Cl **FM** *SC* **FM** *P* *L* # 1

Grow, Robert RMG Consulting

Comment Type **ER** *Comment Status* **A**

With P802.3/D3.2 at RevCom, it is appropriate to update the cw draft for consistency with IEEE Std 802.3-202x. The draft is currently inconsistent, in some places recognizing that it will not be an amdendment to the 2018 revision, and in many places assuming it will be an amendment to the 2018 revision.

SuggestedRemedy

Multiple comments have been submitted but time does not allow this commenter to review all at this time. Editors should update draft for consistency with P802.3/D3.2 as the base document and include the current six amendments assigned numbers (as recognized in front matter), and any other amendments expected to be approved prior to this project.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Review the entire draft and ensure all references are to IEEE Std 802.3-202x, not IEEE Std 802.3-2018.

With editorial license.

Cl **FM** *SC* **FM** *P* *L* # 2

Grow, Robert RMG Consulting

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

To someone not active on the project, content of Clauses 155 and 156 look like they may be based on other clauses.

SuggestedRemedy

Editor's might want to look at changes made during the revision to clauses on which Clauses 155 and 156 are based to look for other style changes. Examples I searched on and commented include capitalization of register, elimination of must, misuse of "PHY", but I am less sure of how correcting misuse of "comprise" and "comprising" and "implementer" were handled in P802.3.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Ensure correct usage of words "comprise", "comprising" and "implementer" based on usage in P802.3 D3.2. See respone to comment 7.

With editorial license.

Cl **FM** *SC* **FM** *P* **1** *L* **27** # 3

Grow, Robert RMG Consulting

Comment Type **ER** *Comment Status* **A**

Misuse of acronym PHY (see P802.3/D3.2, 1.5.

SuggestedRemedy

Delete "(PHY)"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change "adds Physical Layer (PHY) specifications" to "adds Physical Layer specifications"

Cl **FM** *SC* **FM** *P* **2** *L* **1** # 4

Grow, Robert RMG Consulting

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

This will be an amendment to IEEE Std 802.3-202x as stated on the cover page.

SuggestedRemedy

Replace "2018" with "200x"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

See response to comment 1

Cl **FM** *SC* **FM** *P* **2** *L* **5** # 5

Grow, Robert RMG Consulting

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

CapItalization of forward error correction in P802.3 was made consistent, this capitalization is not consistent with that used in P802.3/D3.2.

SuggestedRemedy

"forward error correction"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change "Forward Error Correction (FEC)" to "forward error correction (FEC)"

Cl **45** *SC* **45.2** *P* **23** *L* **3** # 6

Grow, Robert RMG Consulting

Comment Type **ER** *Comment Status* **A**

Base text error.

SuggestedRemedy

P802.3/D3.2 has this "MIDO Interface registers"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Mistake in suggested remedy referring to "MIDO Interface registers". Issue was the capitization of "Registers". Change to "MDIO Interface registers"

Cl **155** *SC* **155.2.5.6** *P* **47** *L* **1** # 7

Grow, Robert RMG Consulting

Comment Type **ER** *Comment Status* **A**

Use of the word "must" is deprecated.

SuggestedRemedy

Rewrite to "shall" or other choice of grammar. Also p. 73, l. 43; p. 75, l. 41, 42; p. 85, l. 34; p. 91, l. 35; and p. 94, l. 26.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Replace "must" with "shall" or similar language used in P802.3/D3.2 throughout the document.

With editorial license.

Cl **FM** *SC* **FM** *P* **3** *L* **7** # 8

Grow, Robert RMG Consulting

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

IEEE page numbering style has changes no more Roman numeral front matter numbering.

SuggestedRemedy

Delete the second paragraph of the note.

Response *Response Status* **C**

ACCEPT.

Cl **FM** *SC* **FM** *P* **3** *L* **21** # 9

Grow, Robert RMG Consulting

Comment Type **ER** *Comment Status* **A** *bucket*

This isn't the current IEEE SA mandated front matter.

SuggestedRemedy

Replace the IEEE-SA front matter with that found in a current template.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Modify front matter to match front matter in Version 5.0 of the IEEE 802.3 Working Group FrameMaker template

Proposed response update:

Modify front matter to match front matter in IEEE 802.3 P802.3/D3.2

Cl **FM** *SC* **FM** *P* **2** *L* **51** # 10

Grow, Robert RMG Consulting

Comment Type **ER** *Comment Status* **A** *bucket*

Some information in this copyright block has been updated.

