Cl **00** *SC* *P* *L* # 167

Thaler, Pat

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

Rouge comment

Having a hyphen in state diagram names is undesireable for tools that don't allow operators in state names

SuggestedRemedy

Replace the hyphen in names such as SEND_SMD-C and SEND_SMD-S with an underscore.

Response *Response Status* **C**

ACCEPT.

Cl **00** *SC* *P* *L* # 168

NoName

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

SuggestedRemedy

Proposed Response *Response Status* **O**

Cl **00** *SC* **0** *P* **0** *L* **0** # 40

Ran, Adee Intel

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

The draft is inconsistent in using "the MAC Merge sublayer" vs. the slightly abbreviated "MAC Merge".

"MAC Merge" is not an acronym, does not appear in the definitions, and does not make the text shorter or easier to read than the full "MAC Merge sublayer".

Also, in most cases where "MAC Merge" appears, it has no article (a/the). This is very unusual. Compare to other sublayer terms (RS, PCS, PMD, and even MAC) which are typically preceded by an article (usually "the").

SuggestedRemedy

Define an acronym "MMS" for the MAC Merge sublayer (Cf. "PCS"). Add it to the definitions and acronyms and use it throughout clause 99 (with the proper articles).

Alternatively use "MACMS" since MAC is itself an acronym.

Alternatively, use "the MAC Merge sublayer" consistently.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. Will use MAC Merge sublayer

Cl **00** *SC* **0** *P* **1** *L* **15** # 66

Hajduczenia, Marek Bright House Network

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

Unnecessary "." at the end of the title

SuggestedRemedy

Remove "." in "Specification and Management Parameters for Interspersing Express Traffic."
The same change is needed on page 14.

Response *Response Status* **C**

ACCEPT.

Cl **00** *SC* **0** *P* **1** *L* **23** # 67

Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **A**

"This draft is an amendment of IEEE Std 802.3-2012" - it is incorrect. We have 802.3bx expected completion before you go into Sponsor Ballot and you should be keeping track against 802.3-201x (currently represented by 802.3bx) - that is what other open projects in ballots do.

SuggestedRemedy

Change to "This draft is an amendment of IEEE Std 802.3-201x". Same changes needed in abstract and description of the amendment.

Response *Response Status* **W**

ACCEPT.

Cl **00** *SC* **0** *P* **3** *L* **1** # 68

Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **A**

Front matter is not up to date!

SuggestedRemedy

Apply the latest front matter (can be obtained from 802.3 Chief Editor). Further changes are also coming per last meeting of Maintenance Task Force in May 2015.

Response *Response Status* **W**

ACCEPT.

Cl **01** *SC* **1.3** *P* **15** *L* **5** # 69

Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **A**

No normative definitions included in 1.3

SuggestedRemedy

Remove - no need to carry on with subclause with no content

Response *Response Status* **W**

ACCEPT. Assume you meant references, not definitions.

Cl **01** *SC* **1.4** *P* **15** *L* **12** # 70

Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **A**

"1.4.0a express Media Access Control (eMAC):" - definition number is hosed. Please fix it.
Definition of "express traffic:" should be placed in a separate line and have a heading number.
Missing space in "The instance of a Media Access Control sublayer(IEEE"

SuggestedRemedy

Per comment

Response *Response Status* **W**

ACCEPT.

Cl **01** *SC* **1.4** *P* **15** *L* **32** # 71

Hajduczenia, Marek Bright House Network

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

Stray "1.4.340"

SuggestedRemedy

Remove empty line

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.4.0a** *P* **15** *L* **12** # 29

Tretter, Albert Siemens AG

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

The instance of a Media Access Control sublayer(IEEE Std 802.3 Annex 4A)...

Between "sublayer(IEEE .." a space is missing.
Please correct

SuggestedRemedy

The instance of a Media Access Control sublayer (IEEE Std 802.3 Annex 4A)...

