C/ 00 SC 0 PIL 30 # 69 Marris. Arthur Cadence

Comment Type Comment Status A

"It provides an accurate indication of the transmission and reception initiation times of certain packets as required to support IEEE Std P802.1AS-201X."

is not an entirely accurate description of what the amendment is doing.

SuggestedRemedy

Change:

"It provides an accurate indication of the transmission and reception initiation times of certain packets as required to support IEEE Std P802.1AS-201X."

To:

"It defines the Time Synchronization service interface to indicate when frames cross the medium independent interface and PHY management objects to report the latency in passing frames between the MDI and medium indepent interface. This is required to support IEEE Std P802.1AS-201X."

Also change 'abstract' on page II.

Response Response Status C

ACCEPT IN PRINCIPLE.

Change the indicated text as presented below:

"It defines the Time Synchronization Service Interface (TSSI) to indicate when SFD crosses the generic Medium Independent Interface (gMII), together with management objects indicating transmission latency between the MDI and gMII for the given PHY. Both features are required to support IEEE Std P802.1AS-201X."

Make the same changes in the abstract

C/ 00 SC 0 P VII L 2 Marris, Arthur Cadence

Comment Type Comment Status A

This should be referring to the IEEE 802.3 working group ballot. P802.3bf is a task force.

SuggestedRemedy

Change:

"The following individuals were members of the IEEE 802.3 working group at the beginning of the P802.3bf working group ballot."

"The following individuals were officers and members of the IEEE 802.3 working group at the beginning of the working group ballot."

Also make Valerie Maguire the treasurer.

Response Response Status C

ACCEPT IN PRINCIPLE.

Valerie Maguire will be indicated as the 802.3 WG Treasurer.

C/ 00 SC 0 PX

Marris. Arthur Cadence

Comment Type E Comment Status A

Make date a placeholder

SuggestedRemedy

Change:

"15 September 200X"

To:

"XX XXXX 201X"

Response Response Status C

The text is part of the template front matter and will be filled in with respective data along the progress of the project.

Cl 45 SC 45.2.1.100 P 5 L 38 C/ 90 SC 90.4.1 P 9 L 44 Marris. Arthur Cadence Marris. Arthur Cadence Comment Type Comment Status A Comment Type Comment Status R Mention latency here. Isn't the MAC control layer defined in Clause 31 a client of the MAC? SuggestedRemedy SuggestedRemedy Change: Delete: "identifies the capability of the given PHY to provide the transmit and receive paths" "definition of the MAC Client is outside of scope of IEEE Std 802.3" Response Response Status C "indicates the capability of the PHY to report the transmit and receive latency between the REJECT. MII and MDI" Response Response Status C Clause 31 is a MAC Control sublayer, which manipulates the behaviour of a MAC, rather ACCEPT IN PRINCIPLE. than using MAC to deliver services. Similarly, Clause 64 and Clause 77 MPCP is a multipoint MAC Control sublayer example rather than an example of a MAC Client. [Should be T] "indicates the capability of the PHY to report the transmit and receive latency between the xMII and MDI' The indicated text remains in the draft. C/ 45 P 6 P 9 SC 45.2.1.101 16 C/ 90 SC 90.4.1 L 52 Marris. Arthur Cadence Anslow. Peter Ciena Comment Type Т Comment Status A Comment Type Ε Comment Status A It might help to define 'link is estabilished' as when bit 2 in PMA/PMD status register 1 is In "any type of IEEE Std 802.3 media independent interfaces", "interfaces" should be high. "interface" SuggestedRemedy SuggestedRemedy Consider changing: Change "interfaces" to "interface" "The values contained in these registers are valid when the link is established." Response Response Status C ACCEPT. To: "The values contained in these registers are valid when the link is established as indicated by bit 2 in register 1.1 (see 45.2.1.2.2)." C/ 90 SC 90.4.2.3 P 11 L 15 Anslow, Peter Ciena make similar change for the receive latency registers. Comment Type E Comment Status A Response Response Status C In "The TS service interface support the exchange" "support" should be "supports" ACCEPT IN PRINCIPLE. SuggestedRemedy Change "support" to "supports" "The values contained in these registers are valid when the link is established." Response Response Status C

ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn SORT ORDER: Clause. Subclause. page. line

"The values contained in these registers are valid when the link is established, as indicated

Make similar change for the receive latency registers i.e. 45.2.1.102

by bit 2 in Register 1.1 (see 45.2.1.2.2)."

