

IEEE P802.3df D3.0 Initial Sponsor ballot comments

CI **FM** SC **FM** P1 L29 # I-1
 Hajduczenia, Marek Charter Communications
 Comment Type **E** Comment Status **D** (bucket1)
 IEEE Std 802.3cy-202x is now approved (2023)
 SuggestedRemedy
 Update publication year for IEEE Std 802.3cy to 2023 in the whole document.
 Proposed Response Response Status **W**
 PROPOSED ACCEPT.

CI **171** SC **171.3.3** P198 L36 # I-5
 Brown, Matthew Alphawave
 Comment Type **E** Comment Status **D** (bucket1)
 800GMII is already defined previously in the clause, so no need to spell it out here.
 SuggestedRemedy
 Change "Media Independent Interface (800GMII)"
 To "800GMII"
 Proposed Response Response Status **W**
 PROPOSED ACCEPT.

CI **FM** SC **FM** P1 L29 # I-2
 Brown, Matthew Alphawave
 Comment Type **E** Comment Status **D** (bucket1)
 The order of amendments to IEEE Std 802.3-2022 has been adjusted such that 802.3df precedes 802.3cw, with the former being Amendment 9 and the latter Amendment 10.
 SuggestedRemedy
 Remove all references to and amendments to 802.3cw and set 802.3df as amendment 9.
 On the front page, change "Amendment" to "Amendment 9" and remove 802.3cw from the list of preceding amendments.
 On page 13, remove 802.3cw from the list of amendments.
 On page 14, add "Amendment 9" at the beginning of the 802.3df description.
 On page 37 and 41, remove "as modified by IEEE Std 802.3cw-202x)" and adjust changes appropriately.
 Implement with editorial license.
 Proposed Response Response Status **W**
 PROPOSED ACCEPT.

CI **124** SC **124.7.1** P110 L38 # I-10
 Li, Jing YOFC
 Comment Type **E** Comment Status **D** (bucket1)
 (TECQ) (max)
 SuggestedRemedy
 (TECQ), each lane (max)
 Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 Change "Transmitter eye closure for PAM4 (TECQ) (max)" to "Transmitter eye closure for PAM4 (TECQ), each lane (max)"

CI **167** SC **167.1** P156 L13 # I-4
 Brown, Matthew Alphawave
 Comment Type **E** Comment Status **D** (bucket1)
 It is "800GBASE-R PCS" and "800GBASE-R PMA"
 SuggestedRemedy
 Change "PCS for 800GBASE-R" to "800GBASE-R PCS"
 Change "PMA for 800GBAE-R" tp "800GBAE-R PMA"
 Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 Change "PCS for 800GBASE-R" to "800GBASE-R PCS"
 Change "PMA for 800GBASE-R" to "800GBASE-R PMA"

CI **167** SC **167.7.1** P163 L26 # I-11
 Li, Jing YOFC
 Comment Type **E** Comment Status **D** (bucket1)
 4.4|4.4
 SuggestedRemedy
 4.4
 Proposed Response Response Status **W**
 PROPOSED REJECT.
 The value is provided in two column even though it's the same for a reason. The motivation is summarized in comment I-15 in the 802.3db Draft 3.0 final comment report here: https://www.ieee802.org/3/db/comments/P802d3db_D3p0_comments_final_by_ID_052522.pdf
 The response is repeated here:
 "TDECQ is measured using different fiber emulation filters for VR and SR. TDECQ (max) is specified in separate columns for VR and SR to note this difference even though both PMDs allow the same numerical limit for TDECQ(max) of 4.4 dB."
 In keeping with the decision, relating to this same table, made in the 802.3db task force, the columns should not be merged as proposed.

IEEE P802.3df D3.0 Initial Sponsor ballot comments

Cl 167 SC 167.7.1 P163 L30 # I-12
 Li, Jing YOFC
 Comment Type E Comment Status D (bucket1)
 Overshoot/undershoot (max)
 SuggestedRemedy
 Transmitter overshoot and undershoot (max)
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 45 SC 45.2.1.7.4 P42 L16 # I-16
 Marris, Arthur Cadence Design Systems, Inc.
 Comment Type E Comment Status D (bucket1)
 Replace . with ,
 SuggestedRemedy
 Change "400GBASE-KR4. 800GBASE-KR8" to "400GBASE-KR4, 800GBASE-KR8"
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 167 SC 167.7.2 P164 L26 # I-13
 Li, Jing YOFC
 Comment Type E Comment Status D (bucket1)
 Receiver sensitivity (OMAouter) (max)
 SuggestedRemedy
 Receiver sensitivity, each lane (OMAouter) (max)
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Change "Receiver sensitivity (OMAouter) (max)" to "Receiver sensitivity (OMAouter), each lane (max)"

Cl 45 SC 45.2.3.25.2 P60 L20 # I-17
 Marris, Arthur Cadence Design Systems, Inc.
 Comment Type E Comment Status D (bucket1)
 Delete editor's note as it is no longer needed
 SuggestedRemedy
 Delete editor's note as it is no longer needed
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 167 SC 167.7.2 P164 L28 # I-14
 Li, Jing YOFC
 Comment Type E Comment Status D (bucket1)
 Stressed receiver sensitivity (OMAouter)c (max)
 SuggestedRemedy
 Stressed receiver sensitivity, each lane (OMAouter)c (max)
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 45 SC 45.2.1.6 P41 L3 # I-18
 Marris, Arthur Cadence Design Systems, Inc.
 Comment Type E Comment Status D (bucket1)
 802.3df is now expected to be published before 802.3cw.
 SuggestedRemedy
 On page 41 delete "(as modified by IEEE Std 802.3cw-202x)" on line 3
 on page 41 line 24 change "0 1 1 1 1 1 1 = 400GBASE-ZR PMA/PMD" to "0 1 1 1 1 1 1 = reserved"
 and in "30.5.1.1.2 aMAUType"
 On page 37 line 35 change "(as modified by IEEE Std 802.3cw-202x)" to "(as modified by IEEE Std 802.3db-2022)"
 Change "after the entry for 400GBASE-ZR" to "after the entry for 400GBASE-VR4"
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Resolve using the response to comment #I-2.

IEEE P802.3df D3.0 Initial Sponsor ballot comments

CI **FM** SC **FM** P13 L45 # I-19

Marris, Arthur Cadence Design Systems, Inc.

Comment Type **E** Comment Status **D** (bucket1)

802.3df will be published before 802.3cw so references to 802.3cw should be removed

SuggestedRemedy

Delete IEEE Std 802.3cw™-202x entry on line 45 on page 13

On page 1 change "IEEE Std 802.3cy-202x, and IEEE Std 802.3cw-202x" to "and IEEE Std 802.3cy-202x"

Proposed Response Response Status **W**

PROPOSED ACCEPT IN PRINCIPLE.
Resolve using the response to comment #I-2.

CI **FM** SC **FM** P1 L30 # I-20

Huber, Thomas Nokia

Comment Type **E** Comment Status **D** (bucket1)

802.3df will be published before 802.3cw

SuggestedRemedy

Change
"... IEEE Std 802.3cz-2023, IEEE Std 802.3cy-202x, and IEEE Std 802.3cw-202x."
to
"... IEEE Std 802.3cz-2023, and 802.3cy-202X."

