

## Comments received

## IEEE P802.3bf D3.0 comments

CI 0 SC 0 P 0 L 0 # 23  
Turner, Michelle

Comment Type ER Comment Status X

This draft meets all editorial requirements.

SuggestedRemedy

Proposed Response Response Status O

CI 0 SC 0 P 14 L 1 # 2  
Marris, Arthur Cadence Design Syst

Comment Type ER Comment Status X

Insert required text between contents and introduction. See page 1 of 802.3ba-2010 for reference. Also see section 21.1 of the IEEE standards style manual:  
Both types of documents have the same format. The following text shall appear at the beginning of either an amendment or a corrigendum:  
NOTE--The editing instructions contained in this <amendment/corrigendum> define how to merge the material contained therein into the existing base standard and its amendments to form the comprehensive standard.  
The editing instructions are shown in bold italic. Four editing instructions are used: change, delete, insert, and replace. Change is used to make corrections in existing text or tables. The editing instruction specifies the location of the change and describes what is being changed by using strikethrough (to remove old material) and underscore to add new material). Delete removes existing material. Insert adds new material without disturbing the existing material. Insertions may require renumbering. If so, renumbering instructions are given in the editing instruction. Replace is used to make changes in figures or equations by removing the existing figure or equation and replacing it with a new one. Editing instructions, change markings, and this NOTE will not be carried over into future editions because the changes will be incorporated into the base standard.315

SuggestedRemedy

Insert the required text as ewcribed in the comment.

Proposed Response Response Status O

CI 1 SC 1 P 1 L 1 # 1  
Byrd, William PRIVACOM VENTUR

Comment Type G Comment Status X

I voted Approval of this document. But, I do not support this type of format being submitted for ballot. The Standard had an incomplete Introduction, Scope, and general description. It jumped directly into the data, which was full of cross-outs and unexplained edits. The IEEE needs to limit any documents that do not have a full and complete justification for their existence. An average researcher would be hard pressed to make any sense of this document. This document should be able to stand on its own, and repeated references to other standards does not fulfill this obligation.

SuggestedRemedy

Add a complete Introduction, Scope and Justification to this document.

Proposed Response Response Status O

CI 1 SC 1.3 P 15 L 10 # 39  
Booth, Brad Applied Micro (AMCC)

Comment Type E Comment Status X

This is not the first reference to 1588, but should at least one of them contain a trademark?

SuggestedRemedy

Recommend add a trademark to this reference to 1588 as previous references in the front matter will disappear when merged into the base document.

Proposed Response Response Status O

CI 1 SC 1.3 P 15 L 10 # 33  
Frazier, Howard M Broadcom Corporation

Comment Type TR Comment Status X

I don't think that 1588 rises to the level of an indispensable reference, which must be at hand when implementing this standard. I am all for including a mention of 1588, and saying that 802.3bf is intended to provide support for it. However, I think it should be moved to the bibliography.

SuggestedRemedy

Move 1588 to the bibliography

Proposed Response Response Status O

## Comments received

## IEEE P802.3bf D3.0 comments

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CI 1 SC 1.3 P 15 L 5 # 6  
Anslow, Peter Ciena Corporation

Comment Type E Comment Status X

Editing instruction "Insert into the list at the appropriate location" is not in the format used by IEEE staff in recent published amendments

SuggestedRemedy

Change to "Insert the following references in alphanumerical order:"

Proposed Response Response Status O

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CI 1 SC 1.3 P 15 L 7 # 38  
Booth, Brad Applied Micro (AMCC)

Comment Type E Comment Status X

IEEE P802.1AS, Timing and Synchronization for Time-Sensitive Applications in Bridged Local Area Networks, draft 7.5, published 2010.10.16 is very explicit in which draft should be used.

SuggestedRemedy

Recommend striking draft number and published date. Changes to 802.1AS should not impact .3bf.

Proposed Response Response Status O

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CI 1 SC 1.3 P 15 L 7 # 34  
Frazier, Howard M Broadcom Corporation

Comment Type TR Comment Status X

I don't think that 802.1AS rises to the level of an indispensable reference, which must be at hand when implementing this standard. I am all for including a mention of 802.1AS, and saying that 802.3bf is intended to provide support for it (especially since it appears in the title of the standard!) However, I think it should be moved to the bibliography.