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.4.0a** *P* **15** *L* **12** # 3

Anslow, Pete Ciena

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

"1.4.0a express ..." should be "1.4.197a express ..."
Space missing in "sublayer(IEEE"
In "(IEEE Std 802.3 Annex 4A)" there should be a comma after 802.3 and "Annex 4A" should have character tag "External" applied (forest green).

Also, the definition for "express traffic" has been merged into this definition.

SuggestedRemedy

Change "1.4.0a express ..." to "1.4.197a express ..."
Change "sublayer(IEEE" to "sublayer (IEEE"
Change "(IEEE Std 802.3 Annex 4A)" to "(IEEE Std 802.3, Annex 4A)" and apply the character tag "External" to "Annex 4A".

Also, make the definition for "express traffic" a separate paragraph with number "1.4.197b".

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.4.0a** *P* **15** *L* **14** # 31

Tretter, Albert Siemens AG

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

(See IEEE Std 802.3, Clause 99.)express traffic:

Between "Clause 99.)express" a space is missing.
Please correct

SuggestedRemedy

(See IEEE Std 802.3, Clause 99.) express traffic:

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. A new paragraph is missing. See #3

Cl **01** *SC* **1.4.339a** *P* **15** *L* **25** # 30

Tretter, Albert Siemens AG

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

The instance of a Media Access Control sublayer(IEEE Std 802.3 Annex 4A)...

Between "sublayer(IEEE .." a space is missing.
Please correct

SuggestedRemedy

The instance of a Media Access Control sublayer (IEEE Std 802.3 Annex 4A)...

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.4.339a** *P* **15** *L* **26** # 4

Anslow, Pete Ciena

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

Space missing in "sublayer(IEEE"
In "(IEEE Std 802.3 Annex 4A)" there should be a comma after 802.3 and "Annex 4A" should have character tag "External" applied (forest green).

SuggestedRemedy

Change "sublayer(IEEE" to "sublayer (IEEE"
Change "(IEEE Std 802.3 Annex 4A)" to "(IEEE Std 802.3, Annex 4A)" and apply the character tag "External" to "Annex 4A".

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.4.340** *P* **15** *L* **32** # 5

Anslow, Pete Ciena

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

spurious heading for 1.4.340

SuggestedRemedy

Delete

Response *Response Status* **C**

ACCEPT.

Cl **30** *SC* **30.12.1.1.1** *P* **19** *L* **36** # 74

Hajduczenia, Marek Bright House Network

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

Unclear editorial instruction: "Change as 30.12.1.1.1 follows:"

SuggestedRemedy

Change to "Change 30.12.1.1.1 as follows:"

Response *Response Status* **C**

ACCEPT.

Cl **30** *SC* **30.12.1.1.1** *P* **19** *L* **48** # 75

Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **R**

A block of text describing allocation of individual bits was removed, which I applaud. However, the replacement text is only a minor improvement towards better readability.

SuggestedRemedy

Insert a table showing bit position and its meaning, rather than what is currently presented on page 20, lines 3-10. A table can be easily referenced, versus an inline list.

Response *Response Status* **W**

REJECT.
This is part of the Managed Object descriptions which follow a defined syntax and therefore it can't have tables. (See also other similar lists in Clause 30 none of which have tables. E.g. 30.3.6.1.35, 30.3.6.1.37)

Cl **30** *SC* **30.12.2.1.34** *P* **20** *L* **24** # 76

Hajduczenia, Marek Bright House Network

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

"(associated with the local system)" in the context of Clause 30, we reference the given local network element as "local System" (note the capitalization)

SuggestedRemedy

Change to "(associated with the local System)" - similar changes in the whole Clause 30 in this amendment.

Response *Response Status* **C**

ACCEPT.

Cl **30** *SC* **30.12.2.1.37** *P* **20** *L* **46** # 77

Hajduczenia, Marek Bright House Network

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

As indicated in the previous comment cycle, the current description "A 2-bit integer value used to indicate, in units of 64 octets, the minimum number of octets over 64 octets required in non-final fragments by the receiver on the given port associated with the local system." is probably understood by the Editor and a few people in the room.

