

IEEE 802.3by D2.2 25 Gb/s Ethernet 2nd Working Group recirculation ballot comments

Cl 108 SC 108.2.2 P 104 L 25 # 1
Gorshe, Steve PMC-Sierra

Comment Type TR Comment Status R

Per ALU comment #20136, I find that the rate compensation method is inconsistent with the project objective: "Provide appropriate support for OTN"

SuggestedRemedy

Add CWMs to all 25Gbit/s Ethernet PHYs as proposed in trowbridge_3by_01_0915

Response Response Status U

REJECT.

[Editor changed Clause from 10805 to 108 and Subclause from 10805.2.2 to 108.2.2.]

The task force reviewed the cited presentation in consideration of D2.0 comments 136, 137, 138, 139, and 190 at the September 2015 task force meeting. Based on Motion #4 at the September 2015 Interim meeting there was no consensus to make the proposed changes.

See the September 2015 task force meeting minutes here:
http://www.ieee802.org/3/by/public/Sept15/minutes_01_3by_0915_approved.pdf

Cl 108 SC 108.2.4 P 106 L 1 # 2
Gorshe, Steve PMC-Sierra

Comment Type TR Comment Status R

Per ALU comment #20137, I find that having some PMDs use CWMs and others not use CWMs is inconsistent with the project objective: "Provide appropriate support for OTN"

SuggestedRemedy

Add CWMs to all 25Gbit/s Ethernet PHYs as proposed in trowbridge_3by_01_0915

Response Response Status U

REJECT.

[Editor changed Clause from 10805 to 108 and Subclause from 10805.2.4 to 108.2.4.]

See response to comment #1.

Cl 108 SC 108.3.3 P 109 L 47 # 3
Gorshe, Steve PMC-Sierra

Comment Type TR Comment Status R

Per ALU comment #20138, I find that having some PMDs use CWMs and others not use CWMs is inconsistent with the project objective: "Provide appropriate support for OTN"

SuggestedRemedy

Add CWMs to all 25Gbit/s Ethernet PHYs as proposed in trowbridge_3by_01_0915

Response Response Status U

REJECT.

[Editor changed Clause from 10805 to 108 and Subclause from 10805.3.3 to 108.3.3.]

See response to comment #1.

Cl 108 SC 108.3.6 P 110 L 27 # 4
Gorshe, Steve PMC-Sierra

Comment Type TR Comment Status R

Per ALU comment #20139, I find that the rate compensation method is inconsistent with the project objective: "Provide appropriate support for OTN"

SuggestedRemedy

Add CWMs to all 25Gbit/s Ethernet PHYs as proposed in trowbridge_3by_01_0915

Response Response Status U

REJECT.

[Editor changed Clause from 10805 to 108 and Subclause from 10805.3.6 to 108.3.6.]

See response to comment #1.

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Cl 110 SC 110.8.4.2.1 P 149 L 9 # 5
Dawe, Piers Mellanox

Comment Type E Comment Status D

Figures 110-3 and 110-4 show "Additive host board loss" while text says "connecting path" - we should use the same name for something, every time. Do not see how loss is additive - the signal power is divided, the number of dBm is subtracted. Figure 83E-15, Example module stressed input test, calls it "Frequency-dependent attenuator". A pair of 3 dB SMA attenuators could be seen as "Additive loss", and the meaning of "host board" is unclear - but they would not have the desired effect.

SuggestedRemedy

Rename to "Frequency-dependent attenuator" or "Frequency-dependent attenuation", both figures and text. Explain in the text that this is intended to emulate the difference between the loss in a host and the MCB loss.

Proposed Response Response Status Z

PROPOSED REJECT.

This comment was WITHDRAWN by the commenter.

Cl 110 SC 110.8.4.2.2 P 149 L 26 # 6
Dawe, Piers Mellanox

Comment Type E Comment Status D

from the pattern generator to the cable assembly test fixture.

SuggestedRemedy

from PGC to the cable assembly test fixture.

Proposed Response Response Status Z

PROPOSED REJECT.

This comment was WITHDRAWN by the commenter.

Cl 110 SC 110.10 P 151 L 53 # 7
Dawe, Piers Mellanox

Comment Type T Comment Status D

I don't see a good reason for breaking the consensus of the last regular meeting.

SuggestedRemedy

Revisit the appropriateness of changing 2.75 m to 3 m in sponsor ballot.

Proposed Response Response Status Z

PROPOSED REJECT.

This comment was WITHDRAWN by the commenter.

Cl 110 SC 110.1 P 138 L 42 # 8
Dawe, Piers Mellanox

Comment Type E Comment Status D

D2.1 comment 92 would apply here also:
What do you mean, "supports operation"?

SuggestedRemedy

Change "supports operation" to "operates", twice.

Proposed Response Response Status Z

PROPOSED REJECT.

This comment was WITHDRAWN by the commenter.

Cl 110 SC 110.1 P 138 L 44 # 9
Dawe, Piers Mellanox

Comment Type E Comment Status D

The way this is written, a cable can't be both CA-25G-L and CA-25G-N:
"A 25GBASE-CR-S PHY supports operation over ... CA-25G-N and CA-25G-S, but not CA-25G-L.