Mark link as external

C/ **90** SC **90.4.2.3** Page 2 of 7 26/05/2010 10:42:42 C/ 90 SC 90.4.3.1 P 11 L 24 Marris. Arthur Cadence Comment Type Comment Status A 3.1 TS TX.indication primitive This does not read right.

SuggestedRemedy

Change:

"This primitive defines the transfer of a indication of an event between gRS and the TimeSvnc Client."

To:

"This primitive is used to indicate the event of a transmit frame passing through the qRS."

Response Status C

ACCEPT IN PRINCIPLE.

Options under consideration:

[A] "This primitive defines the transfer of the indication of an event between gRS and the TimeSvnc Client."

[B] "This primitive defines the transfer of the indication of an event of detection SFD at the gRS. This indication is transfered between gRS and the TimeSync Client."

[C] "This primitive is used to indicate the event of a transmit frame passing through the gRS."

[D] "This primitive is used to indicate a transmit event at the gRS to the TimeSync Client."

[E] "This primitive is used to indicate the event of transmit of SFD at the gRS to the TimeSvnc Client."

Straw poll #1:

I pick option

A: 5

B: 0

C: 0 D: 1

E: 0

Final response: "This primitive defines the transfer of the indication of an event between gRS and the TimeSync Client."

Change text in 90.4.3.2 to read as follows: "This primitive defines the transfer of the indication of an event between gRS and the TimeSync Client."

C/ 90 SC 90.4.3.1 P 11 L 24 Ciena

Anslow, Peter

Comment Type E Comment Status A 3.1 TS TX.indication primitive

In "This primitive defines the transfer of a indication of an event" "a indication" should be "the indication"

Same in 90.4.3.2

SuggestedRemedy

Change "a indication" to "the indication" here and in 90.4.3.2

Response Response Status C

ACCEPT.

See comment #72.

C/ 90 SC 90.4.3.1.1 P 11 L 32

Anslow, Peter Ciena

Comment Type T Comment Status A UNDETECTED or undefined

Since in 90.5.1 we have: "The service primitive across the TS service interface i.e. TS_TX.indication is generated only when the SFD sequence is detected on the transmit signals. Otherwise, the status of TS TX indication is undefined," what is the purpose of defining the SFD parameter value of UNDETECTED?

Same issue for TS RX.indication(SFD)

SuggestedRemedy

Remove the value "UNDETECTED" or use it for something Same in 90.4.3.2.1

Response Response Status C

ACCEPT IN PRINCIPLE.

Change 90.4.3.1.1 to read

The SFD parameter can take either of the following two values: DETECTED or undefined. When asserted (SFD = DETECTED), the TimeSync Client is notified that a valid SFD was detected by the gRS sublayer TS_SFD_Detect_TX function (see 90.5.1) in the xMII transmit signals. Otherwise, the value of SFD parameter is undefined.

Change 90.4.3.2.1 to read

The SFD parameter can take either of the following two values: DETECTED or undefined. When asserted (SFD = DETECTED), the TimeSync Client is notified that a valid SFD was detected by the qRS sublayer TS SFD Detect RX function (see 90.5.2) in the xMII receive signals. Otherwise, the value of SFD parameter is undefined.

Response

ACCEPT IN PRINCIPLE. See comment #72.

