

IEEE P802.3de Enhancements to MAC Merge and TSSI for Pt-to-Pt SPE Initial Working Group ballot comment

CI **FM** SC **FM** P1 L11 # 5

Dawe, Piers Nvidia

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

There should be an amendment number here (although it may change). According to line 28 and page 10, this is predicted to be amendment 2.

*SuggestedRemedy*  
Change "Amendment:" to Amendment 2:"

Response Response Status **C**

ACCEPT IN PRINCIPLE.  
Editor to consult with 802.3 updated amendment order and adjust numbering appropriately.

CI **FM** SC **FM** P1 L29 # 6

Dawe, Piers Nvidia

Comment Type **ER** Comment Status **A** PAR scope

In Section 7, "MAC Merge sublayer" appears 54 times and "MAC Merge function" does not appear at all.

*SuggestedRemedy*  
Follow the established terminology; change "MAC Merge function" to "MAC Merge sublayer" in three places.

Response Response Status **W**

ACCEPT IN PRINCIPLE.  
Change "MAC Merge function" to "MAC Merge sublayer" in the Abstract on page 3.

Leave it as "MAC Merge function" on pages 1 and 10, to align with the PAR Scope in 5.2b.

"MAC Merge function" is the terminology used in the PAR, and the purpose of the amendment needs to match the PAR in the description of the amendment on page 1 and in the frontmatter. This difference was discussed when the PAR was written, and the "function" is what we specify - the "sublayer" is the mechanism we specify that function in. For the text on page 1 and the description, "function" is correct, while the abstract defines what specifications actually changed (not why it was changed) and therefore the change to sublayer is appropriate there.

CI **FM** SC **FM** P1 L30 # 7

Dawe, Piers Nvidia

Comment Type **E** Comment Status **R** PAR scope

Here, MAC Merge and TSSI support PHYs while on page 10, PHYs support MAC Merge TSSI. It can't be both ways round. The floor supports the table, the table doesn't support the floor.

*SuggestedRemedy*  
Preferably, use better words than "support". The text here could be:  
"... MAC Merge function and the Time Synchronization Service Interface (TSSI) for use with/on/over 10 Mb/s Single-Pair Ethernet point to point PHYs".  
Similarly in the abstract on page 3.  
The description of 802.3de on page 10 could be:  
"... PHYs compatible with the MAC Merge function and the Time Synchronization Service Interface (TSSI)."  
Also: shouldn't the abstract and the description be very similar?

Response Response Status **C**

REJECT.  
The CRG disagrees with the commenter.  
The purpose text is aligned with the scope of the PAR (5.2b). In the physical devices, the PHYs support the specification, which aligns with the PAR scope as well, and is clear. Changing the description text in the frontmatter is unneeded for clarity would cause unnecessary churn in subsequent amendments already in process.

CI **FM** SC **FM** P3 L1 # 42

Grow, Robert RMG Consulting

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

Awkward grammar

*SuggestedRemedy*  
Change "This amendment to IEEE Std 802.3-202x to specify additions to..." to "This amendment to IEEE Std 802.3-202x specifies additions to..."

Response Response Status **C**

ACCEPT IN PRINCIPLE.  
Resolved by comment #18  
Response to comment #18 is ACCEPT  
(Change: This amendment to IEEE Std 802.3-202x to specify additions to  
To: This amendment to IEEE Std 802.3-202x specifies additions to)

IEEE P802.3de Enhancements to MAC Merge and TSSI for Pt-to-Pt SPE Initial Working Group ballot comment

Cl 00 SC 0 P3 L1 # 60

Jones, Peter Cisco  
 Comment Type E Comment Status A EZ

Editorial problem in abstract. The text says  
 This amendment to IEEE Std 802.3-202x to specify additions to and appropriate  
 modifications of

SuggestedRemedy

Replace "to specify" with "specifies"

Response Response Status C

ACCEPT IN PRINCIPLE.  
 Resolved by comment #18  
 Response to comment #18 is ACCEPT  
 (Change: This amendment to IEEE Std 802.3-202x to specify additions to  
 To: This amendment to IEEE Std 802.3-202x specifies additions to)

Cl FM SC FM P3 L1 # 18

Wienckowski, Natalie General Motors  
 Comment Type E Comment Status A EZ

poor wording

SuggestedRemedy

Change: This amendment to IEEE Std 802.3-202x to specify additions to  
 To: This amendment to IEEE Std 802.3-202x specifies additions to

Response Response Status C

ACCEPT.

Cl Abstrac SC Abstract P3 L1 # 51

Kabra, Lokesh Synopsys Inc  
 Comment Type E Comment Status R Frontmatter

SuggestedRemedy

Response Response Status C

REJECT.  
 Blank comment. Presumably, by location, this comment is on the grammar in the abstract  
 resolved by comment #18. Commenter has been contacted and confirmed that this the  
 case.

Cl 00 SC 0 P3 L3 # 1

Maguire, Valerie The Siemon Company  
 Comment Type E Comment Status A Editorial

For consistency with the title of the document, replace "single pair" with "single-pair" when  
 the term is used before Ethernet.

SuggestedRemedy

Replace "Single Pair" with "Single-Pair"

Response Response Status C

ACCEPT.

Cl FM SC FM P3 L4 # 8

Dawe, Piers Nvidia  
 Comment Type E Comment Status A EZ

802.3cg

SuggestedRemedy

802.3de

Response Response Status C

ACCEPT IN PRINCIPLE.  
 Add "802.3de™ " to keyword list.  
 (802.3cg should remain because this amendment relates to PHY's added by 802.3cg)

Cl FM SC FM P4 L8 # 22

Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope,  
 Comment Type E Comment Status A EZ

Editorial note contains exception to IEEE style which is obsolete.

SuggestedRemedy

delete "One exception to IEEE style that is consciously used to simplify the balloting  
 process is the numbering of  
 the front matter. Instead of the front matter being lower case Roman numeral page  
 numbers, with the draft  
 restarting at 1 with Arabic page numbers, balloted front matter and draft are numbered  
 consecutively with  
 Arabic page numbers." on lines 8 -11 from editor's note.