Proposed Response Response Status **W**

PROPOSED ACCEPT IN PRINCIPLE.
Resolve using the response to comment #I-2.

CI **FM** SC **FM** P13 L45 # I-21

Huber, Thomas Nokia

Comment Type **E** Comment Status **D** (bucket1)

802.3df will be published before 802.3cw

SuggestedRemedy

Delete the text related to 802.3cw.

Proposed Response Response Status **W**

PROPOSED ACCEPT IN PRINCIPLE.
Resolve using the response to comment #I-2.

CI **30** SC **30.5.1.1.2** P37 L34 # I-22

Huber, Thomas Nokia

Comment Type **E** Comment Status **D** (bucket1)

802.3df will be published before 802.3cw

SuggestedRemedy

Change the editing instruction to say "Insert the following new entries into "APPROPRIATE SYNTAX" in 30.5.1.1.2 after the entry for 400GBASE-VR4:"

Proposed Response Response Status **W**

PROPOSED ACCEPT IN PRINCIPLE.
Resolve using the response to comment #I-2.

CI **45** SC **45.2.1.6** P41 L3 # I-23

Huber, Thomas Nokia

Comment Type **E** Comment Status **D** (bucket1)

The editing instruction needs to reflect that table 45-7 was modified by 802.3ck-2022, 802.3db-2022, and 802.3cz-2023, and that 802.3cw won't have modified it.

SuggestedRemedy

Change the parenthetical remark in the editing instruction to say "(as modified by IEEE Std. 802.3db-2022, IEEE Std. 802.3ck-2022, and IEEE Std 802.3cz-2023)"

Proposed Response Response Status **W**

PROPOSED ACCEPT IN PRINCIPLE.
Resolve using the response to comment #I-2.

CI **45** SC **45.2.1.6** P41 L25 # I-24

Huber, Thomas Nokia

Comment Type **T** Comment Status **D** (bucket1)

400GBASE-ZR won't have been defined when 802.3df is approved since 802.3cw is after 802.3df

SuggestedRemedy

Replace "400GBASE-ZR PMA/PMD" with "reserved"

Proposed Response Response Status **W**

PROPOSED ACCEPT IN PRINCIPLE.
Resolve using the response to comment #I-2.

IEEE P802.3df D3.0 Initial Sponsor ballot comments

Cl 45 SC 45.2.1.7 P42 L16 # I-25
 Huber, Thomas Nokia
 Comment Type E Comment Status D (bucket1)
 The period after 400GBASE-KR4 should be a comma, and the punctuation mark should be indicated as text to be inserted
 SuggestedRemedy
 Change "400GBASE-KR4. 800GBASE-KR8" to "400GBASE-KR4, 800GBASE-KR8" and underline the comma
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 45 SC 45.2.1.7 P42 L21 # I-26
 Huber, Thomas Nokia
 Comment Type E Comment Status D (bucket1)
 The comma and space following 400GBASE-CR4 should be indicated as text to be inserted
 SuggestedRemedy
 Underline the comma and space.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 45 SC 45.2.1.60b P47 L1 # I-27
 Huber, Thomas Nokia
 Comment Type E Comment Status D (bucket1)
 The editing instruction should note that 45.2.1.60a was inserted by 802.3cz
 SuggestedRemedy
 Change the editing instruction to say "Insert 45.2.1.60b after 45.2.1.60a (as inserted by IEEE Std. 802.3cz-2023) as follows:"
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 73 SC 73 P90 L2 # I-28
 Huber, Thomas Nokia
 Comment Type T Comment Status D (bucket1)
 Figure 73-1 (as updated by 802.3ck-2022) should be updated to include 800G MII and 800 Gb/s media
 SuggestedRemedy
 Insert clause 73.2, with an editing instruction to replace Figure 73-1 (as replaced by 802.3ck-2022). In the figure itself, change "or 400GMII" to "400GMII, or 800GMII", change "or 400 Gb/s" to "400 Gb/s, or 800 Gb/s", and add "800GMII = 800 Gb/s MEDIA INDEPENDENT INTERFACE" to the legend
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Resolve using the response to comment #I-140.

Cl 73 SC 73.6.4 P90 L8 # I-29
 Huber, Thomas Nokia
 Comment Type E Comment Status D (bucket1)
 Missing a space in the editing instruction
 SuggestedRemedy
 Change "Table73-4" to "Table 73-4".
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 73 SC 73.7.6 P91 L6 # I-30
 Huber, Thomas Nokia
 Comment Type E Comment Status D (bucket1)
 Missing a space in the editing instruction
 SuggestedRemedy
 Change "Table73-5" to "Table 73-5".
 Proposed Response Response Status W
 PROPOSED ACCEPT.

IEEE P802.3df D3.0 Initial Sponsor ballot comments

Cl 124 SC 124.2 P103 L16 # I-31

Huber, Thomas

Nokia

Comment Type E Comment Status D (bucket1)

Singular/plural misalignment between subject and verb in the second sentence.

SuggestedRemedy

Change "The service interface for these PMDs are described..." to "The service interface for these PMDs is described..." or "The service interfaces for these PMDs are described..."

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change "The service interface for these PMDs are described" to "The service interface for these PMDs is described"

Cl 124 SC 124.8.5.1 P118 L23 # I-32

Huber, Thomas

Nokia

Comment Type E Comment Status D (bucket1)

The style guide indicates that there should not be only one subclause at a given level; as such, inserting 124.8.5.1 without also adding a 124.8.5.2 is not appropriate.

SuggestedRemedy

Delete the editing instruction to insert 124.8.5.1 and that new heading. Include the text that would have gone in 124.8.5.1 as part of the changes to be made to 124.8.5.

Proposed Response Response Status W

PROPOSED REJECT.

The comment correctly points out that the style manual "recommends" that there should not be lone subclauses. However, this is an exception, where 124.8.5 we wish to retain a similar structure to 121.8.5 and 121.8.5.2 to define the TDECQ test channel characteristics.

Cl 124 SC 124.12.4.6 P129 L14 # I-33

Huber, Thomas

Nokia

Comment Type E Comment Status D (bucket1)

There is a stray : in the Status

SuggestedRemedy

Change
 "(DR4+DR42:)*INS:M" to
 "(DR4+DR42)*INS:M"

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 169 SC 169.2.6 P178 L54 # I-34

Huber, Thomas

Nokia

Comment Type E Comment Status D (bucket1)

One of the two instances of 'is' in the second sentence was presumably intended to be 'as'.

SuggestedRemedy

Revise the sentence to use the structure of the analogous sentence in clause 80.2.6: Clause 73 auto-negotiation is used by the 800 Gb/s backplane PHY (800GBASE-KR8) and the 800 Gb/s copper PHY (800GBASE-CR8).

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Resolve using the response to comment #I-50.

Cl 170 SC 170.4.4.1 P191 L19 # I-35

Huber, Thomas

Nokia

Comment Type E Comment Status D (bucket1)

It seems odd to skip G2. This seems to be copied from clause 117, but it doesn't make any more sense there; if the intent was to align with the numbering in clause 81, the two rows should be G3 and G4 rather than G1 and G3.