Response Status C

C/ 90 SC 90.4.3.1.1 P 11 L 32 C/ 90 SC 90.4.3.2.1 P 12 L 3 Marris. Arthur Cadence Marris. Arthur Cadence Comment Type Т Comment Status A UNDETECTED or undefined Comment Type Comment Status A UNDETECTED or undefined Please use 'NOT DETECTED' as was agreed in the resolution to comment 31 against the Change 'any' to 'either' last draft. SuggestedRemedy SuggestedRemedy Change 'any' to 'either' Change: Response Response Status C "UNDETECTED" ACCEPT. To: "NOT DETECTED" See comment #65 and elsewhere in the document. C/ 90 SC 90.5 P 12 L 32 Marris, Arthur Cadence Also change: Comment Type Comment Status A "any of the following two values" To: Change: "either of the following two values" "responsible for generation of the TS_TX.indication and TS_RX.indication service primitives, respectively, across the TS service interface defined in 90.4" Response Response Status C ACCEPT IN PRINCIPLE. "which are responsible for generation of the TS TX.indication and TS RX.indication [line number correct, was 24, is 32] service primitives defined in 90.4" See comment #65 - "UNDETECTED" was replaced with "undefined" SuggestedRemedy SC 90.4.3.2 C/ 90 P 11 L 50 Change: Marris, Arthur Cadence "responsible for generation of the TS_TX.indication and TS_RX.indication service primitives, respectively, across the TS service interface defined in 90.4" Comment Type Comment Status A This could be worded better. "which are responsible for generation of the TS_TX.indication and TS_RX.indication service primitives defined in 90.4" SuggestedRemedy Response Response Status C Change: ACCEPT IN PRINCIPLE. "This primitive defines the transfer of a indication of an event between gRS and the TimeSvnc Client." [should be T] ", which are responsible for generation of the TS_TX.indication and TS_RX.indication "This primitive is used to indicate the event of a receive frame passing through the gRS." service primitives, as defined in 90.4"

C/ 90 SC 90.5.1 P 12 L 40 # 59

Anslow, Peter Ciena

Comment Type E Comment Status A

"instantied" isn't a word same in 90.5.2

SuggestedRemedy

Final responses

Change "instantied" to "instantiated" and also in 90.5.2

Response Status C

ACCEPT.

C/ 90 SC 90.5.1 P12 L 44 W # 75
Marris, Arthur Cadence

Comment Type T Comment Status R UNDETECTED or undefined

TS_TX.indication is not undefined otherwise.

SuggestedRemedy

Change:

"The service primitive across the TS service interface i.e. TS_TX.indication is generated only when the SFD sequence is detected on the transmit signals. Otherwise, the status of TS_TX.indication is undefined."

To:

"On detection of SFD by the TS_SFD_Detect_TX function TS_TX.indication(SFD) signals DETECTED otherwise it signals NOT DETECTED."

Make similar change in 90.5.2.

Response Status C

REJECT.

See comment #65.

C/ 90 SC 90.6 P13 L 31 # 55
Anslow Peter Ciena

Anslow, Peter Clena

Comment Type E Comment Status A

The two references to "Clause 30" should be black and links since Clause 30 is included in the draft.

Same for Clause 45 in 90.7

SuggestedRemedy

Change the two instances of "Clause 30" to black font and make them links. Change the two instances of "Clause 45" in 90.7 to black font and make them links.

Response Status C

ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn SORT ORDER: Clause, Subclause, page, line

C/ 90 SC 90.6 P13 L 31 # 77

Marris, Arthur Cadence

Comment Type T Comment Status A

Should not say changes as this will be meaningless once the standard is published.

SuggestedRemedy

Change:

"Changes to Clause 30 for the optional support of TimeSync capability are summarized below:"

To:

"Objects defined in Clause 30 for the optional support of TimeSync capability are summarized below:"

Response Status C

ACCEPT.

CI 90 SC 90.6 Page 5 of 7 26/05/2010 10:42:42

D0.3

C/ 90 SC 90.7 P 13 L 45 Marris. Arthur Cadence

Comment Type Comment Status A Clause 45 changes summary Put a table in here and remove the word changes.

SuggestedRemedy

Change: "Clause 45 describes the Management Data Input/Output (MDIO) Interface for any of the IEEE Std 802.3 compliant PHYs. Changes to Clause 45 for the optional support of TimeSvnc capability are summarized below:"

"The optional MDIO capability described in Clause 45 defines several variables that provide TimeSync status information for the PMD. If MDIO is implemented, it will map MDIO TimeSync status variables to PMD status variables as shown in Table 90-X."