SuggestedRemedy

Suggest to reword to: "This 2-bit integer value indicates the minimum size of any non-final frame fragments supported by the receiver on the given port associated with the local System. This value is expressed in units of 64 octets, with the value of 0 representing the minimum fragment size of 64 octets."

Similar change to be applied to aLldpXdot3RemAddFragSize (30.12.3.1.31)

Response *Response Status* **W**

ACCEPT IN PRINCIPLE.

A 2-bit integer value used to indicate the minimum size of non-final fragments supported by the receiver on the given port associated with the local System. This value is expressed in units of 64 octets of additional fragment length. I.e., the minimum non-final fragment size is (aLldpXdot3LocAddFragSize + 1) x 64 octets.

Cl **30** *SC* **30.14.1.10** *P* **24** *L* **19** # 82

Hajduczenia, Marek Bright House Network

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

"The counter is incremented each time the FRAME_COMPLETE state of the Receive Processing state diagram (Fig 99-) is entered when the previous invocation of the SMD_DECODE function returned "C"." - it is more correct to reference Figure and not subclause containing multiple Figures
Also, it is not clear whether the said attribute is incremented once or multiple times. There is also no need to discuss under what conditions specific states are entered - this is what the State Diagram is for.

SuggestedRemedy

Change to "The counter is incremented by one every time the FRAME_COMPLETE state in the Receive Processing State Diagram (see Figure 99-5) is entered."

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
"The counter is incremented by one every time the FRAME_COMPLETE state in the Receive Processing State Diagram (see Figure 99-5) is entered if the state CHECK_FOR_RESUME was previously entered while processing the packet."

The intent is to only count for packets that were preempted and complete successfully. It isn't intended to increment when a preemptable frame wasn't preempted.

Cl **30** *SC* **30.14.1.10** *P* **24** *L* **29** # 32

Tretter, Albert Siemens AG

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

The following reference is incomplete: (Fig 99-)

SuggestedRemedy

Please correct the reference

Response *Response Status* **C**

ACCEPT.

Cl **30** *SC* **30.14.1.11** *P* **24** *L* **31** # 83

Hajduczenia, Marek Bright House Network

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

"This counter is incremented on the Receive Processing State Diagram (Figure 99–5) transition from P_RECEIVE_DATA to WAIT_FOR_DV_FALSE.;" - language should be improved to be more consistent with the other attributes. We cannot also increment on transition, since transitions do not allow to execute actions.

SuggestedRemedy

Change to "The counter is incremented by one every time the WAIT_FOR_DV_FALSE state in the Receive Processing State Diagram (see Figure 99-5) is entered."

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. The suggested remedy is incorrect because WAIT_FOR_DV_FALSE is entered every time an express frame is received while waiting to resume a preempted frame so counting the number of times it was entered without regard to which state it was enterered wouldn't count the number of additional mPackets received due to preemption.

There are other managed objects that count due to state machine transitions. There is nothing prohibiting this. However, we found a simpler condition that counts the number of addional mPackets created by preemption.

"The counter is incremented by one every time the state CHECK_FRAG_CNT in the Receive Processing State Diagram (see Figure 99-5) is entered."

Cl **30** *SC* **30.14.1.11** *P* **24** *L* **42** # 84

Hajduczenia, Marek Bright House Network

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

Stray ".;"

SuggestedRemedy

Remove

Response *Response Status* **C**

ACCEPT.

Cl **30** *SC* **30.14.1.12** *P* **24** *L* **44** # 85

Hajduczenia, Marek Bright House Network

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

"This counter is incremented on the Transmit Processing State Diagram (Figure 99–4) transition from P_TX_COMPLETE to RESUME_PREAMBLE.;" - language should be improved to be more consistent with the other attributes. We cannot also increment on transition, since transitions do not allow to execute actions.