SuggestedRemedy

Move 802.1AS to the bibliography

Proposed Response Response Status O

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CI 1 SC 1.4 P 15 L 19 # 7  
Anslow, Peter Ciena Corporation

Comment Type E Comment Status X

Editing instruction "Insert into the ordered list and renumber as appropriate" is not in the format used by IEEE staff in recent published amendments

SuggestedRemedy

Change to "Insert the following new definition into the definitions list, in alphanumerical order:"

Proposed Response Response Status O

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CI 1 SC 1.4 P 15 L 21 # 28  
Thaler, Patricia Broadcom Corporation

Comment Type ER Comment Status X

This is not a definition - just an acronym expansion

SuggestedRemedy

Make consistent with the other Interface descriptions (e.g. 1.4.50 and 1.4.51). The acronym goes in parenthesis after the full name. Text should be something like "The interface between \_ and \_ for \_\_\_".

Proposed Response Response Status O

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CI 1 SC 1.4 P 15 L 21 # 8  
Anslow, Peter Ciena Corporation

Comment Type E Comment Status X

"Interface, as specified in IEEE P802.3bf, Clause 90" is not the format previously used for references to the amendment (see 802.3av or 802.3ba)

SuggestedRemedy

Change to "Interface. (See IEEE Std 802.3, Clause 90.)"

Proposed Response Response Status O

## Comments received

## IEEE P802.3bf D3.0 comments

**Cl 1**      **SC 1.5**      **P 15**      **L 25**      # **9**

Anslow, Peter      Ciena Corporation

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

Editing instruction "Insert a new abbreviation to the list, sort the list alphabetically:" is not in the format used by IEEE staff in recent published amendments. Also, there is more than one new abbreviation.

**SuggestedRemedy**

Change to "Insert the following new abbreviations into the abbreviations list, in alphabetical order:"

**Proposed Response**      **Response Status**    **O**

**Cl 30**      **SC 30.12**      **P 19**      **L 3**      # **12**

Anslow, Peter      Ciena Corporation

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

This amendment adds 30.12 Management for oTimeSync entity. But IEEE Std 802.3bc-2009 already inserted 30.12 Layer Management for Link Layer Discovery Protocol (LLDP)

**SuggestedRemedy**

Unless there is a good reason to insert this new text before the existing 30.12 (in which case amend the editing instruction to say insert before 30.12 added by IEEE Std 802.3bc) change this to be 30.13 inserted after 30.12.3.1.13 added by IEEE Std 802.3bc.

**Proposed Response**      **Response Status**    **O**

**Cl 30**      **SC 30.12.1.1**      **P 19**      **L 22**      # **41**

Thompson, Geoffrey      Independent

**Comment Type**    **G**      **Comment Status**    **X**

Grammar:  
"then the value stored in this attribute equals to the logical OR operation over the values..."

**SuggestedRemedy**

CHANGE TO:  
"then the value stored in this attribute is equal to the logical OR operation over the values..."  
(The same problem exists in 30.12.1.2, line 34)

**Proposed Response**      **Response Status**    **O**

**Cl 30**      **SC 30.12.1.3**      **P 19**      **L 38**      # **17**

Hajduczenia, Marek      ZTE Corporation

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

"composed of the following instantiated MDIO registers" - change to "accounting for the values stored in the following instantiated MDIO registers"  
Similar change to be made to page 20, line 14; page 20, line 34; page 21, line 3

**SuggestedRemedy**

per comment

**Proposed Response**      **Response Status**    **O**

**Cl 30**      **SC 30.12.1.3**      **P 19**      **L 45**      # **24**

Garner, Geoffrey      Samsung

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

This subclause indicates that the aTimeSyncDelayTXmax managed object is the maximum data delay as specified in 90.7, expressed in units of ns. Figure 90-3 in 90.7 illustrates the data delay between the bottom of the MDI and the top of the xMII, and 90.7 also explains that the transmit path delay is measured from the input of the beginning of the SFD at the xMII to its presentation by the PHY to the MDI.

