory on the receiver since the need is dependent on the receiver architecture; and the transmitter precoding state is set based on the need of the receiver. If optional output precoding is retained then some explanation about how it is coordinated between distantly located terminals will be coordinated.

SuggestedRemedy

Change the last sentence to:
"A PMA that is not connected to the service interface of a 100GBASE-BRx PMD shall provide 1/(1+D) mod 4 precoding capability on each output lane. A PMA that is connected to the service interface of a 100GBASE-BRx PMD may provide 1/(1+D) mod 4 precoding capability on each output lane."
Alternately, consider leaving the the base standard text as is.

Proposed Response *Response Status* **W**

For group discussion.

See D2.1 comment #110.

Cl **135** *SC* **135.6** *P* **5287** *L* # I-46

Dawe, Piers J G — NVIDIA

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

In Table 135-3, MDIO/PMA status variable mapping (in the base document)

SuggestedRemedy

Insert new rows:

MDIO status variable	PMA/PMD register name	Register/bit number	PMA status variable
PMA Rx precoding ability	PMA precoding ability	1.607.1	Rx_precoding_ability
PMA Tx precoding ability	PMA precoding ability	1.607.0	Tx_precoding_ability

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Implement suggested remedy with editorial license.See D2.3 withdrawn comment #8.

Cl **135** *SC* **135.7.3** *P* **45** *L* **17** # I-40

Ran, Adee — Cisco Systems, Inc.

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

The "Item" name of "*100GBASE-BRx" does not match the feature and status, and subclause 135.1.4 does not address 100GBASE-BRx.
The feature is used as part of the conditional status in C2 and C3 , so it seems that "100GBASE-BRx" is correct but the feature and status definitions are not.

Also the usage for C2 and C3 is incorrect: these features are defined as "for physically instantiate PMA service interface" but in this case the precoding is intended to be on the PMD service interface, which is addressed by items C4 and C4 (duplicate labels in .802.3-2022...)

SuggestedRemedy

In item *100GBASE-BRx, change the "Feature" text to "PMA lanes connected to the service interface of a 100GBASE-BRx PMD", change subclause to 135.5.7.2, and change status to "APMD*100G*NLD=1:O" (this means: optional when above a 100G single-lane PMD).

Remove the rows for items C2 and C3.
Copy the two rows labeled C4 from 802.3-2022.
In the first row for C4 (which is "PMA supports output precoding for PMD service interface"), change "Status" from "PMDE:M" to "PMDE:M or 100GBASE-BRx:O", and add a "No" option in "Support".
Rename the second row for C4 (which is "PMA supports input precoding for PMD service interface") to "C5", change "Status" from "PMDE:O" to "(PMDE+100GBASE-BRx):O".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Implement suggested remedy with editorial license.

Cl **157** *SC* **157** *P* **46** *L* **5** # I-41

Ran, Adee — Cisco Systems, Inc.

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

"BiDi PHYs" is existing text

SuggestedRemedy

Remove underline format

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **157** *SC* **157.2.2** *P* **49** *L* **10** # I-42

Ran, Adee — Cisco Systems, Inc.

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

CAUI-10 and CAUI-4 are not compatible with the KP FEC used in the PHYs of this project. These interfaces are specified for a signaling rate of 25.78125 GBd and can only used for NRZ signaling with RS-FEC (e.g. SR4, clause 95) or without any FEC (LR4, clause 88).

Th 100GBASE-BRx always operate with the KP FEC on the medium. If the module form factor is SFP (single lane on the host side), there will always be KP FEC on the AUI as well.

The CAUI-4 is only relevant if the module is QSFP and the host uses the KR FEC, and then the module converts between KR and KP (using the inverse RS-FEC sublayer) - which seems a rather wasteful situation, and perhaps can be dropped from the documented options (people can still implement it even if it's not listed in the standard). Note that the 50G BiDi PHYs do not list the corresponding "LAUI-2" (Annex 135B, 135C).

I don't see any application that would use CAUI-10, and maybe it's time to deprecate it.

If it is accepted that CAUI-4 does not need to be supported, then the clause 83 PMA and Clause 152 inverse RS-FEC can be dropped too.

SuggestedRemedy

Delete the two columns for annexes 83A and 83B.
If it is agreed that stacks with KR FEC do not need to be included, delete also the columns for Clauses 83 and 152, and for annexes 83D, 83E.
Implement the corresponding changes in Table 168–1.