SuggestedRemedy

Change to "The counter is incremented by one every time the RESUME_PREAMBLE state in the Transmit Processing State Diagram (see Figure 99-4) is entered."

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. The suggested remedy would not work because that state is entered once for each octet of preamble but current text also has a problem because we don't transition directly between those two states. However, there is an alternative that works.

"The counter is incremented by one every time the SEND_SMD-C state in the Transmit Processing State Diagram (see Figure 99-4) is entered."

Cl **30** *SC* **30.14.1.3** *P* **22** *L* **51** # 78

Hajduczenia, Marek Bright House Network

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

"This attribute maps to the variable pEnable (see 99.4.7.3)" - as far as I can tell, pEnable has two states (TRUE / FALSE) and not UNKNOWN (not set). Which of the variable states does "unknown" map?

Furthermore, pEnable seems to be reflecting the state of aMACMergeEnableTx attribute, at which time it is not clear what value it will have when the attibute is in "unknown" value.

SuggestedRemedy

Please clarify how "unknown" value is mapper into pEnable and what effect it has on the operation of the respective state diagrams. It *seems* it might be easier to just remove "unknown" and assume preemption is disabled by default until it is explicitly enabled for the given link

Similar observation applies to aMACMergeVerifyDisableTx, aMACMergeStatusTx, and others that map into boolean variables used later on in state diagrams

Response *Response Status* **W**

ACCEPT IN PRINCIPLE. Also make the same change to 30.14.1.4 aMACMergeVerifyDisableTx since it also sets a variable.

Cl **30** *SC* **30.14.1.7** *P* **23** *L* **46** # 79

Hajduczenia, Marek Bright House Network

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

"A 2-bit integer value used to indicate the value of addFragSize variable used by the Transmit Processing State Machine." we usually accompany name of the dtate diagram with reference to specific Figure that contains the said diagram.
Also, it is State Diagram and not State Machine !

SuggestedRemedy

Change to "A 2-bit integer value used to indicate the value of addFragSize variable used by the Transmit Processing State Diagram (see Figure 99-4)." - make sure the link is live

Response *Response Status* **C**

ACCEPT.

Cl **30** *SC* **30.14.1.8** *P* **24** *L* **3** # 80

Hajduczenia, Marek Bright House Network

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

"The counter is incremented when the ASSEMBLY_ERROR state of the Receive Processing State Diagram is entered (see 99.4.7.7)." - it is more correct to reference Figure and not subclause containing multiple Figures
Also, it is not clear whether the said attribute is incremented once or multiple times.

SuggestedRemedy

Change to "The counter is incremented by one every time the ASSEMBLY_ERROR state in the Receive Processing State Diagram (see Figure 99-5) is entered."

Response *Response Status* **C**

ACCEPT.

Cl **30** *SC* **30.14.1.9** *P* **24** *L* **15** # 81

Hajduczenia, Marek Bright House Network

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

"The counter is incremented each time the BAD_FRAG state of the Receive Processing State Diagram is entered and each time the WAIT_FOR_DV_FALSE state is entered due to the invocation of the SMD_DECODE function returning the value "ERR" (see 99.4.7.7)." - it is more correct to reference Figure and not subclause containing multiple Figures
Also, it is not clear whether the said attribute is incremented once or multiple times.
There is also no need to discuss under what conditions specific states are entered - this is what the State Diagram is for.

SuggestedRemedy

Change to "The counter is incremented by one every time the BAD_FRAG state or the WAIT_FOR_DV_FALSE state in the Receive Processing State Diagram (see Figure 99-5) is entered."

Response *Response Status* **C**

ACCEPT.

Cl **30** *SC* **30.2.3** *P* **16** *L* **35** # 72

Hajduczenia, Marek Bright House Network

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

Confusing editorial instruction: "Replace Figure 30-3 with the following:Replace Figure 30-3 with the Figure 30–3 shown below."

SuggestedRemedy

Change to "Replace Figure 30-3 with the Figure 30–3 shown below."

