Cl **FM** *SC* **FM** *P* **1** *L* **23** # 1

Anslow, Pete — Ciena

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

This says "Draft D1.0 is prepared for Task Force review."

SuggestedRemedy

Change "is prepared for Task Force review" to "is prepared for Working Group ballot recirculation"

Response *Response Status* **C**

ACCEPT.

Cl **90** *SC* **90.7** *P* **13** *L* **18** # 2

Anslow, Pete — Ciena

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

The editing instruction says "Insert the following sentence at the end of 90.7."
However, paraphrasing the content of 90.7:
The first paragraph (quoted in the draft) is about data delay measurement.
Note 1 is about not adding media delay.
The next paragraph is about how to report the measurement values
Note 2 is about adjustments that the TimeSync Client may need to make
Consequently, it does not seem that the best place to add text regarding multi-lane receive path data delay measurement is at the end of 90.7

SuggestedRemedy

Change the editing instruction to: "Insert the following paragraph after the first paragraph of 90.7."
Alternatively, delete the second editing instruction and show the new paragraph in underline font.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change the editing instruction to: "Insert the following paragraph after the first paragraph of 90.7."

Cl **FM** *SC* **FM** *P* **1** *L* **23** # 3

Zimmerman, George — CME Consulting, Inc.

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

"Draft 1.0 is prepared for Task Force Review" - this is for working group ballot. While the ballot announcement says D1.0, the subject email says D2.0, which is usual for WG ballot.

SuggestedRemedy

Update draft number to 2.1 on next round, and change "Task Force review" to "Working Group recirculation."

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

There is no requirement for the initial Working Group ballot draft to be numbered "D2.0". The next draft will be "D1.1".

Per the response to comment #1, change "is prepared for Task Force review" to "is prepared for Working Group ballot recirculation".

Cl **90** *SC* **90.7** *P* **13** *L* **20** # 4

Marris, Arthur — Cadence Design Syst

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

It would be nice if there was some explanation of why the lane with the maximum media propagation delay has been chosen. Choosing this lane will result in the lowest reported receive path delay. I looked through the 802.3 maintenance web page and could not find any presentations on this other than maintenance request 1286

SuggestedRemedy

Add some text to justify choosing the lane with the maximum media propagation delay.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

The editor's note preceding the text points to the proceedings of the "IEEE 802.3 Timestamping Liaison Letter ad hoc" which includes some of the information requested. <http://www.ieee802.org/3/ad_hoc/timestamp/index.html>

It would be useful for the draft to include some explanatory text. Replace the paragraph starting at page 13, line 19 with the following.

"The receiver of a multi-lane PHY is expected to include a buffer to compensate for skew between the lanes. This buffer selectively delays each lane such that the lanes are aligned at the buffer output. The earliest arriving lane experiences the most delay through the buffer and the latest arriving lane experiences the least delay through the buffer. The receive path data delay for a multi-lane PHY is reported as if the SFD arrived at the MDI input on the lane with the smallest buffer delay."

Cl **FM** *SC* **FM** *P* **11** *L* **5** # 5

Gardner, Andrew — Linear Technology

Comment Type **E** *Comment Status* **R**

Since it seems likely that IEEE P802.3bu will be published before IEEE P802.3bs add it to the list of prior amendments.

SuggestedRemedy

see comment

Response *Response Status* **C**

REJECT.

IEEE Std 802.3bs-201x is also not in the list of published amendments.

The editor's note states that "description(s) of any other amendment(s) approved before or at the same SASB meeting as this amendment should be inserted here." This is expected to be done during Sponsor ballot when the full list of preceding amendments will be well known and it will be finalized during preparation for publication.

Cl **90** *SC* **90.7** *P* **13** *L* **15** # 6

Dawe, Piers — Mellanox

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

In 802.3, the shorthand for transmit is usually Tx and for receive, it's usually Rx (although names of variables or similar, or parts of names, often have different case).

SuggestedRemedy

Change TX to Tx and RX to Rx

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

[Editor's note: Changed page from 15 to 13 and line from 1 to 15.]

Replace "TX MDI" with "MDI output" and "RX MDI" with "MDI input".