Proposed Response *Response Status* **W**

For group discussion.

Cl **168** *SC* **168.1.1** *P* **55** *L* # I-1

Tandon, Jas — Individual

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

The BER requirement is expressed only via post-FEC frame-loss ratio. For interoperability and test reproducibility we also need an explicit pre-FEC BER/SER target for PAM4 with RS-FEC(544,514) (Clause 91) and guidance when RS-FEC-Int (Clause 161) is used.

SuggestedRemedy

Add normative text: “The pre-FEC BER at the PMA service interface shall be ≤ 2.4×10^{-4} for random errors when Clause 91 RS-FEC is used (measured per 91.5.2.7). When RS-FEC-Int (Clause 161) is used, specify the corresponding pre-FEC threshold and test method. State that burst-error performance shall meet the same frame-loss objective with a burst model defined by [insert reference to existing 802.3 burst method].”

Proposed Response *Response Status* **W**

For group discussion.

Cl **168** *SC* **168.3.2** *P* **56** *L* **19** # I-3

Macijuk, Greg — Mountainside Digital Consulting Inc.

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

The original line references Clause 80.5.3.4 but I've been unable to locate such a clause so think it's 83.5.3.4?

SuggestedRemedy

Skew at SP2 is limited to 43 ns as defined by 83.5.3.4. Since the signal at the PMD service interface 43 ns as defined by

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change 80.5.3.4 to 83.5.3.4.

Cl **168** *SC* **168.3.2** *P* **56** *L* **28** # I-16

Kramer, Glen — Broadcom Corporation

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

The subclause 168.3.2 contains the following requirement: "If the PMD service interface is physically instantiated so that the Skew at SP5 can be measured, then the Skew at SP5 shall be less than 145 ns." The corresponding PICS entry SC3 is marked as optional, while it should be marked as conditional mandatory.

SuggestedRemedy

The instantiation of the PMD service interface should be specified in text as an optional requirement, and that requirement should serve as a condition to the measured skew requirement.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Cl **168** *SC* **168.5.1** *P* **57** *L* **29** # I-24

Dudek, Michael — Marvell

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

Figure 168-2 does not show the required patch cord in the 2nd direction. (that is needed to be able to test at TP2)

SuggestedRemedy

Add the additional patch cord to the figure

Proposed Response *Response Status* **W**

PROPOSED REJECT.

This is bidirectional operation which only requires one patch cord.

Cl **168** *SC* **168.5.2** *P* **58** *L* **3** # I-21

Kramer, Glen — Broadcom Corporation

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

The subclause 168.5.2 contains three mandatory requirements. Only the second and third requirements have corresponing PICS entries. The first requirement has no PICS entry.

SuggestedRemedy

Add PICS for the following requirement: "The PMD Transmit function shall convert the symbol stream requested by the PMD service interface messages PMD:IS_UNITDATA _0.request into an optical signal."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Add item in 168.11.4.2 before F4.

Cl **168** *SC* **168.6** *P* **62** *L* **11** # I-7

Rannow, R K — Silverdraft

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

Note that the table is split between pages, so not "a" does not appear in page 63. However, in the document, when tables are split between pages, "continue" is used to help ensure no ambiguity

SuggestedRemedy

Make the document consistent.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Add "(continued)" in table title of Table 168-7, and make changes to other tables split between pages with editorial license.

Cl **168** *SC* **168.6.3** *P* **62** *L* **36** # I-10

Maniloff, Eric — Ciena Corporation

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

The channel insertion loss for 100GBASE-BR10 in Note b says it is based on 0.4dB/km + the loss allocation from 168.10.2.1 (2dB). This doesn't equal 6.3 dB.

SuggestedRemedy

Modify the note for Channel insertion loss to indicate that 100GBASE-BR10 to indicate that it is calculated using fiber attenuation of 0.43dB/km

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **168** *SC* **168.7.5** *P* **65** *L* **8** # I-47

Dawe, Piers J G — NVIDIA

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

This says "there's a proposal to add the maximum tap weight for the tap immediately after the largest tap: max 0.07 in CL 168.7.5.". chayeb_3dj_01_2505 slide 8 shows that a very asymmetric signal can pass all the specs and still be troublesome to receive. P802.3dj D2.0 comment 392 proposed "The absolute difference between c(-1) and c(1) shall be less than 0.3", P802.3dj D2.1 had
|w(1) - w(-1)| max 0.25, for w(1) > 0 (this was based on no DFE). However, a limit with a "for" or "if " rule may be more difficult to implement in the TDECQ solver than one without. However, ordinary filtering effects (pulses decay slower than they build up) can cause the optimum setting for the tap immediately after the largest tap to be more negative than the one immediately before; this is expected. Having the tap before at -0.2 and the tap after at +0.1 would be more undesirable than the reverse, as can be seen in chayeb_3dj_01_2505.