SuggestedRemedy

Rather than propagate the presumed typo from clause 117, change G3 to G2

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 173 SC 173.5.5 P240 L51 # I-36

Huber, Thomas

Nokia

Comment Type E Comment Status D (bucket1)

The variable n should be italicized in the first line

SuggestedRemedy

Format the n in "n output lanes" in italics

Proposed Response Response Status W

PROPOSED ACCEPT.

IEEE P802.3df D3.0 Initial Sponsor ballot comments

Cl 1 SC 1.4.109 P31 L49 # I-40
 Ran, Adee Cisco Systems, Inc.
 Comment Type E Comment Status D (bucket1)
 In all other definitions in 1.4 that mention reach (103, 108a, 109a, 135, 135a, 142, 142a, 143, 144, 144a, 184b, 184c, 184f, 184g) there is a comma before "with reach up to". Here there isn't.
 SuggestedRemedy
 For consistency, add a comma after "in each direction".
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 1 SC 1.4.184k P34 L3 # I-42
 Ran, Adee Cisco Systems, Inc.
 Comment Type E Comment Status D (bucket1)
 "RS Sublayer" (RAS syndrome)
 SuggestedRemedy
 Change to "Reconciliation Sublayer"
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 RS is normally spelled out to distinguish it from the Reed-Solomon FEC (RS-FEC) and this resolves the redundancy.
 Implement the suggested remedy with editorial license.
 [Editor's note: Changed line 34 to 3]

Cl 30 SC 30.5.1.1.2 P36 L45 # I-43
 Ran, Adee Cisco Systems, Inc.
 Comment Type T Comment Status D (bucket1)
 Most entries in this list include reach, but some don't, although reach is defined for them. In this project, reach was added for 400GBASE-DR4, but not for other items.
 200GBASE-DR4, 200GBASE-SR4, 400GBASE-SR4.2, 400GBASE-SR8, and 400GBASE-SR16 have reaches included in their definitions in 1.4.
 SuggestedRemedy
 In the 200GBASE-DR4 item, insert "with reach up to at least 500 m" after "PMD".
 In the 200GBASE-SR4 item, insert "with reach up to at least 100 m" after "PMD".
 In the 400GBASE-SR4.2 item, insert "with reach up to at least 150 m" after "PMD".
 In the 400GBASE-SR16 item, insert "with reach up to at least 100 m" after "PMD".
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 The SR reach is dependent on fiber type so it is not appropriate to indicate reach for these SR MAU types in 30.5.1.1.2
 However for the 200GBASE-DR4 item, insert "with reach up to at least 500 m" after "PMD".

Cl 116 SC 116.1.3 P95 L43 # I-44
 Ran, Adee Cisco Systems, Inc.
 Comment Type T Comment Status D (bucket1)
 200GBASE-SR4 is defined with a reach (see 1.4.109), but it is the only one for which it is not mentioned in this table.
 SuggestedRemedy
 Insert ", with reach up to at least 100 m" after "in each direction".
 Proposed Response Response Status W
 PROPOSED ACCEPT.

IEEE P802.3df D3.0 Initial Sponsor ballot comments

Cl 0 SC 0 P128 L21 # I-47

Ran, Adeo Cisco Systems, Inc.

Comment Type TR Comment Status D (bucket1)

The symbol "+" is used on the status column in multiple PICS items, denoting logical-OR. It is not defined in the PICS conventions in clause 21.

SuggestedRemedy

Add Clause 21 to the draft, and amend 21.6.2, adding the sentence:

"<item1>+<item2>: OR-predicate condition, the requirement has to be met if either of the optional items is implemented".

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Add Clause 21 to the draft, and amend 21.6.2, adding the sentence:

"<item1>+<item2>: OR-predicate condition, the requirement has to be met if one or both of the items is implemented"
Implement with editorial license.

Cl 162 SC 162.1 P130 L20 # I-48

Ran, Adeo Cisco Systems, Inc.

Comment Type ER Comment Status D test points (bucket1)

"Annex 162A provides information on parameters with test points that may not be testable in an implemented system"

The word "testable" is inappropriate for test points; it is the parameters associated with the test points that might not be testable, because the test points are typically inaccessible.

SuggestedRemedy

Change the quoted sentence to
"Annex 162A provides information on parameters that might not be testable in an implemented system, since the test points they are associated with are typically inaccessible".

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 169 SC 169.2.1 P178 L3 # I-49

Ran, Adeo Cisco Systems, Inc.

Comment Type TR Comment Status D (bucket1)

The title of this subclause is "Reconciliation Sublayer (RS) and Media Independent Interface (MII)" and the text includes "The Media Independent Interface (MII) specified in Clause 170".

But MII is defined in 1.4.393 (as of 802.3-2022) only with reference to clause 22. Annex 4A (which defines the MAC) does not use MII as a generic term.

For 800G, the term 800GMII (defined in 1.4.184i) should be used.

SuggestedRemedy

Change the title to "Reconciliation Sublayer (RS) and 800 Gb/s Media Independent Interface (800GMII)".

Change the subclause text accordingly

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Implement the suggested remedy with editorial license.

Cl 169 SC 169.2.6 P178 L53 # I-50

Ran, Adeo Cisco Systems, Inc.

Comment Type ER Comment Status D (bucket1)

"Auto-Negotiation is used by the 800 Gb/s backplane PHY (800GBASE-KR8) and the 800 Gb/s copper PHY (800GBASE-CR8) is specified in Clause 73."

The sentence is incorrect as written (800GBASE-CR8 is not specified in Clause 73).

SuggestedRemedy

Change to "Auto-Negotiation is used by the 800 Gb/s backplane PHY (800GBASE-KR8) and the 800 Gb/s copper PHY (800GBASE-CR8). Auto-Negotiation is specified in Clause 73."

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

To be consistent with wording in other similar clauses implement the following...

Change: "Auto-Negotiation is used by the 800 Gb/s backplane PHY (800GBASE-KR8) and the 800 Gb/s copper PHY (800GBASE-CR8) is specified in Clause 73."

To: "Auto-Negotiation used by the 800 Gb/s backplane PHY (800GBASE-KR8) and the 800 Gb/s copper PHY (800GBASE-CR8) is specified in Clause 73."

IEEE P802.3df D3.0 Initial Sponsor ballot comments

Cl 169 SC 169.4 P182 L13 # I-51

Ran, Adee Cisco Systems, Inc.

Comment Type E Comment Status D (bucket1)

The sentence "in bit times as specified in 1.4 and pause_quanta as specified in 31B.2 for 800 Gigabit Ethernet" suggests that 31B.2 includes a specification for 800 Gigabit Ethernet - but it does not.

The references to 1.4 and 31B.2 are parenthetic, so corresponding punctuation should be used.

SuggestedRemedy

Change to "in bit times (as specified in 1.4) and pause_quanta (as specified in 31B.2) for 800 Gigabit Ethernet"

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
Implemented the suggested remedy with editorial license.

Cl 170 SC 170.1 P187 L7 # I-53

Ran, Adee Cisco Systems, Inc.