SuggestedRemedy

If that's how we mean to describe things, we will have to write the list in 110.10 Cable assembly characteristics more carefully. That list is badly worded anyway - it says achievable cable length can't be less than 3 or 5 m, so shorter cables are not achievable.

Proposed Response Response Status Z

PROPOSED REJECT.

This comment was WITHDRAWN by the commenter.

IEEE 802.3by D2.2 25 Gb/s Ethernet 2nd Working Group recirculation ballot comments

CI 110 SC 110.8.4.2.1 P 149 L 9 # 10
Dawe, Piers Mellanox

Comment Type E Comment Status D

Figures 110-3 and 110-4 show "Additive host board loss" while text says "connecting path" - we should use the same name for something, every time. Do not see how loss is additive - the signal power is divided, the number of dBm is subtracted. Figure 83E-15, Example module stressed input test, calls it "Frequency-dependent attenuator". A pair of wideband SMA 3 dB attenuators could be seen as "Additive loss", and the meaning of "host board" is unclear - but they would not have the desired effect.

SuggestedRemedy

Rename to "Frequency-dependent attenuator" or "Frequency-dependent attenuation", both figures and text. Explain in words that this loss is intended to emulate the difference between the MCB loss and the loss in a host.

Proposed Response Response Status Z

PROPOSED REJECT.

This comment was WITHDRAWN by the commenter.

CI 110 SC 110.8.4.2.2 P 149 L 26 # 11
Dawe, Piers Mellanox

Comment Type E Comment Status D

from the pattern generator to the cable assembly test fixture.

SuggestedRemedy

from PGC to the cable assembly test fixture.

Proposed Response Response Status Z

PROPOSED REJECT.

This comment was WITHDRAWN by the commenter.

CI 108 SC 108.5.2.2 P 106 L 25 # 20136
Trowbridge, Steve Alcatel-Lucent

Comment Type TR Comment Status R OTN, BTI

Doing rate compensation below the PCS precludes developing an OTN mapping for 25GbE which is PCS codeword transparent.

SuggestedRemedy

See trowbridge_3by_01_0915.pdf for proposed remedy. The problem can be solved if all of the PMDs have CWMs, none of the PMDs have CWMs, or if no rate compensation is done to insert CWMs (i.e., overclock to insert CWM). Propose to move the rate compensation to the PCS. Rate compensation should similarly be removed from Figure 108-2.

Response Response Status U

REJECT.

The task force reviewed the cited presentation.

There is no consensus to make the proposed changes. See Motion #4.

See comments 137, 138, 139 and 190.

CI 108 SC 108.5.2.4 P 108 L 1 # 20137
Trowbridge, Steve Alcatel-Lucent

Comment Type TR Comment Status R OTN, BTI

Some PMDs having CWMs and others not prevents creating a PCS codeword transparent mapping for 25GbE into OTN which can interconnect any pair of 25GbE PMDs.

SuggestedRemedy

Propose to move CWM insertion to the PCS. See trowbridge_3by_01_0915.pdf for details. If CWM insertion is moved to the PCS, Figure 108-3 needs to transcode the CWM from four 66B blocks to the 257B format.

Response Response Status U

REJECT.

The task force reviewed the cited presentation.

There is no consensus to make the proposed changes. See Motion #4.

See comments 136, 138, 139, and 190.

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CI 108 **SC 108.5.3.3** **P 111** **L 47** # **20138**
Trowbridge, Steve Alcatel-Lucent

Comment Type **TR** **Comment Status** **R** **OTN, BTI**

Some PMDs having CWMs and others not prevents developing a PCS codeword transparent mapping into OTN which can interconnect any pair of 25GbE PMDs.

SuggestedRemedy
See trowbridge_3by_01_0915.pdf for details. Move CWM removal to the PCS, and replace this text with how to transcode CWM from the 257B format back to four 66B blocks.

Response **Response Status** **U**
REJECT.

The task force reviewed the cited presentation.

There is no consensus to make the proposed changes. See Motion #4.

See comments 136, 137, 139 and 190.

CI 108 **SC 108.5.3.6** **P 112** **L 15** # **20139**
Trowbridge, Steve Alcatel-Lucent

Comment Type **TR** **Comment Status** **R** **OTN, BTI**

Having rate compensation below the PCS prevents creating a PCS codeword transparent mapping into OTN which can interconnect any pair of 25GbE PMDs.

SuggestedRemedy
Move this rate compensation to the PCS and add CWM to all PMDs. See trowbridge_3by_01_0915.pdf.

Response **Response Status** **U**
REJECT.

The task force reviewed the cited presentation.

There is no consensus to make the proposed changes. See Motion #4.

See comments 136, 137, 138, and 190.

CI 000 **SC 0** **P** **L** # **20190**
Anslow, Pete Ciena

Comment Type **TR** **Comment Status** **R** **OTN, BTI**

The current draft contains two different variants of 25 Gb/s Ethernet where idle insertion/deletion has to be performed in order to convert from one type to the other (at the OTN will have to do) due to one containing CWMs and the other not. While the exact requirements of the objective: "Provide appropriate support for OTN" are somewhat vague, I do not consider that this has been met.