SuggestedRemedy

Add two specs:
Tap weight for the tap immediately after the largest tap: max 0.08. (Typically this tap would be -ve)
-0.3 <= (tap after - tap before) <= 0.15
Remove the editor's note

Proposed Response *Response Status* **W**

For group discussion.

No consensus reached during D2.3 comment resolution.

Cl **168** *SC* **168.7.5.1** *P* **65** *L* **54** # I-11

Maniloff, Eric — Ciena Corporation

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

A statistical approach is used to determine the zero dispersion wavelengths in Table 168-11. This is indicated for the values in Table 168-12, but should also be noted in Table 168-11

SuggestedRemedy

Add a note for Dispersion in Table 168-11 with the following text: "The dispersion specifications are based on the statistical link design methodology documented in ITU-T REC G.652, Appendix I."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **168** *SC* **168.7.7** *P* **66** *L* **27** # I-43

Ran, Adee — Cisco Systems, Inc.

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

Missing cross-reference in "(see)"

SuggestedRemedy

Add the appropriate reference.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Change "see" to "see 168.7.5" and mark it as cross-reference.

Cl **168** *SC* **168.7.12** *P* **68** *L* **37** # I-4

Macijuk, Greg — Mountainside Digital Consulting Inc.

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

minor capitalization error .. the original line reads "The receiver sensitivity For 100GBASE-BR40 is optional and is defined for a transmitter with a value of"

SuggestedRemedy

Should read:
"The receiver sensitivity for 100GBASE-BR40 is optional and is defined for a transmitter with a value of"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **168** *SC* **168.10.1** *P* **71** *L* **49** # I-25

Maguire, Valerie — Copperopolis

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

I think what the draft is trying to do is accomodate legacy cable types, but calling out 'newer, higher performing cables with exceptions' as the specification is a confusing way to do this. The proposed text is aligned with changes made to clause 180.8.1 of P802.3dj to address this same concern.

SuggestedRemedy

Replace, "The optical fiber cable requirements are satisfied by cables containing ITU-T G.652.B (dispersion unshifted), type G.652.D (low water peak, dispersion unshifted), or type G.657.A1 or type G.657.A2 (bend insensitive) fibers, or the requirements in Table 168–13 where they differ."

with, "The optical fiber cable requirements are satisfied by cables meeting the characteristics in Table 168–13. The use of optical fiber cables containing ITU-T G.652.B (dispersion unshifted), type G.652.D (low water peak, dispersion unshifted), or type G.657.A1 or type G.657.A2 (bend insensitive) fibers is recommended."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Cl **168** *SC* **168.10.1** *P* **72** *L* **7** # I-48

Dawe, Piers J G — NVIDIA

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

Note b about dispersion doesn't relate to the insertion loss row.

SuggestedRemedy

Remove note b from channel insertion loss row, and add note b to all dispersion rows.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

See D2.3 withdrawn comment #12.

Cl **168** *SC* **168.10.1** *P* **72** *L* **7** # I-12

Maniloff, Eric — Ciena Corporation

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

Channel insertion Loss includes note b. Note b relates to Dispersion.

SuggestedRemedy

Remove note b from Channel Insertion Loss

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

See comment #I-48.

Cl **168** *SC* **168.10.1** *P* **72** *L* **13** # I-13

Maniloff, Eric — Ciena Corporation

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

All of the dispersion entries should include note b, as they are based on statistical analysis

SuggestedRemedy

Add Note b to all of the entries for Dispersion

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

See comment #I-48.

Cl **168** *SC* **168.10.1** *P* **72** *L* **35** # I-14

Maniloff, Eric — Ciena Corporation

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

Table 168-13 includes values of 0.43dB and 0.5dB/km for fiber attenuation. However the losses for 100GBASE-BR20 and 100GBASE-BR40 are based on 0.4dB/km

SuggestedRemedy

The fiber characteristics in Table 168-13 should include 0.4 dB/km, and/or some description on how the Channel Insertion Loss is calculated.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Add 0.4 in the cabled optical fiber attenuation row.