Comment Type TR Comment Status D (bucket1)

"This clause defines the characteristics of the Reconciliation Sublayer (RS) and the Media Independent Interface between Ethernet media access controllers and various PHYs"

This clause is specific to 800 Gb/s PHYs. The capitalized "Media Independent Interface" is a different thing, specified for 10M/100M Ethernet in Clause 22 (see 1.4.393).

SuggestedRemedy

Change to "This clause defines the characteristics of the Reconciliation Sublayer (RS) and the 800 Gb/s Media Independent Interface (800GMII) between Ethernet media access controllers and various PHYs".

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
Change to "This clause defines the characteristics of the Reconciliation Sublayer (RS) and the 800 Gb/s Media Independent Interface (800GMII) between Ethernet media access controllers and various 800 Gb/s PHYs".

Cl 170 SC 170.1 P187 L37 # I-54

Ran, Adee Cisco Systems, Inc.

Comment Type TR Comment Status D (bucket1)

The title of Figure 170-1 has "RS" and "MII", but the labels in the figure are "Reconciliation" and "800GMII".

SuggestedRemedy

Change the title to "Relationship of the Reconciliation Sublayer and 800GMII to the ISO/IEC Open Systems Interconnection (OSI) reference model and IEEE 802.3 Ethernet model".

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 170 SC 170.1.1 P188 L9 # I-55

Ran, Adee Cisco Systems, Inc.

Comment Type T Comment Status D (bucket1)

"The following are the major concepts of the 800GMII:"

But the list discusses both the 800GMII and the RS.

SuggestedRemedy

Change "800GMII" to "800GMII and RS".

Proposed Response Response Status W

PROPOSED ACCEPT.

IEEE P802.3df D3.0 Initial Sponsor ballot comments

Cl 170 SC 170.4.4.2 P191 L29 # I-56

Ran, Adee Cisco Systems, Inc.

Comment Type T Comment Status D (bucket1)

PICS items PL2 through PL13 refer to 170.1.7 but there is no corresponding text there.

The text in 170.1.7 refers back to 81.1.7 for these functions, with an exception for EEE and LPI, which is not reflected in the PICS.

Having detailed PICS items when the text is just a reference is not helpful. The EEE/LPI exception should be noted.

Similarly for 170.4.4.2 (where multiple items refer to 170.2), and for 170.4.4.4 and 170.4.4.5 (170.3, which has an exception for EEE/LPI),

SuggestedRemedy

Replace PL2 through PL9 with a single item "Primitives mapped as specified in 81.1.7 except for EEE and LPI", 170.1.7, MII:M.

Apply similarly in other tables including the exception where appropriate.

Proposed Response Response Status W

PROPOSED REJECT.

The PICS items are correct and unambiguous as written. The proposed changes do not improve the technical accuracy or clarity of the draft.

Cl 171 SC 171.3.2 P198 L18 # I-57

Ran, Adee Cisco Systems, Inc.

Comment Type E Comment Status D (bucket1)

In most figures in the existing standard the PMAs are designated PMA(m:n) - including in this draft, e.g. Figures 169-2 through 169-5, Figure 171-3, Figure 173-2, and all figures in Annex 173A

However, in the text of clauses 171 and 173 the PMAs are referred to as "32:8 PMA", "8:32 PMA", and "8:8 PMA", and in the PICS (173.7.3) they are listed as "PAM 32:8", "PMA 8:32", and "PMA 8:8".

Consistency is preferable.

SuggestedRemedy

In clauses 171 and 173:

Change 14 instances of "32:8 PMA" to "PMA(32:8)"
 Change 11 instances of "8:32 PMA" to "PMA(8:32)"
 Change 11 instances of "8:8 PMA" to "PMA(8:8)".

Add the missing parentheses in the PICS.

Also, change bare instances of "8:8", "32:8", "8:32" to "PCS(8:8)" etc., where appropriate (e.g. some instances in 173.2 and 173.3).

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
 For task force discussion.

Cl 172 SC 172.1.2 P206 L12 # I-58

Ran, Adee Cisco Systems, Inc.

Comment Type T Comment Status D (bucket1)

Subclause title is "Relationship of 800GBASE-R to other standards" - but the text is specific to the PCS.

SuggestedRemedy

Change the title to "Relationship of the 800GBASE-R PCS to other standards".

Proposed Response Response Status W

PROPOSED ACCEPT.

IEEE P802.3df D3.0 Initial Sponsor ballot comments

Cl 172 SC 172.1.2 P207 L49 # I-59
 Ran, Adeo Cisco Systems, Inc.
 Comment Type **TR** Comment Status **D** (bucket1)
 "Media Independent Interface" is specific to 10M/100M Ethernet.
 SuggestedRemedy
 Change to "800 Gb/s Media Independent Interface".
 Proposed Response Response Status **W**
 PROPOSED ACCEPT.

Cl 172 SC 172.2.1 P210 L6 # I-60
 Ran, Adeo Cisco Systems, Inc.
 Comment Type **TR** Comment Status **D** (bucket1)
 The first sentence in this subclause states that "The 800GBASE-R PCS is composed of the PCS Transmit and PCS Receive processes"
 But the third sentence talks about "transmit channel", and also in line 17 "When the transmit channel is in normal mode" and in line 28 "When the transmit channel is in test-pattern mode"
 The term "transmit channel" appears only here while "transmit function" is used elsewhere (5 times for the PCS).
 Also, the sentence "The PCS transmit channel can operate in normal mode or test-pattern mode." would be better placed right before these modes are discussed.
 SuggestedRemedy
 Move the sentence "The PCS transmit channel can operate in normal mode or test-pattern mode." to a separate paragraph after the second paragraph.
 Change "transmit channel" to "transmit function", 3 times.
 Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 Implement the suggested remedy with editorial license.

Cl 172 SC 172.2.4.1 P211 L10 # I-61
 Ran, Adeo Cisco Systems, Inc.
 Comment Type **E** Comment Status **D** (bucket1)
 The subclause title "Encode" does not match the subordinate subclause titles which use "encoder".

Also, "Encode" is also used in 172.2.4.8, a more specific term would better be used here.

Similarly in 172.2.5.9, "Decode".

SuggestedRemedy
 Change the title of 172.2.4.1 to "66-bit block encoder".
 Change the title of 172.2.5.9 to "66-bit block decoder".

Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 change title of 172.2.4.1 to "64B/66B encoder"
 change title of 172.2.5.9 to "64B/66B decoder"

Cl 172 SC 172.5 P223 L50 # I-64
 Ran, Adeo Cisco Systems, Inc.
 Comment Type **ER** Comment Status **D** numbers (bucket1)
 "640 000"

Per the style manual, the use of space as a thousands separator is specified for numbers within tables. There is no need to use it in text and it adds no clarity.

Adding spaces in numbers within clause creates significant issues in other places of the standard and should be avoided.

SuggestedRemedy
 Change "640 000" to "640000".

Proposed Response Response Status **W**
 PROPOSED REJECT.
 Note that there are other similar instances: "32 768" in 167.3.1, "32 768" in 124.3.1 and "167.3.1"
 The guidance from the publication editors is that thousands separator is required with some exceptions, e.g., where the readability is compromised. Readability is not an issue for the cases noted in the comment and in this response above.
 The proposed change is not consistent with the editorial guidelines.
 See related comment #I-73.

