Cl **FM** *SC* **FM** *P* **1** *L* **1** # 12

Huber, Tom Nokia

Comment Type **E** *Comment Status* **X**

Document number in the header is incorrect

SuggestedRemedy

Change P802.3cs to P802.3cx

Proposed Response *Response Status* **O**

Cl **FM** *SC* **FM** *P* **10** *L* **3** # 13

Huber, Tom Nokia

Comment Type **E** *Comment Status* **X**

Text in the box is copied from 802.3cs

SuggestedRemedy

Replace with description of P802.3cx

Proposed Response *Response Status* **O**

Cl **FM** *SC* **FM** *P* **10** *L* **33** # 14

Huber, Tom Nokia

Comment Type **E** *Comment Status* **X**

By the time 802.3cx is published it will be amending 802.3-2022.

SuggestedRemedy

Change 2018 to 2022, and delete the list of amendments to the 2018 version. Probably not worth filling in the anticipated amendments to 802.3-2022 at this point I nthe process.

Proposed Response *Response Status* **O**

Cl **9** *SC* **9.4.3.3.2** *P* **56** *L* **5** # 7

Tse, Richard Microchip Technology

Comment Type **TR** *Comment Status* **X**

At the last meeting, it was proposed to add some words to highlight the cases where this primitive is not needed. Here is a possible solution.

SuggestedRemedy

Append a sentence to the first paragraph in this sublcause, as shown below.

"Tx_num_unit_change is generated for every Tx xMII word. It indicates the change in the Tx PHY's path data delay due to AM insertion, CWM insertion, and/or Idle rate adaptation insertion/removal for the Tx xMII word. If a Tx PHY never performs these changes to its path data delay, then this primitive can be fixed to the value zero."

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.1** *P* **32** *L* **14** # 22

Lv, Jingfei Huawei

Comment Type **TR** *Comment Status* **X**

The fine resolution PMA/PMD transmit path data delay 1.1809/1.1810 is a part of PMA/PMD transmit path data delay. Propose to directly add 1.1809 and 1.1810 to the line with 1.1801 through 1.1804, instead of inserting new lines with 1.1809 and 1.1810.

If this is agreed, do the same change for the receive path data delay of table 45-3 of Clause 45.2.1, and the transmit/receive path data delay of table 45-156 of Clause 45.2.2, table 45-176 of Clause 45.2.3, table 45-245 of Clause 45.2.4, table 45-270 of Clause 45.2.5, and table 45-295 of Clause 45.2.6

SuggestedRemedy

Propose to add 1.1809 and 1.1810 to the line with 1.1801 through 1.1804,

"1.1801 through 1.1804, 1.1809 and 1.1810"

And remove the line of 1.1809 and 1.1810.

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.1.146** *P* **32** *L* **27** # 23

Lv, Jingfei Huawei

Comment Type **TR** *Comment Status* **X**

The registers 1.1801 and 1.1805 through 1.1808 do not include the fine resolution registers. The description of Clause 45.2.3.66 is a better one, and it could be referred by Clause 45.2.1.146.

If this is agreed, do the similar change for the first paragraph of Clause 45.2.2.20, 45.2.4.28, 45.2.5.28 and 45.2.6.14.

SuggestedRemedy

Propose to change the first paragraph of 45.2.1.146 as,

"The TimeSync PMA/PMD capability register (see Table 45–110) indicates the capability of the PMA/PMD to report the transmit data delay (in ns-resolution registers 1.1801 through 1.1804 and, separately, in sub-ns-resolution registers 1.1809 and 1.1810) and receive data delay (in ns-resolution registers 1.1805 through 1.1808 and, separately, in sub-ns-resolution registers 1.1811 and 1.1812)."

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.1.147** *P* **33** *L* **28** # 27

Lv, Jingfei Huawei

Comment Type **TR** *Comment Status* **X**

The bit 2 in Register 1.1 (see 45.2.1.2.4) seems to indicate the status of the receive link, not for the transmit link. Its definition is copied here,

"45.2.1.2.4 Receive link status (1.1.2)
When read as a one, bit 1.1.2 indicates that the PMA/PMD receive link is up. When read as a zero, bit 1.1.2 indicates that the PMA/PMD receive link is down. The receive link status bit shall be implemented with latching low behavior.
While a 10PASS-TS or 2BASE-TL PMA/PMD is initializing, this bit shall indicate receive link down (see 45.2.1.25)."