Insert table called "MDIO/PMD status variable mapping" and delete 90.8.

Response Status C Response

ACCEPT IN PRINCIPLE.

Change:

"Clause 45 describes the Management Data Input/Output (MDIO) Interface for any of the IEEE Std 802.3 compliant PHYs. Changes to Clause 45 for the optional support of TimeSync capability are summarized below:"

To:

"The optional MDIO capability described in Clause 45 defines several variables that provide TimeSvnc status information for the PMD, as shown in Table 90-X:".

Remove 90.8.

Add Table 90-X with the summary of registers in lines 50-53 page 13.

SC 90.8 C/ 90 P 14 L 4 76 Marris. Arthur Cadence

Comment Type Comment Status A Clause 45 changes summary

Delete 90.8

SuggestedRemedy

Delete 90.8 and add a table called "MDIO/PMD status variable mapping" to 90.7.

Response Response Status C

ACCEPT IN PRINCIPLE. See comment #78

C/ 90 SC 90.9

P 14 Cadence L 16

Marris. Arthur Comment Type

Comment Status A

MP2 location

Why not just call MP2 the MDI?

SuggestedRemedy

Delete the note at the top of page 15 as it is confusing and unnecessary. Replace the note with:

"MP2 is at the MDI."

Also change:

"namely a minimum and a maximum PHY latency values, observed over the number of conducted PHY latency measurements"

"namely a minimum and a maximum PHY latency value"

Response

Response Status C

ACCEPT.

- (1) see comment #67
- (2) as suggested by the commenter

C/ 90 P 14 L 17 SC 90.9 Anslow, Peter Ciena

Comment Type T Comment Status A

Measurement precision

This says "The measurement of the PHY latency shall be conducted with 1 ns precision" To achieve this level of precision (0.1 UI for 100 Mbit/s), the definition of the two events needs to be much more precise than currently defined.

Presumably one event is the assertion of TS TX.indication or TS RX.indication by the qRS. What is the definition of the other event? This must define which edge passing the MDI starts or stops the delay measurement

SuggestedRemedy

Define the two times precisely. At MP1 this is the assertion of TS TX.indication or TS RX indication. At MP2 define which edge passing the MDI defines the start or stop time.

Also, in Figure 90-3 it would be better to show MP1 at the TS service interface since this is where the event of the assertion of TS TX.indication or TS RX.indication is observable.

Response Response Status C

ACCEPT IN PRINCIPLE.

See comment #79

C/ 90 SC 90.9 P 14 L 17 Marris. Arthur Cadence Comment Type T Comment Status A Measurement precision Just because the register can report 1 ns precision does not mean the PHY has to. SuggestedRemedy Delete "measurement of the PHY latency shall be conducted with 1 ns precision, while the" Response Status C Response ACCEPT. SC 90.9 P 14 L 51 C/ 90 Anslow, Peter Ciena

Since "the method used for the PHY latency measurement is outside the scope of this specification" the title of Figure 90-3 should not be "PHY latency measurement methodology"

Comment Status A

SuggestedRemedy

Comment Type T

Change the title to "PHY latency measurement points"

Response Response Status C

ACCEPT.

C/ 90 SC 90.9 P15 L1 # 67
Anslow, Peter Ciena

Comment Type T Comment Status A

MP2 location

This says "MP2 is located at the bottom of the MDI," but the MDI does not have a top and bottom, it is an interface point. See for instance Figure 52-2.

SuggestedRemedy

Change this to "MP2 is located at the MDI,"

Also, in Figure 90-3 show the dotted line for MP2 going through the centre of the MDI box to bring it in to line with the architecture diagrams such as Figures 21-1, 34-1, 44-1 etc.

Response Status C

ACCEPT.

C/ 90 SC 99.10 P16 L1 # 54

Anslow, Peter Ciena

Comment Type E Comment Status A

The numbering still changes to 99 part way through clause 90. See comment 52 against D 0.21

SuggestedRemedy

99.10 onwards should be re-numbered 90.10 etc.

Response Status C

ACCEPT.