IEEE P802.3df D3.0 Initial Sponsor ballot comments

Cl 172 SC 172.7.4 P226 L22 # I-65

Ran, Adeo Cisco Systems, Inc.

Comment Type E Comment Status D (bucket1)

Many PICS items refer to subclauses in 172 for features that are not explicitly specified there but refer back to clause 119.

SuggestedRemedy

Whenever there are multiple items referring to a subclause that only refers back to clause 119, consider replacing these items with a single item that points to the subclause in clause 172, across the PICS tables.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

To be consistent, it is an improvement to point to the relevant subclauses in Clause 172 rather than Clause 119. However, it does not seem necessary or practical to collapse multiple items together as proposed nor does this improve the technical clarity or accuracy of the draft.

Change references to subclauses in Clause 119 to the relevant subclauses in Clause 172.

Cl 173 SC 173.5.2.1 P238 L23 # I-67

Ran, Adeo Cisco Systems, Inc.

Comment Type E Comment Status D (bucket1)

"referencing the functional block diagram shown in..." does not sound right.

This appears in 173.5.2.1, 173.5.2.2, and 173.5.2.3, two instances each.

SuggestedRemedy

Change "referencing the functional block diagram shown in" to "as shown in", in all 6 instances.

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 173 SC 173.5.3.2 P239 L44 # I-70

Ran, Adeo Cisco Systems, Inc.

Comment Type T Comment Status D (bucket1)

"the PMA service interface that receives data in the transmit direction ... shall tolerate the maximum amount of Skew Variation"

The PMA has to tolerate skew variation, not its service interface (see also 173.5.3.4 where it's the PMA).

SuggestedRemedy

Delete "service interface".

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 173 SC 173.5.6 P241 L8 # I-71

Ran, Adeo Cisco Systems, Inc.

Comment Type E Comment Status D (bucket1)

"For cases where the interface between the PMA client and the PMA, or between the PMA and the sublayer below the PMA represent a physically instantiated interface, ..."

This sentence is unnecessarily complex and the punctuation is incorrect.

SuggestedRemedy

Change to "When the interface between the PMA client and the PMA, or between the PMA and the sublayer below the PMA, is physically instantiated, ..."

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change: "For cases where the interface between the PMA client and the PMA, or between the PMA and the sublayer below the PMA represent a physically instantiated interface, the PMA provides electrical signal drivers for that interface."

To: "For a case where there is a physically instantiated interface the PMA provides electrical signal drivers."

IEEE P802.3df D3.0 Initial Sponsor ballot comments

CI 173 SC 173.5.8.1 P242 L3 # I-72

Ran, Adeo Cisco Systems, Inc.

Comment Type T Comment Status D (bucket1)

The requirement that "data is being sent on all 32 output lanes (PMA:IS_UNITDATA_0:31.indication)" is unique to this PMA (32:8); the other two PMAs set the signal status only based on data being received on the appropriate interface.

In real implementations, an indication to the PCS that data is not being received by the PMA (which may be due to lack of a link partner) would likely be separate from an indication that data is not being transmitted (essentially a local fault). Specifying in the standard that it's the same indication is not helpful for readers.

SuggestedRemedy

Delete the second item in the list.

Consider converting the list to regular paragraph text as in the other two subclauses.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change the SIGNAL_OK definition to the following:

"The SIGNAL_OK parameter is set to OK when data is being received on all 8 input lanes (inst:IS_UNITDATA_0:7.indication) and the SIGNAL_OK parameter of the PMD:IS_SIGNAL.indication primitive is set to OK, if there is a PMD immediately below the PMA. Otherwise SIGNAL_OK is set to FAIL."

CI 31B SC 31B.3.7 P251 L25 # I-73

Ran, Adeo Cisco Systems, Inc.

Comment Type ER Comment Status D numbers (bucket1)

"115 840"

The space separator is inconsistent with the format of existing numbers in 31B.3.7 in the base document (e.g., "57920" for 400 Gb/s).

Per the style manual, the use of space as a thousands separator is specified for numbers within tables. There is no need to use it in text and equations, especially where it creates inconsistency.

This comment also applies to 124.3.1 and 167.3.1, where numbers of bit times appear with thousands separators in the text (subject of another comment).

SuggestedRemedy

Change "115 840" to "115840".

Implement similarly for the numbers of bit time in 124.3.1 and 167.3.1 (subject of another comment).

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

See related comment #I-64.

For this case the use of a thousands separator is inconsistent with similar equations in 31B.3.7 and the use of the separator makes the use of the equation difficult to read.

Change "115 840" to "115840" in 31.B.3.7

Comment #I-45 addresses the changes requested for 124.3.1 and 167.3.1

CI 173A SC 173A P283 L8 # I-74

Ran, Adeo Cisco Systems, Inc.

Comment Type E Comment Status D (bucket1)

This annex is titled "800 Gb/s PMA sublayer partitioning examples", but it's about Physical layer partitioning examples, not PMA sublayer partitioning. The PMA is not partitioned.

SuggestedRemedy

Change Annex title to "800 Gb/s Physical layer partitioning examples".

Proposed Response Response Status W

PROPOSED REJECT.

This annex, like similar ones used for other Ethernet rates, demonstrates variations of a physical layer implementation with different sets of physical instantiations of the PMA service interface (800GAUI-n) and the resulting MMD address to be assigned to each of the PMA sublayers.

IEEE P802.3df D3.0 Initial Sponsor ballot comments

Cl 124 SC 124.8.1 P117 L30 # I-76

Ran, Adeo Cisco Systems, Inc.

Comment Type TR Comment Status D (bucket1)

In Table 124-10, the subclause reference for the bottom two rows (Stressed receiver conformance test signal calibration, and Stressed receiver sensitivity) is 124.9, but that subclause is "Safety, installation, environment, and labeling" - apparently incorrect.

In the base document, these references are to 124.8.10, which is not part of this draft. If the existing 124.8.10 is adequate for the new PHYs then the reference can simply be corrected.

However, I suspect that other changes are required (for example, 140.7.13 includes a requirement about overshoot and undershoot, which does not exist in 124.8.10, even though these Tx requirements were added in 124.8.5b). If that is the case, then 124.8.10 should be added to this document and amended. I do not have the expertise to propose a detailed solution.

SuggestedRemedy

Change the reference of both table items to 124.8.10.

If it is necessary, add 124.8.10 to this document and make any required changes.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

In Table 124-10 change the related subclause for Stressed receiver conformance test signal calibration and Stressed receiver sensitivity from 124.9 to 124.8.10.

Cl 124 SC 124.8.9.2 P120 L17 # I-77

Ran, Adeo Cisco Systems, Inc.

Comment Type E Comment Status D (bucket1)

The editorial instruction says "Insert new subclause 124.8.9.2 after Figure 124-4". But that figure might move to another place when a new revision is created. The location of the new subclause should be defined by the subclause structure.

SuggestedRemedy

Change the instruction to "Insert new subclause 124.8.9.2 after 124.8.9.1".