SuggestedRemedy

Please double check, whether the register can be used to indicate the status of the transmit side and receive side.

If yes, the texts do not need to be changed; otherwise, the reference of the bit 2 in Register 1.1 is incorrect at the clause of transmit path data delay.

The register references at other Clauses should be also checked.

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.1.147** *P* **33** *L* **35** # 24

Lv, Jingfei Huawei

Comment Type **TR** *Comment Status* **X**

The meaning of "If both sets of registers are valid (see Table45–110)" at line 35 and line 43 are not clear. Based on the understanding of table 45-110, the 1.1800.1 represents the support of the nano-second portion of the transmit path data delay, and the 1.1800.14 could represent the support of the fractionanl-ns portion of the transmit path data delay. Therefore, the condition of "If both sets of registers are valid (see Table45–110)" is decided by the value of 1.1800.1 and 1.1800.14. However, the definition of 1.1800.14 could indicate all of functions defined by Clause 90, not only for the fractional-ns portion of the delay.

So, it may be better to define a new bit for representing the support of the fractional-ns portion of the transmit path data delay.

If this is agreed, do the similar change for the relevant description of the transmit path data delay of Table 45-173 and Clause 45.2.2.21, Table 45-235 and Clause 45.2.3.67, Table 45-267 and Clause 45.2.4.29, Table 45-293 and Clause 45.2.5.29, Table 45-306 and Clause 45.2.6.15.

SuggestedRemedy

1) Propose to add a new bit into the table 45-110,

1.1800.3,
Name: TimeSync transmit path data delay with sub-nanosecond resolution
Description:
0 - PMA/PMD does not provide information on the sub-nanosecond resolution transmit path data delay
1 - PMA/PMD provides information on the sub-nanosecond resolution transmit path data delay in registers 1.1809 and 1.1810.

2) Change

"If both sets of registers are valid (see Table45–110)" of line 35 and line 43

as

"If both sets of registers are valid (see the registers 1.1800.1 and 1.1800.3 of Table45–110)"

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.1.147** *P* **33** *L* **36** # 26

Lv, Jingfei Huawei

Comment Type **TR** *Comment Status* **X**

"If any of the two register sets are not valid,
then the corresponding value is not included in the maximum PMA/PMD transmit path data delay"

For the existing implmentation of IEEE 802.3-2018, it supports the nanosecond portion delay, but not support the fractional-ns portion delay. So, if only the register representing the nanosecond portion transmit delay (1.1800.1) is invalid and the other register representing the fractional-ns portion delay (1.1800.3 proposed by another comment) is invalid, the delay stored in the registers 1.1801 through 1.1804 should be still usable.

However, if the 1.1800.1 is invalid, whatever the register representing the fractional-ns portion delay is valid or invalid, the delay stored in the registers 1.1801 through 1.1804, 1.1809 and 1.1810 should be invalid.

Based on these consideration, propose to do some changes for the sentence.

If this is agreed, do the similar change for the line 44 of page 33 for the description of the minimum PMA/PMD transmit path data delay, and for Clause 45.2.2.21, Clause 45.2.3.67, Clause 45.2.4.29, Clause 45.2.5.29 and Clause 45.2.6.15, and for the description of the maximum/minimum receive path data delay of Clause 45.2.1.148, Clause 45.2.2.22, Clause 45.2.3.68, Clause 45.2.4.30, Clause 45.2.5.30 and Clause 45.2.6.16.

SuggestedRemedy

Propose to change

"If any of the two register sets are not valid,
then the corresponding value is not included in the maximum PMA/PMD transmit path data delay"

as

"If only the register set representing the integer nanoseconds portion of the maximum PMA/PMD transmit path data delay is valid (see the register 1.1800.1 of table 45-110), the maximum PMA/PMD transmit path data delay is the values from the first set. If the register set representing the integer nanoseconds portion of the maximum PMA/PMD transmit path data delay is invalid, whatever the register set representing the fractional nanoseconds portion of the maximum PMA/PMD transmit path data delay is valid or invalid, the maximum PMA/PMD transmit path data delay is not included.