Response Response Status C

ACCEPT IN PRINCIPLE.  
 Resolved by comment 43, Response to comment 43 is ACCEPT  
 (Delete second paragraph of the note.)

8E P802.3de Enhancements to MAC Merge and TSSI for Pt-to-Pt SPE Initial Working Group ballot comment

CI **FM** SC **FM** P4 L8 # 43

Grow, Robert RMG Consulting  
 Comment Type **E** Comment Status **A** EZ

The IEEE Style Manual has changed and the second paragraph of the note is no longer appropriate.

*SuggestedRemedy*  
 Delete second paragraph of the note.

Response Response Status **C**  
 ACCEPT.

CI **FM** SC **FM** P7 L27 # 44

Grow, Robert RMG Consulting  
 Comment Type **E** Comment Status **A** EZ

The ballot group is now known, please add it so WG members can review their listings.

*SuggestedRemedy*  
 Add 802.3 ballot group list.

Response Response Status **C**  
 ACCEPT.

CI **00** SC **0** P9 L1 # 61

Hajduczenia, Marek Charter Communications  
 Comment Type **E** Comment Status **A** Alignment

802.3de is amendment to 802.3dc, so I would assume the text of Introduction to match.

*SuggestedRemedy*  
 Copy text of Introduction, including text of all sections 1 - 9 from 802.3dc-D2.2 into next revision of 802.3de

Response Response Status **C**  
 ACCEPT IN PRINCIPLE.  
 Front matter and introduction text are aligned with 802.3dc-D3.0 by comments marked with the 'Alignment' topic.

CI **FM** SC **FM** P9 L6 # 45

Grow, Robert RMG Consulting  
 Comment Type **E** Comment Status **A** Alignment

Does the revision beng in SA ballot meet the intended stability condition in the second paragraph of the note? I think it does.

*SuggestedRemedy*  
 Do any additional alignment and perhaps note any changes to the draft revision will be tracked as new revision drafts become available.

Response Response Status **C**  
 ACCEPT IN PRINCIPLE.

Comments on this draft align with 802.3dc D3.0, currently in SA ballot.  
 Front matter and introduction text are aligned with 802.3dc-D3.0 by comments marked with the 'Alignment' topic.  
 Delete editor's note at lines 6 & 7.

CI **FM** SC **FM** P9 L17 # 23

Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope,  
 Comment Type **E** Comment Status **A** Alignment

"Ethernet at 10 Mb/s was approved" does not align with intro text in 802.3dc D3.0

*SuggestedRemedy*  
 Replace "Ethernet at 10 Mb/s" with ""Local Area Networks: Carrier sense multiple access with collision detection (CSMA/CD) access method and physical layer specifications"" (including quotes around text)

Response Response Status **C**  
 ACCEPT.

CI **FM** SC **FM** P9 L19 # 24

Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope,  
 Comment Type **E** Comment Status **A** Alignment

"A full duplex MAC protocol was added in 1997." does not align with intro text in 802.3dc D3.0

*SuggestedRemedy*  
 Replace "was added" with "and the ability to use an Ethertype to specify the MAC client protocol were added"

Response Response Status **C**  
 ACCEPT IN PRINCIPLE.

Replace intro paragraphs at page 9 lines 8-30 with paragraphs from 802.3dc D3.0

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**Cl FM**    **SC FM**                    **P9**            **L 24**            # **25**  
 Zimmerman, George                    CME Consulting/ADI, APL Gp, Cisco, CommScope,  
*Comment Type*    **E**            *Comment Status*    **A**                    *Alignment*  
 Trademark symbols on 802.3z, 802.3ae, and 802.3ba is also likely to get a TM in SA ballot...  
*SuggestedRemedy*  
 Add TM symbol to 802.3z, 802.3ae, and 802.3ba  
*Response*                                    *Response Status*    **C**  
 ACCEPT.

**Cl FM**    **SC FM**                    **P9**            **L 36**            # **26**  
 Zimmerman, George                    CME Consulting/ADI, APL Gp, Cisco, CommScope,  
*Comment Type*    **E**            *Comment Status*    **A**                    *Alignment*  
 Section 1 ends at Annex K in 802.3dc D3.0. Annex H should be Annex K to align with 802.3dc D3.0  
*SuggestedRemedy*  
 Change "Annex H" to "Annex K"  
*Response*                                    *Response Status*    **C**  
 ACCEPT.

**Cl FM**    **SC FM**                    **P9**            **L 40**            # **27**  
 Zimmerman, George                    CME Consulting/ADI, APL Gp, Cisco, CommScope,  
*Comment Type*    **E**            *Comment Status*    **A**                    *Alignment*  
 Section 2 ends at Annex 33A - there is no Annex 33E, this was an error in the intro to 802.3-2018  
*SuggestedRemedy*  
 Change "Annex 33E" to "Annex 33A"  
*Response*                                    *Response Status*    **C**  
 ACCEPT.

**Cl FM**    **SC FM**                    **P10**            **L 13**            # **28**  
 Zimmerman, George                    CME Consulting/ADI, APL Gp, Cisco, CommScope,  
*Comment Type*    **E**            *Comment Status*    **A**                    *Alignment*  
 "as well the 40 Gb/s" should be "as well as 40 Gb/s" to align with 802.3dc D3.0  
*SuggestedRemedy*  
 Change "as well the" to "as well as"  
*Response*                                    *Response Status*    **C**  
 ACCEPT.

**Cl FM**    **SC FM**                    **P10**            **L 25**            # **29**  
 Zimmerman, George                    CME Consulting/ADI, APL Gp, Cisco, CommScope,  
*Comment Type*    **E**            *Comment Status*    **A**                    *Alignment*  
 The introductory text for section eight reflects IEEE Std 802.3-2018 which only went to clause 126. This has substantially changed in 802.3dc D3.0, which includes new clauses to 140, as well as a section 9 for clauses through 160.  
*SuggestedRemedy*  
 Replace "Section Eight" paragraph (lines 25 - 29) with text from IEEE P802.3dc D3.0 for Section Eight and Section Nine (pg 26 of IEEE P802.3dc D3.0 lines 26 through 43).  
*Response*                                    *Response Status*    **C**  
 ACCEPT.

