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

Brown, Matt — Alphawave

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

802.3cw is now preceded by 802.3df and will be amendement 10. 802.3df has been added to cover page (page 1) and the amendment lines (page 13) but references elsewhere have not been updated.

SuggestedRemedy

In clauses being amended by 802.3cw (1, 30, 45, 116, 118)...
Change any amendments to include references to 802.3df and changes made in 802.3df, as appropriate.
Implement with editorial license.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **155** *SC* **155.2.2** *P* **46** *L* **7** # 2

Brown, Matt — Alphawave

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

"When communicating" phrase is deceiving since it implies that sometimes it does not communicate with the other layer. I think the intent was to provide a reference to each of the two interfaces. Also, the PCS does not communicate *with* the 400GMII, it communicates *via* the 400GMII with the RS or PHY 400GXS above. Similar for communication with the PMA.

SuggestedRemedy

Change "When communicating with the 400GMII, the 400GBASE-ZR PCS uses an eight octet-wide, synchronous data path, with packet delineation being provided by transmit control signals (TXC) and receive control signals (RXC) (see 81.3). When communicating with the 400GBASE-ZR PMA in the transmit direction, the 400GBASE-ZR PCS provides codewords (see 155.3.2.1) of a systematic (128, 119) double-extended Hamming code (denoted SD-FEC within this clause) to the 400GBASE-ZR PMA. When communicating with the 400GBASE-ZR PMA in the receive direction, the 400GBASE-ZR PCS receives 128 x m bit SD-FEC codewords (see 155.3.2.2.1) from the 400GBASE-ZR PMA, where m is the implementation dependent sampling resolution of each component of the DP-16QAM symbol in bits."
To: "For communication via the 400GMII, the 400GBASE-ZR PCS uses an eight octet-wide, synchronous data path, with packet delineation being provided by transmit control signals (TXC) and receive control signals (RXC) (see 81.3). For communication with the 400GBASE-ZR PMA in the transmit direction, the 400GBASE-ZR PCS provides codewords (see 155.3.2.1) of a systematic (128, 119) double-extended Hamming code (denoted SD-FEC within this clause) to the 400GBASE-ZR PMA. For communication with the 400GBASE-ZR PMA in the receive direction, the 400GBASE-ZR PCS receives 128 x m bit SD-FEC codewords (see 155.3.2.2.1) from the 400GBASE-ZR PMA, where m is the implementation dependent sampling resolution of each component of the DP-16QAM symbol in bits."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **45** *SC* **45.2.1.6** *P* **24** *L* **38** # 6

Marris, Arthur Cadence Design Systems

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

802.3df is also modifying bits 1.7.6:0

SuggestedRemedy

Add as modifed by IEEE Std 802.3df-202x
add extra bit 7 to make it bits 1.7.7.0
Change to 0 1 1 1 1 1 1 1 = 400GBASE-ZR PMA/PMD

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Implement suggested remedy. See response to comment #1.

Cl **45** *SC* **45.2.3** *P* **31** *L* **22** # 7

Marris, Arthur Cadence Design Systems

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

Table 45–233—PCS registers has been modified by 802.3df

SuggestedRemedy

Add as modifed by IEEE Std 802.3df-202x
Change 3.632 to 3.664

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Implement suggested remedy. See response to comment #1.

Cl **45** *SC* **45.2.1.6** *P* **24** *L* **27** # 9

Huber, Thomas Nokia

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

Table 45-7 is modified by 802.3df. Since 802.3cw is now after 802.3df, the editing instruction should include 802.3df.

SuggestedRemedy

Change "as modified by IEEE Std 802.3db-2022" to "as modifiex by IEEE Std 802.3db-2022 and IEEE Std 802.3df-202x"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Resolve using the response to comment #1.

Cl **45** *SC* **45.2.1.6** *P* **24** *L* **36** # 10

Huber, Thomas Nokia

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

Since 802.3df also modifies Table 45-7, and 802.3cw is now after 802.3df, the changes need to be based on the table as it exists in 802.3df rather than in 802.3db.

SuggestedRemedy

In the table, change the value in the Bits column to 1.7.7:0. Change the Description column to show the value 0 1 1 1 1 1 1 1 = reserved being changed to 0 1 1 1 1 1 1 1 = 400GBASE-ZR PMA/PMD

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Resolve using the response to comment #6.