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.1.148** *P* **34** *L* **44** # 25

Lv, Jingfei Huawei

Comment Type **TR** *Comment Status* **X**

The meaning of "If both sets of registers are valid (see Table45–110)" at line 44 and line 52 are not clear. Based on the comment for the transmit path data delay, it may be better to define a new bit for representing the support of the fractional-ns portion of the receive path data delay.

If this is agreed, do the similar change for the relevant description of the receive path data delay of Table 45-173 and Clause 45.2.2.22, Table 45-235 and Clause 45.2.3.68, Table 45-267 and Clause 45.2.4.30, Table 45-293 and Clause 45.2.5.30, Table 45-306 and Clause 45.2.6.16.

SuggestedRemedy

1) Propose to add a new bit into the table 45-110,

1.1800.2,
Name: TimeSync receive path data delay with sub-nanosecond resolution
Description:
0 - PMA/PMD does not provide information on the sub-nanosecond resolution receive path data delay
1 - PMA/PMD provides information on the sub-nanosecond resolution receive path data delay in registers 1.1811 and 1.1812.

2) Change

"If both sets of registers are valid (see Table45–110)" of line 44 and line 52

as

"If both sets of registers are valid (see the registers 1.1800.0 and 1.1800.2 of Table45–110)"

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.2.22** *P* **37** *L* **46** # 28

Lv, Jingfei Huawei

Comment Type **TR** *Comment Status* **X**

The reference "bit 2 in Register 1.1 (see 45.2.1.2.4)" is incorrect, and it should be bit 2 in Register 2.1.

SuggestedRemedy

Propose to change "bit 2 in Register 1.1 (see 45.2.1.2.4)" as "bit 2 in Register 2.1 (see 45.2.2.2.2)"

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.3.66** *P* **39** *L* **14** # 15

Huber, Tom Nokia

Comment Type **T** *Comment Status* **X**

The text in the paragraph is not consistent with the rows in the table that follows, which indicate that register 3.1800.12 is used when the timestamp point is the first symbol after SFD and 3.1800.13 is used when the reference point is the SFD.

SuggestedRemedy

Change the first parenthetical text to say "when the beginning of the SFD is used as the message timestamp point", and change the second parenthetical text to say "when the beginning of the first symbol after the SFD is used as the message timestamp point"

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.3.66** *P* **39** *L* **15** # 2

Tse, Richard Microchip Technology

Comment Type **ER** *Comment Status* **X**

Change "symbol after SFD" to "symbol after the SFD" throughout the document.

SuggestedRemedy

Make this change throughout the document. I believe there are 7 instances.

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.3.66** *P* **39** *L* **15** # 1

Tse, Richard Microchip Technology

Comment Type **TR** *Comment Status* **X**

"when the first symbol after SFD is used as the message timestamp point)"

should be

"when the beginning of the first symbol
after the SFD is used as the message timestamp point)"

SuggestedRemedy

Change as per comment

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.3.66** *P* **39** *L* **19** # 29

Lv, Jingfei Huawei

Comment Type **ER** *Comment Status* **X**

In Clause 90, the primitive for the unit change is RX_num_unit_change at Clause 90.4.2.

Propose to change Rx as RX.

SuggestedRemedy

Propose to change "TX/Rx_num_unit_change" as "TX/RX_num_unit_change".

Do the same change for the use of Rx_num_unit_change at other places.

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.5.28** *P* **46** *L* **43** # 31

Lv, Jingfei Huawei

Comment Type **ER** *Comment Status* **X**

Add a space within 90TimeSync

SuggestedRemedy

Change "Clause 90TimeSync" as "Clause 90 TimeSync"

Proposed Response *Response Status* **O**

Cl **90** *SC* **90.2** *P* **53** *L* **18** # 41

Lv, Jingfei Huawei

Comment Type **TR** *Comment Status* **X**

"IEEE Std 1588-2008 [B43], and IEEE Std 802.1AS [B41]", now the latest version of these two bibliographies are IEEE 1588-2019 and IEEE 802.1AS-2020.

It's better to use the latest version, IEEE 1588-2019 and IEEE 802.1AS-2020.

If this is agreed, need to check the whole draft about the use of IEEE 1588 and IEEE 802.1AS.