IEEE P802.3de Enhancements to MAC Merge and TSSI for Pt-to-Pt SPE Initial Working Group ballot comment

Cl **Intro** SC **Introduction** P10 L25 # 52

Kabra, Lokesh Synopsys Inc  
 Comment Type **ER** Comment Status **A** Alignment

Section 8 Description incomplete

*SuggestedRemedy*

Replace Section 8 description with

Includes Clause 116 through Clause 140 and Annex 119A through Annex 136D. Clause 116 through Clause 124 and associated annexes include general information on 200 Gb/s and 400 Gb/s operation as well as 200 Gb/s and 400 Gb/s Physical Layer specifications. Clause 125 includes general information on 2.5 Gb/s and 5 Gb/s operation. Clause 126 through Clause 130 and associated annexes include 2.5 Gb/s and 5 Gb/s Physical Layer specifications. Clause 131 provides general information on 50 Gb/s operation. Clause 132 through Clause 140 and associated annexes include 50 Gb/s Physical Layer specifications and additional 100 Gb/s, 200 Gb/s, and 400 Gb/s Physical Layer specifications.

Response Response Status **C**

ACCEPT IN PRINCIPLE.  
 Accommodated by comment #29  
 Response to comment #29 is: ACCEPT  
 (Replace "Section Eight" paragraph (lines 25 - 29) with text from IEEE P802.3dc D3.0 for Section Eight and Section Nine (pg 26 of IEEE P802.3dc D3.0 lines 26 through 43).)

Cl **FM** SC **FM** P10 L30 # 41

Murty, Ramana Broadcom  
 Comment Type **E** Comment Status **A** Alignment

Add section nine describing Clauses 141 - 160 per 802.3dc D3.0.

*SuggestedRemedy*

Per comment

Response Response Status **C**

ACCEPT IN PRINCIPLE.  
 Accommodated by comment #29  
 Response to comment #29 is: ACCEPT  
 (Replace "Section Eight" paragraph (lines 25 - 29) with text from IEEE P802.3dc D3.0 for Section Eight and Section Nine (pg 26 of IEEE P802.3dc D3.0 lines 26 through 43).)

Cl **Intro** SC **Introduction** P10 L30 # 53

Kabra, Lokesh Synopsys Inc  
 Comment Type **ER** Comment Status **A** Alignment

Section 9 Description missing

*SuggestedRemedy*

Add the following :  
 Section Nine—Includes Clause 141 through Clause 160 and Annex 142A through Annex 154A. Clause 141 through Clause 144 and associated annexes specify symmetric and asymmetric operation of Ethernet passive optical networks over multiple 25 Gb/s channels. Clause 145 and associated annexes specify increased power delivery using all four pairs in the structured wiring plant. Clause 146 through Clause 149 and associated annexes add Physical layers for 10 Mb/s, 2.5 Gb/s, 5 Gb/s, and 10 Gb/s operation over a single balanced pair of conductors. Clause 150 and Clause 151 add 400 Gb/s Physical Layer specifications. Clause 153 and Clause 154 specify 100 Gb/s operation over DWDM systems. Clause 157 through Clause 160 add 10 Gb/s, 25 Gb/s, and 50 Gb/s bidirectional Physical Layer specifications.

Response Response Status **C**

ACCEPT IN PRINCIPLE.  
 Accommodated by comment #29  
 Response to comment #29 is: ACCEPT  
 (Replace "Section Eight" paragraph (lines 25 - 29) with text from IEEE P802.3dc D3.0 for Section Eight and Section Nine (pg 26 of IEEE P802.3dc D3.0 lines 26 through 43).)

Cl **00** SC **0** P10 L34 # 2

Maguire, Valerie The Siemon Company  
 Comment Type **E** Comment Status **A** Editorial

For consistency with the title of the document, replace "single pair" with "single-pair" when the term is used before Ethernet. Request Editor of the P802.3dd project to adjust the title of this amendment accordingly.

*SuggestedRemedy*

Replace "Single Pair" with "Single-Pair"

Response Response Status **C**

ACCEPT IN PRINCIPLE.  
 Make the change suggested. Comment on 802.3dd title will need to be made on text draft, separately to that project.

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CI **FM** SC **FM** P10 L39 # 21  
 Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope,  
 Comment Type **E** Comment Status **A** Alignment  
 "changes to IEEE Std 802.3-2018" should be "changes to IEEE Std 802.3"  
 SuggestedRemedy  
 delete "-2018"  
 Response Response Status **C**  
 ACCEPT IN PRINCIPLE.  
 Accomodated by comment #9, response to comment #9 is ACCEPT  
 "IEEE Std 802.3-202x"

CI **00** SC **0** P10 L39 # 3  
 Maguire, Valerie The Siemon Company  
 Comment Type **E** Comment Status **A** Editorial  
 For consistency with the title of the document, replace "single pair" with "single-pair" when  
 the term is used before Ethernet.  
 SuggestedRemedy  
 Replace "Single Pair" with "Single-Pair"  
 Response Response Status **C**  
 ACCEPT.

CI **Introdu** SC **Introduction** P10 L39 # 54  
 Kabra, Lokesh Synopsys Inc  
 Comment Type **E** Comment Status **A** Alignment  
 Incorrect reference to 802.3 standard version  
 SuggestedRemedy  
 Replace "802.3-2018" with "802.3-202x"  
 Response Response Status **C**  
 ACCEPT IN PRINCIPLE.  
 Accomodated by comment #9, response to comment #9 is ACCEPT  
 "IEEE Std 802.3-202x"

CI **FM** SC **FM** P10 L39 # 9  
 Dawe, Piers Nvidia  
 Comment Type **E** Comment Status **A** Alignment  
 IEEE Std 802.3-2018  
 SuggestedRemedy  
 IEEE Std 802.3-202x  
 Response Response Status **C**  
 ACCEPT.

CI **FM** SC **FM** P12 L3 # 10  
 Dawe, Piers Nvidia  
 Comment Type **E** Comment Status **A** EZ  
 Amendment X  
 SuggestedRemedy  
 As it says in page 10: Amendment 2  
 Response Response Status **C**  
 ACCEPT IN PRINCIPLE.  
 Editor to consult with 802.3 updated amendment order and adjust numbering appropriately.