However, 30.12.1.3 then goes on to talk about multiple maximum transmit path delay values, for the PMA/PMD, WIS, PCS, PHY XS, DTE XS, and TC. But, there is no clear explanation of what the individual values for each of these sublayers represents, as 90.7 does not talk about delay values for these sublayers but only about total delay between the bottom of the MDI and top of the xMII. It appears that each value is the delay for the respective sublayer, but no explicit description of this is given. It would be useful to clarify this, to ensure that a higher-layer TimeSync client (e.g., IEEE 802.1AS, IEEE 1588) will use these values correctly.

In addition, not all the sublayers are present for every rate interface. If a sublayer is not present, it is not clear whether the respective value is zero, is undefined, or is simply not present. It would be useful to clarify which of these possibilities (or some other possibility) is intended.

This same comment applies to the aTimeSyncDelayTXmin (30.12.1.4), aTimeSyncDelayRXmax (30.12.1.5), and aTimeSyncDelayRXmin (30.12.1.6) managed objects.

**SuggestedRemedy**

Clarify whether the individual values for the PMA/PMD, WIS, PCS, PHY XS, DTE XS, and TC in 30.12.1.3, 30.12.1.4, 30.12.1.5, and 30.12.1.6 are respective maximum and minimum transmit and receive delays for each sublayer (or, if this is not correct, clearly define what these individual values represent). Clarify, for the case where a sublayer is not present for a particular interface, whether the respective value for that sublayer is 0, is undefined, or is not present (or if something else is intended).

**Proposed Response**      **Response Status**    **O**

## Comments received

## IEEE P802.3bf D3.0 comments

**CI 30**      **SC 30.12.1.3**      **P 19**      **L 47**      # **29**  
Thaler, Patricia      Broadcom Corporation

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

"accounts for" is ambiguous. Does that mean that it is the sum of the values, the maximum of the values, ...? This comment also applies to the 3 subsequent subclauses.

**SuggestedRemedy**

Replace "accounts for" with an unambiguous statement of how the values are combined. If there is an explanation elsewhere, reference the explanation.

**Proposed Response**      **Response Status**    **O**

**CI 30**      **SC 30.12.1.4**      **P 20**      **L 13**      # **31**  
Frazier, Howard M      Broadcom Corporation

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

The phrase "the value stored in this attribute accounts for minimum transmit path data delay values, composed of the following..." does not provide enough information to the implementer. Any delay associated with the TS\_SFD\_Detect\_TX function must be accounted for as well, and this must be subtracted from the value reported in the aTimeSyncDelayTXmin attribute.

**SuggestedRemedy**

Add to the end of BEHAVIOUR DEFINED AS: "The value of the delay associated with the TS\_SFD\_Detect\_TX function shall be subtracted from the sum of the minimum transmit path data delay values reported via the MMD registers."

**Proposed Response**      **Response Status**    **O**

**CI 30**      **SC 30.12.1.5**      **P 20**      **L 33**      # **32**  
Frazier, Howard M      Broadcom Corporation

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

The phrase "the value stored in this attribute accounts for maximum receive path data delay values, composed of the following..." does not provide enough information to the implementer. Any delay associated with the TS\_SFD\_Detect\_RX function must be accounted for as well, and this must be added to the value reported in the aTimeSyncDelayRXmax attribute.

**SuggestedRemedy**

Add to the end of BEHAVIOUR DEFINED AS: "The value of the delay associated with the TS\_SFD\_Detect\_RX function shall be added to the sum of the maximum receive path data delay values reported via the MMD registers."

**Proposed Response**      **Response Status**    **O**

**CI 30**      **SC 30.2.3**      **P 17**      **L 12**      # **10**  
Anslow, Peter      Ciena Corporation

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

Editing instruction "Replace Figure 30-3 with that presented below (as last modified by IEEE Std 802.3av and IEEE Std 802.3at):" would be clearer if re-arranged.

**SuggestedRemedy**

Change to "Replace Figure 30-3 (as last modified by IEEE Std 802.3av and IEEE Std 802.3at) with that below:"

**Proposed Response**      **Response Status**    **O**

**CI 30**      **SC 30.2.5**      **P 17**      **L 21**      # **11**  
Anslow, Peter      Ciena Corporation

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

The thick border on the right hand side of Table 30-6 is missing

**SuggestedRemedy**

Fix the border

**Proposed Response**      **Response Status**    **O**

**CI 45**      **SC 45.2.1**      **P 23**      **L 4**      # **3**  
Marris, Arthur      Cadence Design Syst

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

"Change" should be used instead of "Modify" in the editing instructions.