SuggestedRemedy

1) Propose to change "IEEE Std 1588-2008
[B43], and IEEE Std 802.1AS [B41]" as "IEEE Std 1588-2019 [B43], and IEEE Std 802.1AS-2020 [B41]"

2) Revise the [B43] of Annex A (Bibliography) of IEEE 802.3-2018 as,

[B43] IEEE Std 1588™-2019, IEEE Standard for a Precision Clock Synchronization Protocol for
Networked Measurement and Control Systems

3) Revise the [B41] of Annex A (Bibliography) of
IEEE 802.3-2018 as,

[B41] IEEE Std 802.1AS™-2020, IEEE Standard for Local and metropolitan area networks—Timing and
Synchronization for Time-Sensitive Applications in Bridged Local Area Networks

Proposed Response *Response Status* **O**

Cl **90** *SC* **90.4.1.1** *P* **54** *L* **1** # 30

Lv, Jingfei Huawei

Comment Type **ER** *Comment Status* **X**

In Clause 90, the primitive for the unit change is TX_num_unit_change at Clause 90.4.2.

Propose to change Tx_num_unit_change as TX_num_unit_change.

SuggestedRemedy

Propose to change "Tx_num_unit_change" as "TX_num_unit_change".

Do the same change for the use of Tx_num_unit_change at other places.

Proposed Response *Response Status* **O**

Cl **90** *SC* **90.4.1.1** *P* **54** *L* **43** # 32

Lv, Jingfei Huawei

Comment Type **TR** *Comment Status* **X**

The MII specified in Clause 22 includes 10M and 100M (see the figure 22-1). So, the 100Mb/s should be changed as 10Mb/s.

SuggestedRemedy

Propose to change as,

"10 Mb/s and above. For example: for 10Mb/s and 100Mb/s implementations this interface is called MII; for 1Gb/s implementations, it is called GMII; for 10 Gb/s implementations, it is called XGMII; etc."

Proposed Response *Response Status* **O**

Cl **90** *SC* **90.4.3.1.1** *P* **55** *L* **43** # 16

Huber, Tom Nokia

Comment Type **E** *Comment Status* **X**

Missing a definite article before "MAC Merge sublayer" in the last sentence of the paragraph.

SuggestedRemedy

Change to: The MM parameter is not provided when the MAC Merge sublayer is not instantiated or when the beginning of the SFD is not chosen as the message timestamp point

Proposed Response *Response Status* **O**

Cl **90** *SC* **90.4.3.2.1** *P* **56** *L* **24** # 17

Huber, Tom Nokia

Comment Type **E** *Comment Status* **X**

Missing a definite article before "MAC Merge sublayer" in the last sentence of the paragraph.

SuggestedRemedy

Change to: The MM parameter is not provided when the MAC Merge sublayer is not instantiated or when the beginning of the SFD is not chosen as the message timestamp point

Proposed Response *Response Status* **O**

Cl **90** *SC* **90.4.3.3.1** *P* **56** *L* **50** # 10

Tse, Richard Microchip Technology

Comment Type **ER** *Comment Status* **X**

Add reference to Annex 90A to the end of this subclause

SuggestedRemedy

Add "An example usage of Tx_num_unit_change can be found in in 90A.5.1."

Proposed Response *Response Status* **O**

Cl **90** *SC* **90.4.3.3.1** *P* **56** *L* **50** # 5

Tse, Richard Microchip Technology

Comment Type **TR** *Comment Status* **X**

Making the unit of Tx_num_unit_change equal to one bit time would make it more future-proof.

SuggestedRemedy

Change

"...where one unit is equivalent to the size of one word at the xMII"

to

"...where one unit is equivalent to one bit at the xMII"

Proposed Response *Response Status* **O**

Cl **90** *SC* **90.4.3.3.2** *P* **57** *L* **3** # 33

Lv, Jingfei Huawei

Comment Type **TR** *Comment Status* **X**

If the UNIT_CNT reported by TX_num_unit_change is zero, the PHY does not need to report TX_num_unit_change. So, it seems that the report of TX_num_unit_change is unnecessary for every Tx xMII word, although the generation could be needed for every Tx xMII word.

Propose to make it more clear.

SuggestedRemedy

Propose to change

"Tx_num_unit_change is generated for every Tx xMII word"

as

"Tx_num_unit_change is generated for every Tx xMII word. If the UNIT_CNT is non-zero, it's notified to the TimeSync Client."