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 116 SC 116.1.3 P95 L43 # I-79

Lusted, Kent Intel

Comment Type T Comment Status D (bucket1)

There is no indication of the supported reach for 200GBASE-SR4 in Table 116-1. An unfamiliar reader may not know of the reach of this specific PHY or be able to differentiate it from the other entries in the table. Note that Table 116-2 for 400 Gb/s PHYs has a description entry for 400GBASE-SR4 that does include "with a reach up to at least 100 m". The reach text is also in the Definitions in 1.4.109 (page 31, line 50)

SuggestedRemedy

Add "with a reach up to at least 100 m" to the description of 200GBASE-SR4 in Table 116-1.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Resolve using the response to comment #I-44.

Cl 1 SC 1.4.461 P34 L19 # I-88

Dawe, Piers J G NVIDIA

Comment Type E Comment Status D (bucket1)

Difficult to parse "carried on a physical lane together at the..."

SuggestedRemedy

Change to "carried together on a physical lane at the..." or "carried on a single physical lane at the..."

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change "One or more PCS lanes can be multiplexed and carried on a physical lane together"

To: "One or more PCS lanes can be multiplexed and carried together on a physical lane"

Cl 124 SC 124.8.1 P117 L8 # I-94

Dawe, Piers J G NVIDIA

Comment Type T Comment Status D (bucket1)

This would be better worded like the base text or Table 167-11 "3, 4, 5, 6, or valid 100GBASE-R, 200GBASE-R, 400GBASE-R, or 800GBASE-R signal".

SuggestedRemedy

Change "3, 4, 5, 6, or valid 400GBASE-R signal or 800GBASE-R signal" to "3, 4, 5, 6, or valid 400GBASE-R or 800GBASE-R signal" (i.e. put "or 800GBASE-R" before the first (pre-existing) "signal" and delete the second one).

Proposed Response Response Status W

PROPOSED ACCEPT.

IEEE P802.3df D3.0 Initial Sponsor ballot comments

Cl 124 SC 124.12.4.4 P128 L21 # I-96
 Dawe, Piers J G NVIDIA
 Comment Type ER Comment Status D (bucket1)
 This use of + is used in several clauses in this draft. It is not defined in 21.6.2, but it is useful.
 SuggestedRemedy
 In 21.6.2, add: <item1>+<item2>: OR-predicate condition, the requirement has to be met if either or both optional items are implemented
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Resolve using the response to comment #I-47.

Cl 162 SC 162.1 P130 L20 # I-97
 Dawe, Piers J G NVIDIA
 Comment Type E Comment Status D test points (bucket1)
 Bad use of "may not", and contradictory to the meaning at Table 167-6. "The word may is used to indicate a course of action permissible within the limits of the standard (may equals is permitted to)." This issue is fixed in 162A.1. Missing word "associated". Also, see style guide 10.1.2 That and which.
 SuggestedRemedy
 Change "information on parameters with test points that may not be testable in an implemented system" to "parameters associated with test points which might not be testable in an implemented system", aligning with 162A.1 and 136A.1.
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Resolve using the response to #I-48.

Cl 171 SC 171.1.1 P195 L39 # I-104
 Dawe, Piers J G NVIDIA
 Comment Type E Comment Status D (bucket1)
 "Each 800GXS leverages all functions in the 800GBASE-R PCS": this is ambiguous. It might be that an 800GXS uses them, or that its functions are based, more or less, on them but with modification(s). I see the word in 118.1.1; it's not good there but 118 XS functions and 119 PCS functions are not quite identical.
 SuggestedRemedy
 Change "leverages all functions in" to "has the same functions as".
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 172 SC 172.2.4.1 P211 L11 # I-108
 Dawe, Piers J G NVIDIA
 Comment Type E Comment Status D (bucket1)
 Mixed parts of speech: Encode, State-diagram encoder, Stateless encoder, Rate matching, Block distribution, 64B/66B to 256B/257B transcoder and so on
 SuggestedRemedy
 Change the odd one out: change Encode to Encoder. Similarly in the title of 172.2.5.9, change Decode to Decoder.
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Resolve using the response to comment #I-61.

Cl 172 SC 172.2.4.6 P212 L35 # I-111
 Dawe, Piers J G NVIDIA
 Comment Type E Comment Status D alignment markers (bucket1)
 In "and finally a unique pad per PCS lane...", "finally" is unfortunate or incorrect, as the UPs don't come last. As it is only rhetorical, it can be left out.
 SuggestedRemedy
 Delete "finally"
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 172 SC 172.2.4.6 P213 L8 # I-114
 Dawe, Piers J G NVIDIA
 Comment Type E Comment Status D (bucket1)
 In the text above, CM0 to CM5, UM0, UP0 and so on are in regular text while in the tables, the numbers are subscripts. This should be made consistent. In spite of their use in clauses 82 and 119, the subscripts are inconvenient and not necessary.
 SuggestedRemedy
 Change the subscripts to regular text in these two figures
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Implement suggested remedy with editorial license.

IEEE P802.3df D3.0 Initial Sponsor ballot comments

Cl 172 SC 172.2.4.10 P216 L11 # I-116
 Dawe, Piers J G NVIDIA
 Comment Type E Comment Status D (bucket1)
 This wording causes confusion: "The portion of the figure above the "64B/66B to 256B/257B transcoder" is excluded." Which figure? How can they be excluded, it won't work!
 SuggestedRemedy
 Change to:
 The 66-bit block distribution of Figure 172-4 feeds the 64B/66B to 256B/257B transcoder of Figure 119-11 in each flow directly, and the portion of Figure 119-11 above the "64B/66B to 256B/257B transcoder" is not used.
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Implement the suggested remedy with editorial license.

Cl 172 SC 172.2.4.11 P216 L43 # I-117
 Dawe, Piers J G NVIDIA
 Comment Type E Comment Status D (bucket1)
 "is accessible through the register": which register?
 SuggestedRemedy
 is accessible through the BASE-R PCS test-pattern control register 3.42.3
 Proposed Response Response Status W
 PROPOSED REJECT.
 The referenced text is as follows:
 "If a Clause 45 MDIO is implemented, then the tx_test_mode variable is accessible through the register as shown in Table 172-5."
 In Table 172-5, the third row provides the MDIO register and bit information for the variable tx_test_mode. No further information is required. Since the mapping of the variable to a register/bit is already provided in the table, the address need not be repeated in 172.2.4.11.

Cl 172 SC 172.2.4.11 P216 L44 # I-118
 Dawe, Piers J G NVIDIA
 Comment Type E Comment Status D (bucket1)
 Table 172-5
 SuggestedRemedy
 This is not a hotlink.
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Change the reference to an active cross-reference.