SuggestedRemedy
Add CWMs to all 25 Gb/s Ethernet PHYs as per the proposal in http://www.ieee802.org/3/by/public/Sep15/trowbridge_3by_01_0915.pdf

Response **Response Status** **U**
REJECT.

The task force reviewed the cited presentation.

There is no consensus to make the proposed changes. See Motion #4.

See comments 136, 137, 138, and 139.

CI 112 **SC 112.10.3** **P 193** **L 5** # **20237**
Geoff Thompson GraCaSI S.A.

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

This sub-clause purports to define the MDI but does not do that. It defines the MDI device or MDI connector but not the INTERFACE. It is the interface, not the interface connector which is the MDI.

SuggestedRemedy
Change either the title of the sub-clause or the contents so that the title and contents match.

Proposed Response **Response Status** **Z**
PROPOSED REJECT.

This comment was WITHDRAWN by the commenter.

IEEE 802.3by D2.2 25 Gb/s Ethernet 2nd Working Group recirculation ballot comments

CI 000 SC 0 P1 L1 # 21013
Laubach, Mark Broadcom Corporation

Comment Type TR Comment Status A definitions, CC

This comment follows on an unsatisfied R comment #236 against Draft 2.0. Technically 802.3-2015 and almost all prior versions of the 802.3 Ethernet standard defines "channel" in Clause 1 as "In 10BROAD36, a band of frequencies dedicated to a certain service transmitted on the broadband medium". This definition holds true for Clause 11 as well as updated for use in upcoming P802.3bn EPoC Clauses 100, 101, 102, and 100A. (This definition may even hold true for future definitions for optical channels on fiber - however, we'll leave that for their future to determine.). Other clauses including .by, have used "channel" without (errantly) updating the 802.3 definition, creating a technical incorrectness. I think now is the time and opportunity to correct this. The existing definition needs to be maintained (not altered) as the original (for example an "1.") definition, however it is likely prudent to add an addition (for example a "2.") definition as part of the .by draft process, with cross references to the .by clauses of interest. Through maintenance, existing clauses can be added to the additional definition list of cross references, as appropriate.

SuggestedRemedy

Coordinate with the IEEE Editor(s) for best approach, and also coordinate with the P802.3bn Chief Editor to avoid editorial instruction collisions. Suggestion: take the existing Clause 1 definition for "channel" and prepending with an "1. " then adding a "2. " definition and a suitable definition for the use of "channel" in .by with cross reference(s) to the necessary .by clause(s).

Response Response Status C

ACCEPT IN PRINCIPLE.

See response for comment 104 and 107.

CI 045 SC 45.2.1.97 P38 L50 # 21021
Anslow, Pete Ciena

Comment Type ER Comment Status A

The title of Register 1.180 is being changed in the subclause title and the first sentence of 45.2.1.97 and in the title of Table 45-77, but not in Table 45-3 which has a row:
Register address = 1.180 through 1.183
Register name = CAUI-4 chip-to-chip transmitter equalization, receive direction, lane 0 through lane 3
Subclause = 45.2.1.97, 45.2.1.98
Also, there are many references to "CAUI-4" in the subclauses of 45.2.1.97 which don't make sense when this register is used for 25GAUI.
There are the same issues with the change of name for register 1.184

SuggestedRemedy

In Table 45-3, change the existing row into two rows:
Register address = 1.180
Register name = CAUI-4 C2C and 25GAUI C2C transmitter equalization, receive direction, lane 0
Subclause = 45.2.1.97

Register address = 1.181 through 1.183
Register name = CAUI-4 chip-to-chip transmitter equalization, receive direction, lane 1 through lane 3
Subclause = 45.2.1.98

Fix the issues with the references to "CAUI-4" in the subclauses of 45.2.1.97
Make equivalent changes for Register 1.184

Response Response Status U

ACCEPT IN PRINCIPLE.

Implement suggested remedy.

Also, update Table 45-3 to address all changes that have been made in P802.3by.

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<i>Cl</i> 112	<i>SC</i>	<i>P</i>	<i>L</i>	<i>#</i> 21107
Geoff Thompson		GraCaSI S.A.		

<i>Comment Type</i>	TR	<i>Comment Status</i>	A	<i>definitions, CC</i>
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I reject the logic of your response: "The nomenclature and text is consistent with equivalent sections in many other clauses including 95, 88, 87, 86, and 52.

Changing a single clause as suggested might be confusing." Your use is NOT consistent with cabling standards which have a VERY specific definition for channel which you do not use. Further, changing to be aligned with the clause 1 definitions rather than some vague use buried in a number of other clauses will be less confusing, rather than more.

[The comment set clause to "Init WG Ballot #237". The editor changed clause to 112.]

SuggestedRemedy

Use terminology as defined in clause 1.4

<i>Response</i>	<i>Response Status</i>	C
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ACCEPT IN PRINCIPLE.

Add the following sentence to the beginning of the first paragraph in 112.9:
"Fibre Optic Cabling (Channel) is used as a link segment between MDIs."