If this proposal is agreed, do the similar change for the Rx_num_unit_change of 90.4.3.4.2.

Proposed Response *Response Status* **O**

Cl **90** *SC* **90.4.3.4.1** *P* **57** *L* **25** # 6

Tse, Richard Microchip Technology

Comment Type **TR** *Comment Status* **X**

Making the unit of Rx_num_unit_change equal to one bit time would make it more future-proof.

SuggestedRemedy

Change

"...where one unit is equivalent to the size of one word at the xMII"

to

"...where one unit is equivalent to one bit at the xMII"

Proposed Response *Response Status* **O**

Cl **90** *SC* **90.4.3.4.1** *P* **57** *L* **26** # 11

Tse, Richard Microchip Technology

Comment Type **ER** *Comment Status* **X**

Add reference to Annex 90A to the end of this subclause

SuggestedRemedy

Add "An example usage of Rx_num_unit_change can be found in in 90A.5.2."

Proposed Response *Response Status* **O**

Cl **90** *SC* **90.4.3.4.2** *P* **57** *L* **32** # 8

Tse, Richard Microchip Technology

Comment Type **TR** *Comment Status* **X**

At the last meeting, it was proposed to add some words to highlight the cases where this primitive is not needed. Here is a possible solution.

SuggestedRemedy

Append a sentence to the first paragraph in this sublcause, as shown below.

"Rx_num_unit_change is generated for every Rx xMII word. It indicates the change in the Rx PHY's path data delay due to AM removal, CWM removal, and/or Idle rate adaptation insertion/removal for the Rx xMII word. If a Rx PHY never performs these changes to its path data delay, then this primitive can be fixed to the value zero."

Proposed Response *Response Status* **O**

Cl **90** *SC* **90.5.1** *P* **58** *L* **8** # 3

Tse, Richard Microchip Technology

Comment Type **TR** *Comment Status* **X**

The contents of this sublcuase do not take into account changes that result when the beginning of the symbol after the SFD is selected as the message timestamp point. The text here should agree with that of 90.4.3.1.1.

SuggestedRemedy

Change

"When the MAC Merge sublayer is not instantiated, the TS_MTP_Detect_TX function detects the occurrence of the message timestamp point. The service primitive across the TSSI, i.e., TS_TX.indication shall be generated only when the message timestamp point is detected on the transmit signals of the xMII.

When the MAC Merge sublayer is instantiated, the TS_MTP_Detect_TX function detects the occurrence of the Start mPacket Delimiter for an express packet or preemptable packet start (SMD-E or SMD-S, see 99.3.3) in compliance with the specifications of the given type of the instantiated xMII. The service primitive across the TSSI, i.e., TS_TX.indication, shall be generated only when the SMD-E or SMD-S is detected on the transmit signals of the xMII (SFD=DETECTED). The value of MM shall indicate whether an SMD-E (MM=EMAC) or an SMD-S (MM=PMAC) was detected."

to

"When the MAC Merge sublayer is not instantiated or when the beginning of the symbol after the SFD is selected as the message timestamp point, the TS_MTP_Detect_TX function detects the occurrence of the message timestamp point. The service primitive across the TSSI, i.e., TS_TX.indication shall be generated only when the message timestamp point is detected on the transmit signals of the xMII.

When the MAC Merge sublayer is instantiated and when the beginning of the SFD is selected as the message timestamp point, the TS_MTP_Detect_TX function detects the occurrence of the beginning of the SFD for an express packet or preemptable packet (SMD-E or SMD-S, see 99.3.3) in compliance with the specifications of the given type of the instantiated xMII. The service primitive across the TSSI, i.e., TS_TX.indication, shall be generated only when the SMD-E or SMD-S is detected on the transmit signals of the xMII (SFD=DETECTED). The value of MM shall indicate whether an SMD-E (MM=EMAC) or an SMD-S (MM=PMAC) was detected."

Proposed Response *Response Status* **O**

Cl **90** *SC* **90.5.2** *P* **58** *L* **26** # 4

Tse, Richard Microchip Technology

Comment Type **TR** *Comment Status* **X**

The contents of this sublcuase do not take into account changes that result when the beginning of the symbol after the SFD is selected as the message timestamp point. The text here should agree with that of 90.4.3.2.1.