SuggestedRemedy

Replace the IEEE-SA front matter with that found in a current template.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Modify copyright block to match copyright block in Version 5.0 of the IEEE 802.3 Working Group FrameMaker template

Cl **FM** *SC* **FM** *P* **9** *L* **15** # 11

Grow, Robert RMG Consulting

Comment Type **ER** *Comment Status* **A** *bucket*

This is not the current FM Introduction (e.g., first paragraph and Section Nine have been modified at a minimum.

SuggestedRemedy

Get current Introduction from P802.3/D3.2.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Modify introduction as required to match Version 5.0 of the IEEE 802.3 Working Group FrameMaker template

Proposed response update:

Modify introduction to match introduction in IEEE 802.3 P802.3/D3.2

Cl **FM** *SC* **FM** *P* **10** *L* **45** # 12

Grow, Robert RMG Consulting

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

Typo.

SuggestedRemedy

Replace "04" with "104".

Response *Response Status* **C**

ACCEPT.

Cl **FM** *SC* **FM** *P* **11** *L* **27** # 13

Grow, Robert RMG Consulting

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

Not the current P802.3/D3.0 self description.

SuggestedRemedy

Update with the current P802.3de self description (D3.0 or later as appropriate.)

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Modify IEEE Std 802.3de-202x description to match description in IEEE P802.3de/D3.0

Cl **FM** *SC* **FM** *P* **11** *L* **33** # 14

Grow, Robert RMG Consulting

Comment Type **ER** *Comment Status* **A** *bucket*

Will cw really be Amendment 7? There are three projects targeting June 2023 RevCom ahead of cw. While I have no issue with writing your amendment as if it will be #7 for now, I would not put a number here just now.

SuggestedRemedy

Amendment x, Amendment ?, or similar.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change "Amendment 7" to "Amendment x"

Cl **1** *SC* **1.4** *P* **21** *L* **6** # 15

Grow, Robert RMG Consulting

Comment Type **ER** *Comment Status* **A**

Update insert point.

SuggestedRemedy

"Insert the following two new definitions after 1.4.144a “400GBASE-VR4” (as inserted by IEEE Std 802.3db-202x):"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Modify to read "Insert the following two new definitions after 1.4.144a “400GBASE-VR4” (as inserted by IEEE Std 802.3db-202x):" and modify 400GBASE-Z location to 1.4.144b and 400GBASE-ZR location to 1.4.144c.

With editorial license.

Cl **30** *SC* **30.5.1.1.2** *P* **12** *L* **22** # 16

Grow, Robert RMG Consulting

Comment Type **ER** *Comment Status* **A**

Update insert point.

SuggestedRemedy

",,,after 400GBASE-VR4 (inserted by IEEE Std 802.3db-202x)…"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change insertion point to "after 400GBASE-SR16 as follows:"

With editorial license

Cl **78** *SC* **78.1.4** *P* **29** *L* **8** # 17

Grow, Robert RMG Consulting

Comment Type **ER** *Comment Status* **A**

Though I have some experience in 802.3, I do not have the knowledge of PHY type details to provide with confidence where this insert should be. The rules chosen in the resolution of P802.3/D3.0, comment #i-52 are:
1. Increasing speed.
2. Increasing reach (maximum supported distance over the medium).
3. Decreasing number of lanes
The following supplemental rules address are included to address special cases 4. PHY "family designations, by convention, are assigned a reach of 0
5. "Copper" PHYs precede "Fiber" PHYs (all else being equal)
6. Alphanumeric sort (all else being equal)

SuggestedRemedy

Using these rules, and consider the 6 400GBASE inserts being done by P802.3db to determine the correct insert point. (I don't think the insert points in P802.3db/D3.0 follow these rules.)

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change insertion point from "Insert new rows for 400GBASE-ZR in Table 78–1 (as modified by IEEE Std 802.3cu-20xx and IEEE Std 802.3ct-20xx) with 400GBASE-ZR after 400GBASE-LR4-6 as follows (unchanged rows not shown):" to "Insert new row for 400GBASE-ZR at end of Table 78–1:"

With editorial license

Cl **116** *SC* **116.1.2** *P* **31** *L* **8** # 18

Grow, Robert RMG Consulting

Comment Type **ER** *Comment Status* **A**

P802.3db/D3.0 modifies this list inserting a new item and re-lettering the last item to be "l)".