CI **00** SC **0** P12 L11 # 4  
 Maguire, Valerie The Siemon Company  
 Comment Type **E** Comment Status **A** Editorial  
 For consistency with the title of the document, replace "single pair" with "single-pair" when  
 the term is used before Ethernet.  
 SuggestedRemedy  
 Replace "Single Pair" with "Single-Pair"  
 Response Response Status **C**  
 ACCEPT.

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Cl **FM** SC **FM** P12 L48 # 11

Dawe, Piers Nvidia  
 Comment Type **E** Comment Status **R** Frontmatter

IEEE P802.3bj and IEEE P802.3bk are ancient history and "modified" in the past tense reinforces that. Also, it would help the reviewers and editors more if the correct list of "other IEEE 802.3 amendment projects running in parallel" were given.

*SuggestedRemedy*

Change "e.g., IEEE P802.3bj and IEEE P802.3bk" to the correct list of other IEEE 802.3 amendment projects running in parallel that modify the same text and tables "IEEE P802.3cx". (If there were none, delete "(e.g., IEEE P802.3bj and IEEE P802.3bk)".) Change "modified" to "modify".

Response Response Status **C**

REJECT.  
 The CRG disagrees with the commenter. 802.3bj and 802.3bk are given purely as an example, and the reader gets the point - they are amendments with adjacent (or near-adjacent) designations running at the same time.

Cl **90** SC **90** P13 L6 # 30

Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope,  
 Comment Type **E** Comment Status **A** Editorial

The editing instruction could be written more compactly to be resistant to any changes in IEEE 802.3dc ballot since only the first sentence is changed

*SuggestedRemedy*

Change editing instruction to "Change the first sentence of the second paragraph of 90.1 as follows (unchanged sentences not shown):" Delete second and subsequent sentences from line 9 through 13.

Response Response Status **C**

ACCEPT.

Cl **90** SC **90.1** P13 L8 # 12

Dawe, Piers Nvidia  
 Comment Type **E** Comment Status **A** Editorial

Don't make life hard for the reader. There are now too many PHY types and clauses for the reader to be expected to memorise them. There is only one PHY type in Clause 147.

*SuggestedRemedy*

Change "as well as Clause 147 PHYs" to "as well as for 10BASE-T1S (see Clause 147)". See other comments on the same text.

Response Response Status **C**

ACCEPT IN PRINCIPLE.  
 Accomodated by comment #13:  
 Response to comment #13 is ACCEPT IN PRINCIPLE.  
 Change first sentence to:  
 "The TSSI is defined for 10BASE-T1S (see Clause 147) in full-duplex and point-to-point half-duplex modes of operation, and for other PHY types in full-duplex mode."

Cl **90** SC **90.1** P13 L8 # 55

Kabra, Lokesh Synopsys Inc  
 Comment Type **E** Comment Status **A** Editorial

Better sentence construct.

*SuggestedRemedy*

Replace "The TSSI is defined for the full-duplex mode of operation, as well as Clause 147 PHYs" with  
 "The TSSI is defined for full-duplex mode of operation, as well as for Clause 147 PHYs"

Response Response Status **C**

ACCEPT IN PRINCIPLE.  
 Accomodated by comment #13:  
 Response to comment #13 is ACCEPT IN PRINCIPLE.  
 Change first sentence to:  
 "The TSSI is defined for 10BASE-T1S (see Clause 147) in full-duplex and point-to-point half-duplex modes of operation, and for other PHY types in full-duplex mode."

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Cl 90 SC 90.1 P13 L 8 # 13

Dawe, Piers Nvidia  
 Comment Type E Comment Status A Editorial

As the standard order is slow to fast, and "as well as" implies some kind of priority (in date?)...

SuggestedRemedy

This might be better reversed:  
 The TSSI is defined for 10BASE-T1S (see Clause 147) in the point-to-point full-duplex and half-duplex modes of operation only, and for other PHY types in full-duplex mode.

Response Response Status C

ACCEPT IN PRINCIPLE.  
 Change first sentence to:  
 "The TSSI is defined for 10BASE-T1S (see Clause 147) in full-duplex and point-to-point half-duplex modes of operation, and for other PHY types in full-duplex mode."

Cl 90 SC 90.1 P13 L 10 # 62

Hajduczenia, Marek Charter Communications  
 Comment Type ER Comment Status A Alignment

I believe the baseline text is NOT taken from 802.3dc-D2.2. Entry for "50GMII (Clause 132)," is missing

SuggestedRemedy

The list of supported xMII should be as follows: "The MII (Clause 22), GMII (Clause 35), XGMII (Clause 46), 25GMII (Clause106), XLGMII (Clause 81), CGMII (Clause 81), 50GMII (Clause 132), 200GMII (Clause 117), and 400GMII (Clause 117)"

Response Response Status W

ACCEPT.

Cl 90 SC 90.4.1 P13 L 16 # 31

Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope,  
 Comment Type E Comment Status A Figure NOTE

IEEE P802.3dc D3.0 includes the edit to add 10BASE-T1L and 10BASE-T1S, so there is no need to make that here.

SuggestedRemedy

Delete lines 16-29, including 90.4.1, 90.4.1.1, editor's note, and edit to change the NOTE.

Response Response Status C

ACCEPT.

Cl 90 SC 90.4.1 P13 L 20 # 47

Grow, Robert RMG Consulting  
 Comment Type E Comment Status A Figure NOTE

The edited text is included in P802.3/D3.0 in response to Maintenance request #1390. (Maintenance change approved during P802.3 WG ballot.)

SuggestedRemedy

Delete lines 11-16, optionally include an editor's note indicating changes included in previous drafts to the note to Figure 99-1 were deleted as the changes were approved in P802.3 WG ballot and are now included in P802.3/D3.0.

Response Response Status C

ACCEPT IN PRINCIPLE.  
 Accomodated by comment #31  
 Response to comment #31 is ACCEPT:  
 (Delete lines 16-29, including 90.4.1, 90.4.1.1, editor's note, and edit to change the NOTE.)