SuggestedRemedy

Change

"When the MAC Merge sublayer is not instantiated, the TS_MTP_Detect_RX function detects the occurrence of the message timestamp point. The service primitive across the TSSI, i.e., TS_RX.indication, shall be generated only when the message timestamp point is detected on the receive signals of the xMII.

When the MAC Merge sublayer is instantiated, the TS_MTP_Detect_RX function detects the occurrence of the Start mPacket Delimiter for an express packet or preemptable packet start (SMD-E or SMD-S, see 99.3.3) in compliance with the specifications of the given type of the instantiated xMII. The service primitive across the TSSI, i.e., TS_RX.indication, shall be generated only when the SMD-E or SMD-S is detected on the transmit signals of the xMII (SFD=DETECTED). The value of MM shall indicate whether an SMD-E (MM=EMAC) or an SMD-S (MM=PMAC) was detected."

to

"When the MAC Merge sublayer is not instantiated or when the beginning of the symbol after the SFD is selected as the message timestamp point, the TS_MTP_Detect_RX function detects the occurrence of the message timestamp point. The service primitive across the TSSI, i.e., TS_RX.indication, shall be generated only when the message timestamp point is detected on the receive signals of the xMII.

When the MAC Merge sublayer is instantiated and when the beginning of the SFD is selected as the message timestamp point, the TS_MTP_Detect_RX function detects the occurrence of the beginning of the SFD for an express packet or preemptable packet (SMD-E or SMD-S, see 99.3.3) in compliance with the specifications of the given type of the instantiated xMII. The service primitive across the TSSI, i.e., TS_RX.indication, shall be generated only when the SMD-E or SMD-S is detected on the transmit signals of the xMII (SFD=DETECTED). The value of MM shall indicate whether an SMD-E (MM=EMAC) or an SMD-S (MM=PMAC) was detected."

Proposed Response *Response Status* **O**

Cl **90** *SC* **90.7** *P* **61** *L* **1** # 18

Huber, Tom Nokia

Comment Type **E** *Comment Status* **X**

Missing an editing instruction to replace the current contents with the new contents shown here.

SuggestedRemedy

Add an editing instruction indicating that the contents of subclause 90.7 should be replaced by the text in the amendment.

Proposed Response *Response Status* **O**

Cl **90** *SC* **90.7** *P* **61** *L* **16** # 34

Lv, Jingfei Huawei

Comment Type **TR** *Comment Status* **X**

"For a PHY that includes an FEC and/or multilane distribution functions"

The use of multilane should be the function defined at PCS layer. Due that some other paragraphs describes the lane skew caused by the lane at PMA/PMD (see the figure 90A-1 at page 70), it's better to make it more clear.

SuggestedRemedy

Propose to change "multilane" of the paragraph from line 16 to 22 as "multi-PCS lane".

Proposed Response *Response Status* **O**

Cl **90** *SC* **90.7** *P* **61** *L* **24** # 35

Lv, Jingfei Huawei

Comment Type **TR** *Comment Status* **X**

This paragraph specifies for the Tx side, and propose to add "Tx side".

SuggestedRemedy

Propose to change

"For a PHY that inserts alignment markers or codeword markers and/or performs rate adaptation (e.g., adds/removes Idles),"

as

"For a PHY that inserts alignment markers or codeword markers and/or performs rate adaptation (e.g., adds/removes Idles) at the Tx side,"

Proposed Response *Response Status* **O**

Cl **90** *SC* **90.7** *P* **61** *L* **31** # 36

Lv, Jingfei Huawei

Comment Type **TR** *Comment Status* **X**

This paragraph specifies for the Rx side, and propose to add "Rx side".

SuggestedRemedy

Propose to change

"For a PHY that removes alignment markers or codeword markers and/or performs rate adaptation (e.g., adds/removes Idles),"

as

"For a PHY that removes alignment markers or codeword markers and/or performs rate adaptation (e.g., adds/removes Idles) at the Rx side,"

Proposed Response *Response Status* **O**

Cl **90** *SC* **90.7** *P* **61** *L* **48** # 37

Lv, Jingfei Huawei

Comment Type **TR** *Comment Status* **X**

"Lane skew can be present on a multilane transmitter when PCS/FEC lanes have different static latencies such that their alignment markers appear staggered as they depart the device at the MDI output."