Cl **45** *SC* **45.2.1.22** *P* **26** *L* **3** # 11

Huber, Thomas Nokia

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

Since 802.3cw is now after 802.3df, the editing instruction should include 802.3df.

SuggestedRemedy

Change "as modified by IEEE Std 802.3db-2022" to "as modifiex by IEEE Std 802.3db-2022 and IEEE Std 802.3df-202x"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Resolve using the response to comment #1.

Cl **155** *SC* **155.3.1** *P* **60** *L* **35** # 13

Zimmerman, George — CME Consulting/APL Gp, Cisco, Marvell, OnSemi, Se

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

(Figure 155-10) Also related to unsatisfied comment 345 (dp20). In redrawing the figure, it appears an error was created in the primitive interface at the bottom of the figure. Both directions to & from the PMD are labeled. PMD_IS_UNITDATA.request . I believe (confirmed by figures 156-2 and 156-3), the receive side (right hand side) should be "indication".

SuggestedRemedy

Suggest change right hand side "PMD_IS_UNITDATA.request" to "PMD_IS_UNITDATA.indication"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Resolve using the response to comment #5.

Cl **155** *SC* **155.2.5.5.2** *P* **49** *L* **42** # 15

Zimmerman, George — CME Consulting/APL Gp, Cisco, Marvell, OnSemi, Se

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

Style - the style guide says you spell out single digit numbers - "It is set to one" vs. "It is set to 1". We misuse this a LITTLE in IEEE Std 802.3 (29 "is set to 1" instances vs. over 300 "is set to one". Also, we usually try to avoid pronouns (It) and instead say specifically what we mean - helps out editing when things are moved around.

SuggestedRemedy

Suggest changing "It is set to 1" to "The remote PHY fault indication bit is set to one" , and changing "otherwise it is set to 0" to "otherwise it is set to zero".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **155** *SC* **155.3.3** *P* **62** *L* **37** # 19

Dawe, Piers — Nvidia

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

Avoid inconsistent terminology, use the usual 802.3 terminology

SuggestedRemedy

Change "symbol rate" to "signaling rate", several places.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change "symbol rate" to "signaling rate" in 6 places (5 in clause 155 and one in clause 156). With editorial license.

Cl **156** *SC* **156.7.1** *P* **98** *L* **11** # 22

Dawe, Piers — Nvidia

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

20ppm

SuggestedRemedy

Insert space. Also in the next table.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **156** *SC* **156.9.4** *P* **104** *L* **2** # 24

Dawe, Piers — Nvidia

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

Figures 156-6 and 7 are in a serif font, unlike the others.

SuggestedRemedy

Change to Arial

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **156** *SC* **156.10.1.2.4** *P* **112** *L* **47** # 29

Dawe, Piers — Nvidia

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

"using a RRC filter with a beta = 0.2" is too terse, as "RRC" doesn't appear in the 7000 pages of the base standard, nor elsewhere in 156.10. "a beta" reads oddly. Unnecessary use of a symbol in a sentence, unlike the way it's done in 156.9.4.

SuggestedRemedy

Change to "using a RRC filter (see 156.9.4) with a roll-off factor beta of 0.2"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change "using a RRC filter with a B = 0.2" to "using a RRC filter (see 156.9.4) with a roll-off factor B of 0.2". "B" will be correctly formatted as beta.

Cl **156** *SC* **156.9.4** *P* **104** *L* **49** # 32

Dawe, Piers Nvidia

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

T and f should be italic, as in 156A.3

SuggestedRemedy

per comment

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **156** *SC* **156.9.6** *P* **105** *L* **10** # 33

Dawe, Piers Nvidia

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

D2.1 comments 285, optical parameters are inadequately defined, and 286, define frequency noise. You can't have a "should" in a definition, it has to be decisive.

SuggestedRemedy

Change "should" to "is" (not "shall" to avoid a trivial PICS). Similarly in 156.10.1.1, "coherent receiver should have", "ENOB and sampling rate of the digitizers should be".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

In 156.9.6 change "Measurement resolution should be" to "Measurement resolution is".

In 156.10.1.1 change "coherent receiver should have" to "coherent receiver has" and change "digitizers should be at least" to "digitizers have at least"