**SuggestedRemedy**

Change "modify" to "change" for all relevant editing instructions.

**Proposed Response**      **Response Status**    **O**

## Comments received

## IEEE P802.3bf D3.0 comments

CI 45 SC 45.2.1.100 P 23 L 22 # 13  
 Anslow, Peter Ciena Corporation  
 Comment Type E Comment Status X  
 Editing instruction ends "after the last subclause added in IEEE Std 802.3ba, 45.2.1:" which is difficult to understand.  
 SuggestedRemedy  
 Change to "after the last subclause added in 45.2.1 by IEEE Std 802.3ba:". Make the equivalent change to the editing instruction for 45.2.3.40 to 42  
 Proposed Response Response Status O

CI 45 SC 45.2.1.100 P 23 L 22 # 14  
 Anslow, Peter Ciena Corporation  
 Comment Type E Comment Status X  
 The headings for 45.2.1.100 through 45.2.1.102 are missing a space between the subclause number and the title. Also applies to 45.2.3.40 through 45.2.3.42, 45.2.4.10 through 45.2.4.12, 45.2.5.10 through 45.2.5.12 and 45.2.6.14 through 45.2.6.16  
 SuggestedRemedy  
 Correct the Autonumber format of the H4,1.1.1.1 style in clause 45  
 Proposed Response Response Status O

CI 45 SC 45.2.1.100 P 23 L 28 # 30  
 Thaler, Patricia Broadcom Corporation  
 Comment Type T Comment Status X  
 This comment applies to the TimeSync capability registers for all MMDs. Why are their separate capabilities bits for the send and receive? It seems that the information is only useful if it is provided for both directions and that implementations are unlikely to support the registers for one direction without supporting the other.  
 SuggestedRemedy  
 Consider using just one capability bit or respond to this comment with a use case for supporting the information for only one direction.  
 Proposed Response Response Status O

CI 45 SC 45.2.2.20 P 24 L 50 # 15  
 Anslow, Peter Ciena Corporation  
 Comment Type E Comment Status X  
 "immediately after the last subclause in IEEE Std 802.3-2008, 45.2.2:" is unnecessarily complicated.  
 SuggestedRemedy  
 Change to "immediately after 45.2.2.19:" Make equivalent change to instructions for 45.2.4.10 to 12, 45.2.5.10 to 12, 45.2.6.14 to 16  
 Proposed Response Response Status O

CI 90 SC 90.1 P 35 L 6 # 25  
 Barnette, James Vitesse Semiconducto  
 Comment Type E Comment Status X  
 Synchronisation is misspelled  
 SuggestedRemedy  
 Change to Synchronization  
 Proposed Response Response Status O

CI 90 SC 90.4 P 35 L 32 # 26  
 Barnette, James Vitesse Semiconducto  
 Comment Type E Comment Status X  
 "service interface" should be capitalized as part of TSSI acronym  
 SuggestedRemedy  
 Capitalize "Service Interface"  
 Proposed Response Response Status O

## Comments received

## IEEE P802.3bf D3.0 comments

**Cl 90**    **SC 90.4.1.2**    **P 36**    **L 51**    # **18**  
Hajduczenia, Marek    ZTE Corporation

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

"The TimeSync Client can use the indication of egress and ingress of packets provided by the TSSI" change to "The TimeSync Client can use the indication of event corresponding to the egress and ingress of packets provided by the TSSI" to make sure that it is absolutely clear we do not transmit time of such event but the indication of such an event

**SuggestedRemedy**  
per comment

**Proposed Response**    **Response Status**    **O**

**Cl 90**    **SC 90.4.1.2**    **P 37**    **L 1**    # **19**  
Hajduczenia, Marek    ZTE Corporation

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

The first paragraph should be modified to further clarify any potential doubts on the use of indication in the context of TSSI. Suggest to rewrite the text to "The TimeSync Client can use the indication of the event corresponding to the egress and ingress of packets at the xMII provided by the TSSI, combined with the information provided by the TimeSync PHY transmit data delay and TimeSync PHY receive data delay (see 30.12.1), to determine the egress and ingress of packets at the MDI."  
Suggest to use references to 30.12.1 definitions, which are mandatory while the CLause 45 definitions are optional.