Based on the previous discussion and the background of figure 90A-1 at page 70, the description of lane skew by this paragraph should be caused by the different delays at PMA/PMD layer rather than PCS layer.

If this is correct, propose to do some changes.

SuggestedRemedy

Propose to change

"when PCS/FEC lanes have different static latencies such that their alignment markers appear staggered as they depart the device at the MDI output."

as

"when PMA/PMD lanes have different static latencies such that their alignment markers appear staggered as they depart the device at the MDI output."

Proposed Response *Response Status* **O**

Cl **90** *SC* **90.7** *P* **62** *L* **36** # 38

Lv, Jingfei Huawei

Comment Type **TR** *Comment Status* **X**

Make the description of RX side consistent with TX side, that the TimeSync client may need to add or subtract the mean of the minimum delay and maximum delay.

Another typo is that, the transmit at line 36 and 37 should be the receive.

SuggestedRemedy

Propose to change

"Likewise, the TimeSync Client may need to
subtract the value of the delay associated with the TS_MTP_Detect_RX function to the sum of the minimum transmit data delay values and the sum of the maximum transmit data delay values reported by individual MMD(s)."

as

"Likewise, the TimeSync Client may need to
subtract the value of the delay associated with the TS_MTP_Detect_RX function to the mean of the sum of the minimum receive data delay values and the sum of the maximum receive data delay values reported by individual MMD(s)."

Proposed Response *Response Status* **O**

Cl **90A** *SC* **90A.2** *P* **65** *L* **20** # 19

Huber, Tom Nokia

Comment Type **E** *Comment Status* **X**

SFD is used before being later spelled out two paragraphs later, in a manner that is inconsistent with all the other acronym introducions.

SuggestedRemedy

In the first paragraph, change "first symbol after SFD" to "first symbol after start of frame delimiter (SFD)". In the third paragraph, change "the beginning of the start of frame delimiter, the SFD," to "the beginning of the SFD".

Proposed Response *Response Status* **O**

Cl **90A** *SC* **90A.2** *P* **65** *L* **65** # 39

Lv, Jingfei Huawei

Comment Type **TR** *Comment Status* **X**

The use of "IEEE Std 802.3cx support" is better to be replaced, e.g., IEEE Std 802.3 Clause 90.

SuggestedRemedy

Change

"IEEE Std 802.3cx support"

as

"IEEE Std 802.3 Clause 90"

Proposed Response *Response Status* **O**

Cl **90A** *SC* **90A.3** *P* **65** *L* **49** # 20

Huber, Tom Nokia

Comment Type **E** *Comment Status* **X**

The end of the sentence is grammatically awkward: "… if these two message timestamp point options are further separated at due to: ..."

SuggestedRemedy

Delete the word "at"

Proposed Response *Response Status* **O**

Cl **90A** *SC* **90A.5** *P* **67** *L* **36** # 40

Lv, Jingfei Huawei

Comment Type **ER** *Comment Status* **X**

Add a space within and90.4.3.4

SuggestedRemedy

Change as "and 90.4.3.4"

Proposed Response *Response Status* **O**

Cl **90A** *SC* **90A.5.3** *P* **69** *L* **6** # 9

Tse, Richard Microchip Technology

Comment Type **TR** *Comment Status* **X**

At the last meeting, it was proposed to add some words to highlight the cases where the Tx/Rx num_unit_change primitives are not needed. Here is a possible solution.

SuggestedRemedy

Add the following sentence after the bulleted list:

"If a PHY never performs AM, CWM, or Idle insertion/removal, then the Tx/Rx num_unit_change primitives are not needed and can be omitted or fixed to the value zero."

Proposed Response *Response Status* **O**

Cl **90A** *SC* **90A.6** *P* **69** *L* **15** # 21

Huber, Tom Nokia

Comment Type **E** *Comment Status* **X**

The first two sentences of the paragraph are grammatically awkward.

SuggestedRemedy

Rewrite as follows:
For these multi-lane PHYs, it is difficult to compensate for the presence of skew at the transmit Medium Dependent Interface (MDI) because this skew is entwined with, but independent from, the skew of the medium. As shown in the examples of Figure 90A–1, the transmit skew in series with the medium skew can be additive or subtractive.

Proposed Response *Response Status* **O**