Also see comments #7 and #9.

Cl **90** *SC* **90.7** *P* **13** *L* **14** # 7

Dawe, Piers — Mellanox

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

"the input of the beginning of the SFD at the xMII": the SFD doesn't have an input, nor does its beginning.

SuggestedRemedy

Change "the input of the beginning of the SFD at the xMII" to "the arrival of the beginning of the SFD at the xMII" or "the input of the beginning of the SFD to the xMII". Similarly in the receive direction.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

[Editor's note: Changed page from 14 to 13 and line from 1 to 14.]

Replace the last two sentences of the first paragraph of 90.7 with the following.

"The transmit path data delay is measured from the beginning of the SFD at the xMII input to beginning of the SFD at the MDI output. The receive path data delay is measured from the beginning of the SFD at the MDI input to the beginning of the SFD at the xMII output."

Cl **90** *SC* **90.7** *P* **13** *L* **14** # 8

Dawe, Piers — Mellanox

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

In one direction, the SFD is "input" at an MDI, in the other direction it is "presented" to an MDI. The language doesn't seem consistent. A PHY delivers signals to the MDI.

SuggestedRemedy

input ... output? presentation ... delivery / arrival ... presentation ?

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

[Editor's note: Changed page to from 14 to 13 and line from 1 to 14.]

The response to comment #7 rewrites the sentences in question and removes the inconsistency. See comment #7.

Cl **90** *SC* **90.7** *P* **13** *L* **15** # 9

Dawe, Piers Mellanox

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

What does "TX MDI" mean? The term does not occur in 802.3-2015. There is only one PHY in Figure 90-3 and only one MDI. The PHY transmits and receives over the same MDI.

SuggestedRemedy

Remove "TX" and "RX" or explain what you mean.

Response *Response Status* **W**

ACCEPT IN PRINCIPLE.

[Editor's note: Changed page from 15 to 13 and line from 1 to 15.]

Similar timing measurements (e.g, 24.6, 36.5, 40.11) use "MDI output" and "MDI input". Substitute occurences of "TX MDI" with "MDI output" and occurences of "RX MDI" with "MDI input".

Also see comment #7.

Cl **90** *SC* **90.7** *P* **13** *L* **1** # 10

Dawe, Piers Mellanox

Comment Type **T** *Comment Status* **R**

The RS is part of the Physical Layer, presumably the gRS is too.

SuggestedRemedy

Correct Figure 90-3

Response *Response Status* **C**

REJECT.

[Editor's note: Changed page from 367 to 13 and line to 1 (from blank).]

While the commenter is correct and this change is needed, it is beyond the scope of this project. The scope of this corrigendum project is to clarify the timestamping reference point for multilane PHYs.

The commenter is encouraged to submit a maintenance request (preferred) or submit a comment on this topic during the next revision.

Cl **90** *SC* **90.7** *P* **13** *L* **21** # 11

Dawe, Piers Mellanox

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

How can the PHY implementer know which lane has the maximum media propagation delay? For WDM, he knows in advance. Otherwise, he doesn't know. A PHY might work out which lane arrived latest, by looking at its deskew buffer, but doesn't know if that is caused by the medium or the other PHY.

SuggestedRemedy

It might make more sense to measure the Rx lane that arrives latest at the MDI.
But having non-static delay values seems unattractive anyway.

Response *Response Status* **W**

ACCEPT IN PRINCIPLE.

[Editor's note: Changed page from 21 to 13 and line from 1 to 21.]

The intent of the specification is to remove the variation receiver deskew buffer delay from consideration for the minimum and maximum receive path data delay reported by the PHY. Both the transmitter and medium contribute to the skew observed by the receiver. Since the receiver cannot differentiate between the transmitter skew and media skew, the phrase "on the lane with the maximum media propagation delay" should be modified.

This is addressed in the response to comment #4.

Cl **FM** *SC* **FM** *P* **7** *L* **13** # 12

Law, David HPE

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

Please add Working Group voter list supplied in IEEE_P802d3ce_WG_names_DL_060916.fm

SuggestedRemedy

See comment.

Response *Response Status* **C**

ACCEPT.