Cl 90 SC 90.4.1 P13 L 20 # 46

Grow, Robert RMG Consulting  
 Comment Type E Comment Status A Figure NOTE

The edited text is included in P802.3/D3.0 in response to Maintenance request #1389. (Maintenance change approved during P802.3 WG ballot.)

SuggestedRemedy

Delete the subclause, optionally include an editor's note indicating changes included in previous drafts were deleted as the changes were approved in P802.3 WG ballot and are now included in P802.3/D3.0.

Response Response Status C

ACCEPT IN PRINCIPLE.  
 Accomodated by comment #31  
 Response to comment #31 is ACCEPT:  
 (Delete lines 16-29, including 90.4.1, 90.4.1.1, editor's note, and edit to change the NOTE.)



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Cl 90 SC 90.4.1.1 P13 L 27 # 35

Ran, Adeel Cisco  
 Comment Type T Comment Status A Figure NOTE

As of 802.3dc D2.3, Note 1 in Figure 90-1 has the effective text in this draft. Therefore it needs no amendment.

**Suggested Remedy**

Remove the content of 90.4.1 and its subclauses, including the editor's note and editorial instruction.

Response Response Status C

ACCEPT IN PRINCIPLE.  
 Accommodated by comment #31  
 Response to comment #31 is ACCEPT:  
 (Delete lines 16-29, including 90.4.1, 90.4.1.1, editor's note, and edit to change the NOTE.)

Cl 90 SC 90.4.1.1 P13 L 27 # 19

Wienckowski, Natalie General Motors  
 Comment Type E Comment Status A Figure NOTE

change to match 802.3cx D2.1 text

**Suggested Remedy**

Change: NOTE 1—In this figure, the xMII is used as a generic term for the Media Independent Interfaces for implementations of 10BASE-T1L, 10BASE-T1S, and 100 Mb/s and above. For example: for 100 Mb/s implementations  
 To: NOTE 1—In this figure, the xMII is used as a generic term for the Media Independent Interfaces for implementations of 10 Mb/s and above. For example: for 10 Mb/s and 100 Mb/s implementations

Response Response Status C

ACCEPT IN PRINCIPLE.  
 Accommodated by comment #31  
 Response to comment #31 is ACCEPT:  
 (Delete lines 16-29, including 90.4.1, 90.4.1.1, editor's note, and edit to change the NOTE.)

Cl 90 SC 90.4.1.1 P13 L 28 # 49

Healey, Adam Broadcom Inc.  
 Comment Type E Comment Status A Figure NOTE

IEEE P802.3de will be an amendment to the next revision of IEEE Std 802.3. Draft 2.2 of the revision (IEEE 802.3dc) includes the change to NOTE 1 in Figure 90-1. This change instruction is redundant.

**Suggested Remedy**

Remove change to NOTE 1 in Figure 90-1 and the associated editor's note.

Response Response Status C

ACCEPT IN PRINCIPLE.  
 Accommodated by comment #31  
 Response to comment #31 is ACCEPT:  
 (Delete lines 16-29, including 90.4.1, 90.4.1.1, editor's note, and edit to change the NOTE.)

Cl 90 SC 90.4.1.1 P13 L 28 # 38

Nicholl, Shawn Xilinx  
 Comment Type E Comment Status A Figure NOTE

The NOTE does not provide the mapping for the newly-added 10 Mb/s rates. Also, the NOTE is inconsistent with latest P802.3cx\_D2p1 draft.

**Suggested Remedy**

Propose to replace with:  
 NOTE—In this figure, the xMII is used as a generic term for the Media Independent Interfaces for implementations of 10 Mb/s and above. For example: for 10 Mb/s and 100 Mb/s implementations this interface is called MII; for 1 Gb/s implementations ...

Response Response Status C

ACCEPT IN PRINCIPLE.  
 Accommodated by comment #31  
 Response to comment #31 is ACCEPT:  
 (Delete lines 16-29, including 90.4.1, 90.4.1.1, editor's note, and edit to change the NOTE.)  
 (note - this aligns with the text of 802.3dc D3.0. P802.3cx\_D2p1 follows this amendment, and a comment has been made to bring 802.3cx in alignment with 802.3dc and this proposed response)

IEEE P802.3de Enhancements to MAC Merge and TSSI for Pt-to-Pt SPE Initial Working Group ballot comment

Cl 90 SC 90.4.3.1.1 P13 L39 # 37

Slavick, Jeff Broadcom  
 Comment Type TR Comment Status A Half-Duplex

The sentence is describing a behavior that TimeSync Client will see for half-duplex PHYs. This is not defining what TS\_TX.indication is.

SuggestedRemedy

Add "NOTE" before the sentence beginning with "When using the half-duplex"

Response Response Status W

ACCEPT.

Cl 90 SC 90.4.3.2.1 P13 L42 # 56

Kabra, Lokesh Synopsys Inc  
 Comment Type E Comment Status A Half-Duplex

Note about multiple TS\_RX.indications for a packet in half-duplex mode missing

SuggestedRemedy

Insert a new final paragraph in 90.4.3.2.1 as shown:  
 When using the half-duplex mode of operation, multiple TS\_RX indications may be produced for a single packet as a result of collisions on the media.

Response Response Status C

ACCEPT IN PRINCIPLE.  
 Add 90.4.3.2 to the draft:  
 90.4.3.2 TS\_RX.indication primitive  
 90.4.3.2.1 Semantics  
 Insert a new final paragraph in 90.4.3.2.1 as shown:  
 "NOTE - When using the half-duplex mode of operation, multiple TS\_RX indications may be produced for a single packet as a result of collisions on the media.

Cl 99 SC 99 P14 L # 58

Kabra, Lokesh Synopsys Inc  
 Comment Type T Comment Status R Half-Duplex

I am not sure whether the effect of collisions & retransmissions of fragments is considered in Receive Processing state diagram; For example, in Figure 99-6, in state P\_RECEIVE\_DATA, if the incoming continuation fragment is terminated due to collision (!RX\_MCRC\_OK & !rRxDx), the state transitions to FRAME\_COMPLETE. When the remote station retransmits the continuation fragment, it will be declared as a BAD\_FRAG; Is this intended?