Cl **168** *SC* **168.10.1** *P* **72** *L* **41** # I-26

Maguire, Valerie — Copperopolis

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

A dash is missing between "TIA" and "568" in the ANSI/TIA-568.3-C reference.

SuggestedRemedy

Replace, "ANSI/TIA 568-C.3."

with, "ANSI/TIA-568-C.3"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Maintenance required for other clauses (e.g., CL140).

Cl **168** *SC* **168.11.1** *P* **72** *L* **7** # I-6

Rannow, R K — Silverdraft

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

The supplier of a protocol implementation that is claimed to conform to Clause, Physical Medium Dependent (PMD) sublayer and medium, types 100GBASE-BR10, 100GBASE-BR20, and 100GBASEBR40, shall complete the following protocol implementation conformance statement (PICS) proforma.

appears ambiguous

SuggestedRemedy

The supplier of a protocol implementation that is claimed to conform to Clause 168.11, Physical Medium Dependent (PMD) sublayer and medium, types 100GBASE-BR10, 100GBASE-BR20, and 100GBASEBR40, shall complete the following protocol implementation conformance statement (PICS) proforma.

Alternative:

The supplier of a protocol implementation that is claimed to conform to this Standard, shall complete the following protocol implementation conformance statement (PICS) proforma.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Add "168" after "Clause " in the first line of the paragraph in 168.11.1, and mark it as cross-reference.

Cl **168** *SC* **168.11.1** *P* **74** *L* **7** # I-5

Macijuk, Greg — Mountainside Digital Consulting Inc.

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

The line seems to be missing the clause number and reads
"The supplier of a protocol implementation that is claimed to conform to Clause, Physical Medium"

SuggestedRemedy

Revision
"The supplier of a protocol implementation that is claimed to conform to Clause 168, Physical Medium"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

See comment #I-6.

Cl **168** *SC* **168.11.3** *P* **75** *L* **75** # I-20

Kramer, Glen — Broadcom Corporation

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

PICS TP1 and TP2 do not have corresponding requirements in the body of subclause 168.5.1

SuggestedRemedy

Remove PICS entries or add the necessary requirements to 168.5.1.

Proposed Response *Response Status* **W**

PROPOSED REJECT.

Keep consistent with existing clauses.

Cl **168** *SC* **168.11.4.2** *P* **76** *L* **28** # I-17

Kramer, Glen — Broadcom Corporation

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

PICS F1 and M1 are missing the Value/Comment

SuggestedRemedy

Copy the relevant requirements from specification body

Proposed Response *Response Status* **W**

PROPOSED REJECT.

Keep consistent with existing clauses.

Cl **168** *SC* **168.11.4.2** *P* **76** *L* **30** # I-18

Kramer, Glen — Broadcom Corporation

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

There appears no optional requirement in subclause 168.1 that would correspond to PICS F2

SuggestedRemedy

Remove the PICS entry

Proposed Response *Response Status* **W**

PROPOSED REJECT.

The PICS F2 corresponds to the last sentence in 168.1: "to the medium through the MDI and optionally with the management functions that may be accessible through the management interface defined in Clause 45, or equivalent."

Cl **168** *SC* **168.11.4.2** *P* **76** *L* **33** # I-19

Kramer, Glen — Broadcom Corporation

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

The general convention in 802.3 is that every mandatory or optional requirement should have its corresponding PICS entry. But this is not done in this draft. For example, there are two mandatory requirements in 168.1.1, but only a single PICS entry (F3) for both.
Overall, clause 168 contains 50 mandatory requirements ("shall") and 6 optional requirements ("should"). However, there are only 28 mandatory or conditional mandatory PICS entries and 15 optional or conditional optinal PICS entries.

SuggestedRemedy

Review all the PICS entries and revise as needed to ensure one-to-one correspondence with the indivitual mandatory and optional requirements given in the specification body.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Review all the PICS entries and make corresponding changes with editorial license.

Cl **168** *SC* **168.11.4.2** *P* **76** *L* **42** # I-22

Kramer, Glen
Broadcom Corporation

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

PICS entries F6 and F7 both correspond to a single requirement in text

SuggestedRemedy

Combine both PICS entries into one entry. Makre the Value/Comment field read: "Converts the optical signal received from the MDI into a symbol stream for delivery to the PMD service interface using the message PMD:IS_UNITDATA_0.indication"

Proposed Response *Response Status* **W**

PROPOSED REJECT.

Keep consistent with existing clauses.