Cl 172 SC 172.2.5.1 P216 L54 # I-119
 Dawe, Piers J G NVIDIA
 Comment Type TR Comment Status D (bucket1)
 There is a new exception for the alignment lock and deskew process
 SuggestedRemedy
 The 800GBASE-R PCS receive function shall support a maximum Skew of 152 ns between PCS lanes.
 (Editorial: "support" is lame, this should be tolerate.)
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Add a new exception:
 "The maximum Skew is changed from 180 ns to 152 ns"

Cl 172 SC 172.2.5.2 P217 L10 # I-121
 Dawe, Piers J G NVIDIA
 Comment Type T Comment Status D (bucket1)
 "the original stream of two FEC codewords" - there are many codewords, but two FEC streams per flow.
 SuggestedRemedy
 Change to: the original two streams of FEC codewords
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 172 SC 172.2.5.9 P217 L49 # I-122
 Dawe, Piers J G NVIDIA
 Comment Type T Comment Status D (bucket1)
 The receive PCS shall use the decoding method defined in either 172.2.5.9.1 or 172.2.5.9.2.
 SuggestedRemedy
 The receive PCS shall use one of the two decoding methods that are defined in 172.2.5.9.1 and 172.2.5.9.2.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

IEEE P802.3df D3.0 Initial Sponsor ballot comments

Cl 173 SC 173.1.3 P231 L13 # I-123

Dawe, Piers J G

NVIDIA

Comment Type E Comment Status D squelch (bucket1)

As it is a new observable behaviour, the optional squelch feature should be mentioned here in the overview and in 173.2 PMA service interface. And, the word "squelch" should be used so readers will recognise it.

SuggestedRemedy

In 173.1.3 Summary of functions, add a row:

-- Optionally indicate status by disabling (squelching) a lane or lanes

In 173.2 page 233 line 8, add sentences "The 8:32 PMA optionally provides signal status information to the PMA client by disabling (squelching) a lane or lanes (see 173.5.8.2). "The 8:8 PMA optionally provides signal status information in either direction by disabling (squelching) a lane or lanes (see 173.5.8.3)."

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

The automatic AUI output disable (squelch) is one of many aspects of "Provide signal status information". Providing the extra detail as suggested in this high-level "Summary of functions" in 171.1.3 is not warranted.

However, providing the additional sentences to the service interface definition sections (173.2 and 173.3) would be an improvement to the draft.

In 173.2 page 233 line 7 add the following sentence to end of the third paragraph:

"The 8:32 and 8:8 PMAs may optionally provide signal status information to the PMA client by disabling (squelching) one or more of the PAM4 symbol streams sent to the PMA client (PMA:IS_UNITDATA_0:7.indication), see 173.5.8.2 and 173.5.8.3.

In 173.3 page 233 line 32 add the following new paragraph:

For the 8:8 PMA, if the sublayer below the PMA is another PMA, the 8:8 PMA may optionally provide signal status information by disabling (squelching) one or more of the PAM4 symbol streams sent to the sublayer below (PMA:IS_UNITDATA_0:7.request), see 173.5.8.3.

Implement with editorial license.

Cl 173 SC 173.4.3 P237 L46 # I-124

Dawe, Piers J G

NVIDIA

Comment Type T Comment Status D delay wording (bucket1)

While an 8:8 PMA is clear and understandable, it seems that at this speed, with PAM4 and equalisation, implementations are typically back-to-back SerDes. This solves the problem of specifying its maximum delay appropriately.

SuggestedRemedy

If the group sees this as an improvement saying that an 8:8 PMA is specified by assuming that it is back-to back 8:32 and 32:8 PMAs, addressing any conflict between this and 173.5.2.3 restricted bit muxing.

Proposed Response Response Status W

PROPOSED REJECT.

The 8:8 PMA is distinctly different from a back-to-back 8:32 PMA and 32:8 PMA. For instance, there is an explicit rule that groups of PCS lanes on each physical lane remain together through the PMA. The latency concern can more easily be addressed, if necessary, by increasing the specified value for the 8:8 PMA.

IEEE P802.3df D3.0 Initial Sponsor ballot comments

Cl 173 SC 173.5.2.1 P238 L20 # I-125

Dawe, Piers J G

NVIDIA

Comment Type E Comment Status D (bucket1)

"the function": what or which function? Compare lines 31, 39, 46

SuggestedRemedy

Add words such as "bit-level multiplexing" at least here, the first time, and preferably in 173.5.2.2. e.g. "8:32 bit-level multiplexing" would be better. Also at line 31, but maybe that can be "this function".

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

In 173.5.2.1

- add the following new paragraph before the first paragraph, "The 32:8 PMA provides bit-level multiplexing in both the transmit and receive directions."
- change "In the transmit direction, the function is performed" to "In the transmit direction, the bit-level multiplexing function is performed"
- change "In the receive direction, the function is performed" to "In the receive direction, the bit-level multiplexing function is performed"

In 173.5.2.2:

- add the following new paragraph before the first paragraph, "The 8:32 PMA provides bit-level multiplexing in both the transmit and receive directions. "
- change "In the transmit direction, the function is performed" to "In the transmit direction, the bit-level multiplexing function is performed"
- change "In the receive direction, the function is performed" to "In the receive direction, the bit-level multiplexing function is performed"

In 173.5.2.3:

- add the following new paragraph before the first paragraph, "The 8:8 PMA provides bit-level multiplexing in both the transmit and receive directions."
- change "In the transmit direction, the function is performed" to "In the transmit direction, the bit-level multiplexing function is performed"
- change "In the receive direction, the function is performed" to "In the receive direction, the bit-level multiplexing function is performed"

Implement with editorial license.

Cl 173 SC 173.5.4 P240 L35 # I-129

Dawe, Piers J G

NVIDIA

Comment Type T Comment Status D (bucket1)

within a Physical Layer, which is composed of an 800GBASE-R PHY and an optional 800GMII Extender

SuggestedRemedy

within a Physical Layer, which is composed of an 800GBASE-R PHY and, optionally, an 800GMII Extender

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 173 SC 173.5.4 P240 L35 # I-130

Dawe, Piers J G

NVIDIA

Comment Type T Comment Status D (bucket1)

It would avoid misinterpretation if the words to the effect of delay is the sum of transmit and receive delays, were reinstated. 169.4 says it, but it is not referenced here for definitions and it is borderline non-normative "Should there be a discrepancy between this table and the delay requirements of the relevant sublayer clause, the sublayer clause prevails."

SuggestedRemedy

Insert words: The maximum delay (sum of transmit and receive delays) contributed by each instance ...

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 173 SC 173.5.5 P241 L2 # I-131

Dawe, Piers J G

NVIDIA

Comment Type T Comment Status D (bucket1)

If an output lane's clock is derived from its corresponding input, it's not independent.

SuggestedRemedy

As this is only an example, changing "independent" to "separate" or "its own" would be enough to correct this

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change "each output lane could use an independent clock derived from its corresponding input" to "each output lane could use a separate clock derived from its corresponding input".

IEEE P802.3df D3.0 Initial Sponsor ballot comments

Cl 173 SC 173.5.8.2 P242 L13 # I-132

Dawe, Piers J G NVIDIA
 Comment Type T Comment Status D (bucket1)

It is hard work reverse engineering this: "In the *transmit* direction ... The SIGNAL_OK parameter is set to OK when data is being *received*... I believe that less confusing language has been used somewhere. Ingress and egress could be used.

SuggestedRemedy

Change "when data is being received on all 8 input lanes (PMA:IS_UNITDATA_0:7.request)." to "when data is presented to this PMA sublayer by the PMA sublayer above on all 8 transmit lanes (PMA:IS_UNITDATA_0:7.request)". Similarly in 173.5.8.3 8:8, line 23, change "when data is not being received on all 8 input lanes (PMA:IS_UNITDATA_0:7.request)." to "when data is not being presented to this PMA sublayer by the PMA sublayer above on all 8 input lanes (PMA:IS_UNITDATA_0:7.request)".