SuggestedRemedy

Change "i} in the editing instruction (also adding a reference to IEEE Std 802.3db-202x) making the new item "j)". Review clause to assure all P802.3db changes are incorporated in instructions and base text that is being modified.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

In 116.1.2 change insertion point to "Insert item k) at end of lettered list in 116.1.2 (as modified by IEEE Std 802.3ck-202x) as follows:".

To align with P802.3/D3.2, the 400GBASE optical table is now 116-5. In 116.1.4 change editing instructions to "Change Table 116-5 as follows:".

Change Table 116-4 to Table 116-5 and modify as required to align with Table 116-5 from P802.3/D3.2 before adding new columns for 155 and 156.

In 116.2.5 keep editing instructions as written as IEEE Std 802.3ck-202x included Clause 167 as inserted by 803.3dB D3.0. Modify paragraph to match current wording in 802.3ck D3.1 and insert Clause 156 at the end of the sentence.

With editorial license.

Cl **116** *SC* **116** *P* **28** *L* # 19

Issenhuth, Tom Huawei

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

Page numbering for clause 116 is incorrect

SuggestedRemedy

Correct the page numbering in clause 116 to align with the rest of the document

Response *Response Status* **C**

ACCEPT.

Cl **116** *SC* **116.1.4** *P* **28** *L* **3** # 20

Issenhuth, Tom Huawei

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

Insertion point states as modified by IEEE Std 802.3cu-20xx. This document is an amendment to P802.3/D3.2 which includes all modifications from 802.3cu so this reference is no longer valid.

SuggestedRemedy

Remove reference to P802.3cu. Review entire document and remove any references to amendments included in P802.3/D3.2 and update references as required for amendments to P802.3/D3.2.

Response *Response Status* **C**

ACCEPT.

Cl **116** *SC* **116.1.4** *P* **28** *L* **6** # 21

Issenhuth, Tom Huawei

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

Table 116-4 was changed to 116-5 in P802.3/D3.2. There may be other instances of Table or subclause numbering changing with P802.3/D3.2.

SuggestedRemedy

Change Table 116-4 to Table 116-5. Review the entire document and change Table or subclause numbering to align with P802.3 D3.2.

Response *Response Status* **C**

ACCEPT.

Cl **156** *SC* **156.9.1** *P* **86** *L* **35** # 22

Issenhuth, Tom Huawei

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

In Table 156-10 pattern description is stated as "Scrambled idle encoded by SC-FEC". 400GBASE-ZR uses CFEC not SC-FEC

SuggestedRemedy

Change pattern description to read "Scrambled idle encoded by CFEC"

Response *Response Status* **C**

ACCEPT.

Cl **155** *SC* **155.5.2.1** *P* **61** *L* **14** # 23

Sluyski, Mike Cisco Systems

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

faw_valid is TBD

SuggestedRemedy

replace TBD with "8 symbols in a single frame"

Validation methodology to be provided

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change "The sequence is considered to be valid if at least TBD symbols match the known bits of the pattern described in 155.3.3.3.1."

to

"The sequence is considered to be valid if at least 36 bits match the 44 known bits of the FAW pattern described in 155.3.3.3.1."

Cl **156** *SC* **156.7.1** *P* **82** *L* **47** # 24

Sluyski, Mike Cisco Systems

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

In Table 156-6 Error Vector magnitude (max) is TBD

SuggestedRemedy

Replace TBD with 12

Justification based on maniloff_3Cw_01_220314 and Rahn_3cw-01a_220223. Further detail on EVM will be provided in a supporting presentation.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Replace "TBD" with "12"

Cl **156** *SC* **156.8** *P* **85** *L* **30** # 25

Sluyski, Mike Cisco Systems

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

Interferometric crosstalk at TP3 (max)d in Table 156-8

SuggestedRemedy

Remove parameter from table. Remove note (d). ADM applications can be considered Out-of-Scope for this specification.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Retain parameter and note. Use of ADMs are not excluded as long as the end to end link requirements are met. See Note 1 in 156.6.

Change "TBD" to "-35".