SuggestedRemedy

Receive Processing to be updated for handling of collisions/retransmission of fragments in half-duplex mode

Response Response Status C

REJECT.  
 (from comment i-59)  
 Insert Editor's note at P14 L18:  
 Editor's Note (to be resolved prior to close of WG ballot) - Issues have been raised with regards to the need for additional changes in Transmit and Receive Processing for 10BASE-T1S point-to-point half duplex (other half-duplex PHYs being out of project scope). See comments i-58 and i-59 for more detail. Comments do not provide sufficient detail to resolve. Presentations and further comments to with specific changes to resolve issues are solicited.

Cl 99 SC 99 P14 L # 59

Kabra, Lokesh Synopsys Inc  
 Comment Type T Comment Status R Half-Duplex

Similarly, impact of collisions/retransmission of fragments in not fully considered/explained in Transmit Processing. For example, if collision occurs during transmission of preemptable fragment, then Transmit processing remains in PREEMPTABLE\_TX state because pTxCplt = FALSE. In such a case, express packet will remain in queue and gets delayed until the retransmission of the fragment is complete after the random back-off. Is this intended?

SuggestedRemedy

Transmit Processing to be updated for handling of collisions/retransmission of fragments in half-duplex mode

Response Response Status C

REJECT.  
 Insert Editor's note at P14 L18:  
 Editor's Note (to be resolved prior to close of WG ballot) - Issues have been raised with regards to the need for additional changes in Transmit and Receive Processing for 10BASE-T1S point-to-point half duplex (other half-duplex PHYs being out of project scope). See comments i-58 and i-59 for more detail. Comments do not provide sufficient detail to resolve. Presentations and further comments to with specific changes to resolve issues are solicited.

IEEE P802.3de Enhancements to MAC Merge and TSSI for Pt-to-Pt SPE Initial Working Group ballot comment

Cl 99 SC 99.1 P14 L 8 # 15

Dawe, Piers Nvidia  
 Comment Type T Comment Status A Editorial

While the base text in 99.1 made sense discussing one end of a link, "a point-to-point link with a pair of MACs and a single PHY" doesn't make sense.

*SuggestedRemedy*

See suggestion in another comment on the same text

Response Response Status C

ACCEPT IN PRINCIPLE.  
 Comment or response does not provide sufficient detail to make a change.

Accommodated by comment 39:  
 Response to comment 39 is:  
 ACCEPT IN PRINCIPLE.  
 Replace the first sentence of 99.1 (with appropriate change marks and change instruction from the base text), to read:

"This clause specifies an optional MAC Merge sublayer operating in a station with a pair of MACs and a single PHY connected to a point-to-point link. The clause is applicable to full-duplex operation with 10BASE-T1L (Clause 146) and 10BASE-T1S (Clause 147) PHYs and all phys 100 Mb/s and above. It is also applicable to half-duplex point-to-point operation with the 10BASE-T1S (Clause 147) PHY, but operation with the 10BASE-T1S PHY in multidrop mode is not specified."

Cl 99 SC 99.1 P14 L 9 # 14

Dawe, Piers Nvidia  
 Comment Type TR Comment Status A Half-Duplex

This would extend MAC Merge to half-duplex PHYs at 100 Mb/s and 1000 Mb/s which I do not believe is the intention and is outside the scope of the PAR (5.2.b says "10 Mb/s Single Pair Ethernet point to point PHYs"). TR because outside the scope of the PAR.

*SuggestedRemedy*

Delete "full-duplex" here where it applies to 100 Mb/s or higher, or change the PAR.

Response Response Status W

ACCEPT IN PRINCIPLE.  
 Accommodated by comment 39:  
 Response to comment 39 is:  
 ACCEPT IN PRINCIPLE.  
 Replace the first sentence of 99.1 (with appropriate change marks and change instruction from the base text), to read:

"This clause specifies an optional MAC Merge sublayer operating in a station with a pair of MACs and a single PHY connected to a point-to-point link. The clause is applicable to full-duplex operation with 10BASE-T1L (Clause 146) and 10BASE-T1S (Clause 147) PHYs and all phys 100 Mb/s and above. It is also applicable to half-duplex point-to-point operation with the 10BASE-T1S (Clause 147) PHY, but operation with the 10BASE-T1S PHY in multidrop mode is not specified."

:E P802.3de Enhancements to MAC Merge and TSSI for Pt-to-Pt SPE Initial Working Group ballot comme

Cl 99 SC 99.1 P14 L9 # 16

Dawe, Piers Nvidia  
 Comment Type E Comment Status A Half-Duplex

As the standard order is slow to fast, short to long, and "as well as" implies some kind of priority (in date?)...

*SuggestedRemedy*

This might be better reversed:  
 This clause specifies an optional MAC Merge sublayer for use on a point-to-point link with 10BASE-T1S (see Clause 147) or 10BASE-T1L (see Clause 146) PHYs, or PHYs operating at 100 Mb/s or higher, and a pair of full-duplex MACs for each PHY.

Response Response Status C

ACCEPT IN PRINCIPLE.  
 The proposed rewording could be introduces confusion as to whether point-to-point, clause 147 PHYs with a pair of half-duplex MACs are included (they are).

Accommodated by comment 39:  
 Response to comment 39 is:  
 ACCEPT IN PRINCIPLE.  
 Replace the first sentence of 99.1 (with appropriate change marks and change instruction from the base text), to read:

"This clause specifies an optional MAC Merge sublayer operating in a station with a pair of MACs and a single PHY connected to a point-to-point link. The clause is applicable to full-duplex operation with 10BASE-T1L (Clause 146) and 10BASE-T1S (Clause 147) PHYs and all phys 100 Mb/s and above. It is also applicable to half-duplex point-to-point operation with the 10BASE-T1S (Clause 147) PHY, but operation with the 10BASE-T1S PHY in multidrop mode is not specified."