Proposed Response Response Status W

PROPOSED REJECT.
 The direction of transmission and the relevant interfaces are clear and unambiguous. The meaning of the word "received" here is clear given the context. The proposed changes are not an improvement to the technical clarity or accuracy of the text.

Cl 173 SC 173.5.8.3 P242 L18 # I-133

Dawe, Piers J G NVIDIA
 Comment Type E Comment Status D squelch (bucket1)

Please name this feature by its familiar name so readers can find it. This is a kind of disabling is new to 802.3 but its name is well established in the industry.

SuggestedRemedy

by disabling (squelching) one or more output lanes
 Same (twice) in next subclause

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
 Implement the suggested remedy with editorial license.

Cl 173 SC 173.5.8.3 P242 L19 # I-134

Dawe, Piers J G NVIDIA
 Comment Type E Comment Status D (bucket1)

Two dumb cross-references, and two more at line 29.

SuggestedRemedy

Make them hot links

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 173 SC 173.7.3 P246 L32 # I-135

Dawe, Piers J G NVIDIA
 Comment Type E Comment Status D (bucket1)

The optional squelch affects how a PMA is used, so it should appear in the PICS major options

SuggestedRemedy

Add two major options, for the receive (ingress) direction and for the transmit (ingress) direction, conditionally optional according to PMA type.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
 The squelching functions are provided in PICS items SS1 and SS2 in 173.7.9. These are not major functions, but rather one of many minor features that are specified. It is therefore not appropriate to move these to the "major functions" table. However, for SS1 and SS2 the word "squelching" should be added and the subclause references are incorrect. And also PICS items are missing for the general signal status specifications. For SS1 and SS2 feature descriptions change "disabling" to "disabling (squelching)" For SS1 and SS2 subclause change to 173.5.8.2 and 173.5.8.3, respectively. Add new items for signal status for each PMA type per 173.5.8.1, 173.5.8.2, 173.5.8.3" Implement with editorial license.

Cl 173 SC 173.7.7 P248 L37 # I-136

Dawe, Piers J G NVIDIA
 Comment Type E Comment Status D (bucket1)

If the two loopback abilities aren't in the major options table as in 120.7.3, there is no point having separate PCS for "PMA local loopback" and "PMA local loopback implemented". Nothing else depends on "LBL".

SuggestedRemedy

Move the loopback abilities to the major options, as in 120.7.3, or combine the two pairs

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
 Remove the *LBL and *LBR rows from the table. For LB1 and LB2... in the Feature column delete "implemented" Change the status to "O".

IEEE P802.3df D3.0 Initial Sponsor ballot comments

Cl 45 SC 45.2.1.7.4 P42 L16 # I-138
 Dudek, Michael Marvell
 Comment Type E Comment Status D (bucket1)
 *** Comment submitted with the file image.png attached ***
 The separation between 400GBASE-KR4 and 400GBASE-KR4 should be a comma, not a period
 SuggestedRemedy
 Fix it
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 45 SC 45.2.3.25.2 P60 L20 # I-139
 Dudek, Michael Marvell
 Comment Type E Comment Status D (bucket1)
 *** Comment submitted with the file image.png attached ***
 The editor's note has served its purpose
 SuggestedRemedy
 Delete the note
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 73 SC 73.2 P90 L0 # I-140
 Slavick, Jeff Broadcom Inc
 Comment Type TR Comment Status D data rates (bucket1)
 Figure 73-1 does not include 800GMII or 800Gb/s
 SuggestedRemedy
 Remove the laundry list of data rates below the MDI
 Change the laundry list of specific MII rates to just be xMII and update the legend accordingly
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Implement the suggested remedy using editorial license.
 In the legend have "xMII = generic Media Independent Interface".

Cl 172 SC 172.2.4.11 P216 L53 # I-142
 Slavick, Jeff Broadcom Inc
 Comment Type TR Comment Status D (bucket1)
 Clause 119.2.5.1 calls out the explicit amount of skew the PCS must tolerate which is different than the requirement for an 800G system.
 SuggestedRemedy
 Add a new exception:
 The Skew and Skew Variation requirements are specified in Table 169-5 and Table 169-6.
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Resolve using the response to comment #I-119.

Cl 124 SC 124.12.4.4 P128 L21 # I-143
 Slavick, Jeff Broadcom Inc
 Comment Type TR Comment Status D (bucket1)
 PICS don't have a definition for +
 SuggestedRemedy
 For OM9,OM10,OM11,OM12 change the + to a :M and then add a N/A[] in the Support column
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Resolve using the response to comment #I-47.

Cl 124 SC 124.12.4.6 P128 L10 # I-144
 Slavick, Jeff Broadcom Inc
 Comment Type TR Comment Status D (bucket1)
 PICS don't have a definition for +
 SuggestedRemedy
 Change OC5 Status to be "INS*DR4:M INS*DR42:M"
 Change OC10 Status to be "INS*DR8:M INS*DR82:M"
 Change + to :M in OC3, OC4, OC6, OC7, OC8, OC9
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Resolve using the response to comment #I-47.

IEEE P802.3df D3.0 Initial Sponsor ballot comments

Cl 167 SC 167.11.4.6 P174 L10 # I-145
 Slavick, Jeff Broadcom Inc
 Comment Type **TR** Comment Status **D** (bucket1)
 PICS don't have a definition for +
 SuggestedRemedy
 Change + to :M in OC5a, OC16, OC17
 Change OC18 and OC19 to be "INS*VR8:M INS*SR8:M"
 Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 Resolve using the response to comment #I-47.

Cl 173 SC 173.7.6 P248 L6 # I-148
 Slavick, Jeff Broadcom Inc
 Comment Type **TR** Comment Status **D** (bucket1)
 PICS don't have a definition for +
 SuggestedRemedy
 Change + to a :O in T1, T2, T3, T4, T5, T6
 Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 Resolve using the response to comment #I-47.

Cl 173 SC 173.7.3 P246 L12 # I-146
 Slavick, Jeff Broadcom Inc
 Comment Type **TR** Comment Status **D** (bucket1)
 PICS don't have a definition for +
 SuggestedRemedy
 Change C2CA and C2MA to be "P832:O/2 P88:O/2"
 Change C2CB, C2MB,PMDE, PMDO to be "P328:O/3 P88:O/3"
 Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 Resolve using the response to comment #I-47.

Cl 173 SC 173.7.8 P248 L54 # I-149
 Slavick, Jeff Broadcom Inc
 Comment Type **TR** Comment Status **D** (bucket1)
 PICS don't have a definition for +
 SuggestedRemedy
 Change + to a :M in P1 and + to a :O in P4
 Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 Resolve using the response to comment #I-47.

Cl 173 SC 173.7.4 P246 L42 # I-147
 Slavick, Jeff Broadcom Inc
 Comment Type **TR** Comment Status **D** (bucket1)
 PICS don't have a definition for +
 SuggestedRemedy
 Change + to a :M in S1, S2, S3, S7, S8, S9
 Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 Resolve using the response to comment #I-47.