Cl **156** *SC* **156.9.13** *P* **90** *L* **35** # 26

Sluyski, Mike Cisco Systems

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

The I-Q amplitude imbalance (mean) is TBD

SuggestedRemedy

Add definition: The I-Q amplitude imbalance (mean) is the center value between the proportional amplitude difference of the in-phase component I and quadrature component Q of the signal.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change definition from "The I-Q amplitude imbalance (mean) is TBD" to "The I-Q amplitude imbalance (mean) is the center value between the proportional amplitude difference of the in-phase component I and quadrature component Q of the signal."

Cl **156** *SC* **156.9.14** *P* **90** *L* **39** # 27

Sluyski, Mike Cisco Systems

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

The I-Q phase error (max) is TBD

SuggestedRemedy

Add definition: The I-Q phase error (max) is the largest proportional phase difference of the in-phase component I and quadrature component Q of the signal. Measured relative to LO

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change definition from "The I-Q phase error (max) is TBD" to "The I-Q phase error (max) is the largest proportional phase difference of the in-phase component I and quadrature component Q of the signal. Measured relative to local oscillator."

Cl **156** *SC* **156.9.15** *P* **90** *L* **43** # 28

Sluyski, Mike Cisco Systems

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

The I-Q phase error (min) is TBD

SuggestedRemedy

Add definition: The I-Q phase error (min) is the largest negative proportional phase difference of the in-phase component I and quadrature component Q of the signal. Measured relative to LO

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

LATE COMMENT

Change definition from "The I-Q phase error (min) is TBD" to "The I-Q phase error (min) is the largest negative proportional phase difference of the in-phase component I and quadrature component Q of the signal. Measured relative to local oscillator."

Cl **156** *SC* **156.9.16** *P* **90** *L* **46** # 29

Sluyski, Mike Cisco Systems

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

The I-Q quadrature skew (max) is TBD

SuggestedRemedy

Add definition: The I-Q quadrature skew (max) is the maximum relative skew between the in-phase component I and quadrature component Q of the signal.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change definition from "The I-Q quadrature skew is TBD" to "The I-Q quadrature skew (max) is the maximum relative skew between the in-phase component I and quadrature component Q of the signal."

Cl **156** *SC* **156.10.1.2.4** *P* **94** *L* **45** # 30

Sluyski, Mike Cisco Systems

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

Receive filtering definitions include TBDs

SuggestedRemedy

Update as: "The signal is filtered using a 3rd-order super gaussian filter with RRC = 0.2

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

LATE COMMENT

Change definition from "The signal is filtered using a TBD filter with TBD roll-off." to "The signal is filtered using a 3rd-order super gaussian filter with RRC = 0.2."

Cl **156** *SC* **156.10.1.2.6** *P* **95** *L* **3** # 31

Sluyski, Mike Cisco Systems

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

FIR filter is defined with TBD TBD taps

SuggestedRemedy

Suggest to use Equalizer definition used in OMA to determine EVM of Rahn_3cw-01a_220223

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change "The signal is equalized using an FIR filter with TBD TBD taps" to "The signal is equalized using an FIR filter with 15 real taps".

Cl **155** *SC* **155.4.2.1** *P* **61** *L* **50** # 32

Lewis, David Lumentum

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

Because the AM field is protected by C-FEC, the error rate in the amp matching should be extremely low. A single match to the full 1920 bit field should be adequate to declare amp_valid.

SuggestedRemedy

Change the last sentence from: “The sequence is considered to be valid if at least TBD bits match the known bits of the pattern described in 155.2.4.4.1.” to “The sequence is considered to be valid if all bits match the known bits of the pattern described in 155.2.4.4.1.”

Response *Response Status* **C**

ACCEPT.

Cl **156** *SC* **156.8** *P* **85** *L* **28** # 33

Lewis, David Lumentum

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

Because the channel passband min & max characteristics are specified as black link characteristics in Table 156-8, it is not necessary to have a separate table specifying adjacent channel isolation.

SuggestedRemedy

Remove the parameter from Table 156-8 and delete Table 156-9. Remove the test pattern line for adjacent channel isolation from Table 156-11. Remove the parameter definition at 156.9.29.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Retain existing adjacent channel isolation parameter, associated tables, table entries and definition.

Replace TBDs in table 156-9 with values on slide 8 of maniloff_3cw_01_220523.pdf.