**SuggestedRemedy**  
per comment

**Proposed Response**    **Response Status**    **O**

**Cl 90**    **SC 90.4.1.2**    **P 37**    **L 3**    # **16**  
Anslow, Peter    Ciena Corporation

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

This says "determine the egress and ingress of packets at the MDI.". Isn't the point to determine the egress and ingress times? You wouldn't need the delays just to determine the egress and ingress.

**SuggestedRemedy**  
Change to "determine the egress and ingress times of packets at the MDI."

**Proposed Response**    **Response Status**    **O**

**Cl 90**    **SC 90.4.3.1.1**    **P 37**    **L 30**    # **20**  
Hajduczenia, Marek    ZTE Corporation

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

Add the following statement for clarification "Otherwise, no primitive is generated". Similar change on page 37, line 54

**SuggestedRemedy**  
per comment

**Proposed Response**    **Response Status**    **O**

**Cl 90**    **SC 90.5.1**    **P 38**    **L 28**    # **21**  
Hajduczenia, Marek    ZTE Corporation

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

" (SFD=DETECTED)" should be moved to the end of the sentence it is located in. That sounds better and more logical, since the detection condition is defined at the end of the sentence

**SuggestedRemedy**  
per comment

**Proposed Response**    **Response Status**    **O**

**Cl 90**    **SC 90.5.2**    **P 38**    **L 37**    # **22**  
Hajduczenia, Marek    ZTE Corporation

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

" (SFD=DETECTED)" should be moved to the end of the sentence it is located in. That sounds better and more logical, since the detection condition is defined at the end of the sentence

**SuggestedRemedy**  
per comment

**Proposed Response**    **Response Status**    **O**

## Comments received

## IEEE P802.3bf D3.0 comments

CI 90 SC 90.6 P 39 L 30 # 27  
 Barnette, James Vitesse Semiconducto  
 Comment Type E Comment Status X  
 "Management Features" should not be capitalized  
 SuggestedRemedy  
 Remove capitalization changing to "management features"  
 Proposed Response Response Status O

CI 90 SC 90.7 P 41 L 30 # 35  
 Frazier, Howard M Broadcom Corporation  
 Comment Type TR Comment Status X  
 As the data delay values are reported in units of ns (as stated in Clause 45), there is an implied precision to the measurement, and this should be stated.  
 SuggestedRemedy  
 Add the following sentence to the end of 90.7: "The data delay measurements are reported with an implied precision of one ns."  
 Proposed Response Response Status O

CI 99 SC 99 P 1 L 34 # 36  
 Booth, Brad Applied Micro (AMCC)  
 Comment Type E Comment Status X  
 D3.0 is not in Working Group review.  
 SuggestedRemedy  
 Delete following sentence from paragraph:  
 Draft D3.0 is prepared by the IEEE 802.3bf Ethernet Support for the IEEE P802.1AS Time Synchronization Protocol Task Force for Working Group review.  
 Proposed Response Response Status O

CI 99 SC 99 P 1 L 35 # 4  
 Anslow, Peter Ciena Corporation  
 Comment Type E Comment Status X  
 Says "for Working Group review"  
 SuggestedRemedy  
 Change to "for Sponsor ballot recirculation" (for D 3.1)  
 Proposed Response Response Status O

CI 99 SC 99 P 4 L 45 # 5  
 Anslow, Peter Ciena Corporation  
 Comment Type E Comment Status X  
 IEEE Std 802.3az has now been published  
 SuggestedRemedy  
 Change 201x to 2010  
 Proposed Response Response Status O

CI 99 SC 99 P 4 L 45 # 37  
 Booth, Brad Applied Micro (AMCC)  
 Comment Type E Comment Status X  
 802.3az can be updated to be 2010.  
 SuggestedRemedy  
 Update IEEE Std 802.3az(TM)-201X to be IEEE Std 802.3az(TM)-2010.  
 Proposed Response Response Status O

CI 99 SC 99 P 4 L 45 # 40  
 Booth, Brad Applied Micro (AMCC)  
 Comment Type E Comment Status X  
 Missing a reference to IEEE Std. 802.3bd-201x.  
 SuggestedRemedy  
 Add reference.  
 Proposed Response Response Status O