Cl 99 SC 99.1 P14 L9 # 32

Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope,  
 Comment Type E Comment Status A Half-Duplex

unneded comma between "10BASE-T1L" and "and Clause 147"

*SuggestedRemedy*

change "Clause 146 10BASE-T1L, and Clause 147 10BASE-T1S PHYs" to "Clause 146 10BASE-T1L and Clause 147 10BASE-T1S PHYs"

Response Response Status C

ACCEPT IN PRINCIPLE.  
 Accomodated by comment 39:  
 Response to comment 39 is:  
 ACCEPT IN PRINCIPLE.  
 Replace the first sentence of 99.1 (with appropriate change marks and change instruction from the base text), to read:

"This clause specifies an optional MAC Merge sublayer operating in a station with a pair of MACs and a single PHY connected to a point-to-point link. The clause is applicable to full-duplex operation with 10BASE-T1L (Clause 146) and 10BASE-T1S (Clause 147) PHYs and all phys 100 Mb/s and above. It is also applicable to half-duplex point-to-point operation with the 10BASE-T1S (Clause 147) PHY, but operation with the 10BASE-T1S PHY in multidrop mode is not specified."

Cl 99 SC 99.1 P14 L9 # 39

Nicholl, Shawn Xilinx  
 Comment Type E Comment Status A Half-Duplex

The introduction sentence is becoming somewhat awkward to read.

*SuggestedRemedy*

Propose to break it into two sentences:  
 - This clause specifies an optional MAC Merge sublayer for use on a point-to-point link with a pair of MACs and a single PHY. The single PHY shall be a Clause 146 10BASE-T1L PHY, or a Clause 147 10GBASE-T1S PHY, or a PHY operating at 100 Mb/s or higher.

Response Response Status C

ACCEPT IN PRINCIPLE.  
 Replace the first sentence of 99.1 (with appropriate change marks and change instruction from the base text), to read:

"This clause specifies an optional MAC Merge sublayer operating in a station with a pair of MACs and a single PHY connected to a point-to-point link. The clause is applicable to full-duplex operation with 10BASE-T1L (Clause 146) and 10BASE-T1S (Clause 147) PHYs and all phys 100 Mb/s and above. It is also applicable to half-duplex point-to-point operation with the 10BASE-T1S (Clause 147) PHY, but operation with the 10BASE-T1S PHY in multidrop mode is not specified."

IEEE P802.3de Enhancements to MAC Merge and TSSI for Pt-to-Pt SPE Initial Working Group ballot comment

Cl 99 SC 99.1 P14 L9 # 57

Kabra, Lokesh Synopsys Inc  
 Comment Type E Comment Status A Half-Duplex

The new sentence does not look proper. The first part refers to a "pair of MACs and a single PHY operating at 100 Mb/s or higher" but the second part "as well as Clause 146/147 PHYs" does not tie up.

*SuggestedRemedy*

Replace "MACs and a single PHY operating at 100 Mb/s or higher, as well as Clause 146 10BASE-T1L, and Clause 147 10BASE-T1S PHYs" with "MACs and a single PHY operating at 100 Mb/s or higher, or a Clause 146 10BASE-T1L PHY, or a Clause 147 10BASE-T1S PHY"

Response Response Status C

ACCEPT IN PRINCIPLE.

Accommodated by comment 39:  
 Response to comment 39 is:  
 ACCEPT IN PRINCIPLE.  
 Replace the first sentence of 99.1 (with appropriate change marks and change instruction from the base text), to read:

"This clause specifies an optional MAC Merge sublayer operating in a station with a pair of MACs and a single PHY connected to a point-to-point link. The clause is applicable to full-duplex operation with 10BASE-T1L (Clause 146) and 10BASE-T1S (Clause 147) PHYs and all phys 100 Mb/s and above. It is also applicable to half-duplex point-to-point operation with the 10BASE-T1S (Clause 147) PHY, but operation with the 10BASE-T1S PHY in multidrop mode is not specified."

Cl 99 SC 99.1 P14 L9 # 63

Hajduczenia, Marek Charter Communications  
 Comment Type E Comment Status A EZ

Clause 146 and Clause 147 should be marked as external references, i.e., Forest Green.

*SuggestedRemedy*

Per comment

Response Response Status C

ACCEPT.

Cl 99 SC 99.1 P14 L10 # 17

Dawe, Piers Nvidia  
 Comment Type TR Comment Status A Half-Duplex

As for Clause 90, need to make clear which modes of 10BASE-T1S can and can't use MAC Merge (according to the scope of the project in the PAR, only the point to point modes can). The draft text is too brief, and may be ambiguous.

*SuggestedRemedy*

Add a sentence "The MAC Merge sublayer is optional with 10BASE-T1S in full-duplex point-to-point and half-duplex point-to-point modes, and not applicable with 10BASE-T1S half-duplex shared-medium mode (referred to as multidrop mode); or make this clear and unambiguous another way; or change the PAR.

Response Response Status W

ACCEPT IN PRINCIPLE.  
 Accommodated by comment 39:  
 Response to comment 39 is:  
 ACCEPT IN PRINCIPLE.  
 Replace the first sentence of 99.1 (with appropriate change marks and change instruction from the base text), to read:

"This clause specifies an optional MAC Merge sublayer operating in a station with a pair of MACs and a single PHY connected to a point-to-point link. The clause is applicable to full-duplex operation with 10BASE-T1L (Clause 146) and 10BASE-T1S (Clause 147) PHYs and all phys 100 Mb/s and above. It is also applicable to half-duplex point-to-point operation with the 10BASE-T1S (Clause 147) PHY, but operation with the 10BASE-T1S PHY in multidrop mode is not specified."

Cl 99 SC 99.1 P14 L11 # 33

Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope,  
 Comment Type E Comment Status A Figure NOTE

Change to Note on Figure 99-1 is made in IEEE P802.3dc D3.0, no need to make it here.

*SuggestedRemedy*

Delete lines 11-16, including editing instruction and change to note.

Response Response Status C

ACCEPT IN PRINCIPLE.  
 Accommodated by comment #36  
 Response to comment #36 is ACCEPT:  
 (Remove the second editorial instruction in 99.1 and the paragraph following it.)

IEEE P802.3de Enhancements to MAC Merge and TSSI for Pt-to-Pt SPE Initial Working Group ballot comment

CI 99 SC 99.1 P14 L12 # 36

Ran, Adeel Cisco  
 Comment Type T Comment Status A Figure NOTE

As of 802.3dc D2.3, Note 1 in Figure 99-1 has the effective text in this draft. Therefore it needs no amendment.

*SuggestedRemedy*

Remove the second editorial instruction in 99.1 and the paragraph following it.

Response Response Status C

ACCEPT.

CI 99 SC 99.1 P14 L14 # 40

Nicholl, Shawn Xilinx  
 Comment Type E Comment Status A Figure NOTE

The NOTE does not provide the mapping for the newly-added 10 Mb/s rates. Also, the NOTE is inconsistent with latest P802.3cx\_D2p1 draft.

*SuggestedRemedy*

Propose to replace with:  
 NOTE—In this figure, the xMII is used as a generic term for the Media Independent Interfaces for implementations of 10 Mb/s and above. For example: for 10 Mb/s and 100 Mb/s implementations this interface is called MII; for 1 Gb/s implementations ...

Response Response Status C

ACCEPT IN PRINCIPLE.  
 Accommodated by comment #36  
 Response to comment #36 is ACCEPT:  
 (Remove the second editorial instruction in 99.1 and the paragraph following it.)

(note - this aligns with the text of 802.3dc D3.0. P802.3cx\_D2p1 follows this amendment, and a comment has been made to bring 802.3cx in alignment with 802.3dc and this proposed response)

CI 99 SC 99.1 P14 L15 # 20

Wienckowski, Natalie General Motors  
 Comment Type E Comment Status A Figure NOTE

change to match 802.3cx D2.1 text in NOTE1 in 90.4.1.1.

*SuggestedRemedy*

Change: 10BASE-T1L, 10BASE-T1S, and 100 Mb/s and above. For example: for 100 Mb/s  
 To: 10 Mb/s and above. For example: for 10 Mb/s and 100 Mb/s

Response Response Status C

ACCEPT IN PRINCIPLE.  
 Accommodated by comment #36  
 Response to comment #36 is ACCEPT:  
 (Remove the second editorial instruction in 99.1 and the paragraph following it.)

(note - this aligns with the text of 802.3dc D3.0. P802.3cx\_D2p1 follows this amendment, and a comment has been made to bring 802.3cx in alignment with 802.3dc and this proposed response)

CI 99 SC 99.1 P14 L15 # 50

Healey, Adam Broadcom Inc.  
 Comment Type E Comment Status A Figure NOTE

IEEE P802.3de will be an amendment to the next revision of IEEE Std 802.3. Draft 2.2 of the revision (IEEE 802.3dc) includes the change to NOTE in Figure 99-1. This change instruction is redundant.

*SuggestedRemedy*

Remove the change to NOTE in Figure 99-1.

Response Response Status C

ACCEPT IN PRINCIPLE.  
 Accommodated by comment #36  
 Response to comment #36 is ACCEPT:  
 (Remove the second editorial instruction in 99.1 and the paragraph following it.)

IE P802.3de Enhancements to MAC Merge and TSSI for Pt-to-Pt SPE Initial Working Group ballot comment

Cl 99 SC 99.4.5 P14 L 25 # 64

Hajduczenia, Marek Charter Communications

Comment Type ER Comment Status A PICS

New shall added, no PICS added / updated.  
The same in line 33 on page 14

SuggestedRemedy  
Per comment

Response Response Status W

ACCEPT IN PRINCIPLE.  
Accommodated by comment #34  
Response to comment #34 is ACCEPT:  
(Add 99.5.3.1 Functional specifications PICS table to draft, inserting new PICS items, with editing instruction and inserts:  
Insert new rows for PICS items MM11a and MM13a as shown (unchanged rows not shown):

"MM11a,  
Feature = Receive processing PLS\_SIGNAL.indication, Section = 99.4.5, Value/Comment = If PLS\_SIGNAL.indication is received, indication with the same SIGNAL\_STATUS is sent to the pMAC.  
Status = M  
Support = Yes [ ]"

"MM13a,  
Feature = Express filter processing PLS\_SIGNAL.indication, Section = 99.4.6, Value/Comment = If PLS\_SIGNAL.indication is received, indication with the same SIGNAL\_STATUS is sent to the eMAC.  
Status = M  
Support = Yes [ ]")

Cl 99 SC 99.4.5 P14 L 25 # 34

Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope,

Comment Type T Comment Status A PICS

Two new requirements (shalls) are added (one in 99.4.5, one in 99.4.6), which need PICS

SuggestedRemedy  
Add 99.5.3.1 Functional specifications PICS table to draft, inserting new PICS items, with editing instruction and inserts:  
Insert new rows for PICS items MM11a and MM13a as shown (unchanged rows not shown):

"MM11a,  
Feature = Receive processing PLS\_SIGNAL.indication, Section = 99.4.5, Value/Comment = If PLS\_SIGNAL.indication is received, indication with the same SIGNAL\_STATUS is sent to the pMAC.  
Status = M  
Support = Yes [ ]"

"MM13a,  
Feature = Express filter processing PLS\_SIGNAL.indication, Section = 99.4.6, Value/Comment = If PLS\_SIGNAL.indication is received, indication with the same SIGNAL\_STATUS is sent to the eMAC.  
Status = M  
Support = Yes [ ]"

Response Response Status C

ACCEPT.

Cl 90 SC 90.4.6 P14 L 27 # 48

Grow, Robert RMG Consulting

Comment Type E Comment Status A Other

The edited text is included in P802.3/D3.0 in response to Maintenance request #1344.  
(Maintenance change approved during P802.3 WG ballot.)

SuggestedRemedy  
Delete lines 27-34, optionally include an editor's note indicating changes included in previous drafts were deleted as the changes were approved in P802.3 WG ballot and are now included in P802.3/D3.0.

Response Response Status C

ACCEPT IN PRINCIPLE.  
The text in 99.4.6 in the base standard does not include this change. Perhaps the commenter was referring to the change in 99.1 to the note in Figure 99-1, which is included in 802.3/D3.0 and is covered by other comments.