Response *Response Status* **C**

ACCEPT.

Cl **30** *SC* **30.2.5** *P* **16** *L* **39** # 73

Hajduczenia, Marek Bright House Network

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

"Change the first paragraph Subclause 30.2.5 and insert Table 30–8 and Table 30–9" - we do not usually use "subclause" anywhere

SuggestedRemedy

Change to "Change the first paragraph in 30.2.5 and insert Table 30–8 and Table 30–9"

Response *Response Status* **C**

ACCEPT.

Cl **79** *SC* **79.3** *P* **26** *L* **7** # 86

Hajduczenia, Marek Bright House Network

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

Editorial instructions "Insert the row below in Table 79–1 and change the range in the subtype column of the last row to remove the assigned subtype value." is not precise enough. Also, Table 79-1 should show the last row as being modified

SuggestedRemedy

Use the following editorial instruction: "Change Table 97-1 as shown below". Use Table 97-1 per 8023br_1507_hajduczenia_1.pdf

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. The suggested resolution only works if we get assigned the value 7 because if another value is assigned, we will have to have lines for reserving the values above and below it. That is why the updated reserved row isn't provided yet.

Also we normally only put in the changed lines for such tables because other amendments might change other lines.

When the value assigned, the editing instruction will be changed to indicate that the final row of the table is deleted and new rows (the assignment row plus one or 2 reserved value rows) to add at the end of the table similar to the commenters suggestion.

The editor's note already says we will do that.

Cl **79** *SC* **79.3.7** *P* **26** *L* **21** # 87

Hajduczenia, Marek Bright House Network

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

Do not reference "subclause"

SuggestedRemedy

Remove all instances of "Subclause" and "subclause" in the draft

Response *Response Status* **C**

ACCEPT.

Cl **79** *SC* **79.3.7.1** *P* **26** *L* **42** # 89

Hajduczenia, Marek Bright House Network

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

Wrong reference: "defined in Table 79–7aa"

SuggestedRemedy

Change to "defined in Table 79–7a"

Response *Response Status* **C**

ACCEPT.

Cl **79** *SC* **79.3.7.1** *P* **26** *L* **44** # 88

Hajduczenia, Marek Bright House Network

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

There are change marks on the clean document all over the place.

SuggestedRemedy

Remove change bars from the clean document.

Response *Response Status* **C**

REJECT. Change bars are normally shown in the clean drafts for recirculaiton to show what parts changed because that indicates the part of the draft that is open to comment.

See for example the P802.3 revision D3.1 clean drafts.

In retrospect, in D2.1, they could have been left off because the whole doc was open to comment. In the next ballot, change bars will be included but there should be far few change bars.

Cl **79** *SC* **79.3.7.2** *P* **27** *L* **1** # 90

Hajduczenia, Marek Bright House Network

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

Formatting of second column in Table 79–7a is off

SuggestedRemedy

Expand the size (witdh) of the second coolumn so that the sentences are not broken between lines. There is no need for that.
Narrow down column one, and expand the size of column three as well.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. The editor will shrink colomn 1 (and probably 4) and expand columns 2 and 3 to reduce or eliminate the carriage returns.

Cl **79** *SC* **79.3.7.2** *P* **27** *L* **20** # 91

Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **A**

"Reserved for future standardization" was cleaned up per 802.3bx.

SuggestedRemedy

Change "Reserved for future standardization" to "Reserved"
Similarly, in 79.5.11, change "bits reserved for future standardization" to "Reserved bits"

Response *Response Status* **W**

ACCEPT.

Cl **90** *SC* **90.0.1** *P* **30** *L* **3** # 92

Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **A**

Wrong subclause number

SuggestedRemedy

Change "90.0.1" to "90.4.1" and make sure all following subclauses of levels 4 and 5 are numbered correctly.

Response *Response Status* **W**

ACCEPT.

Cl **90** *SC* **90.0.1** *P* **30** *L* **3** # 6

Anslow, Pete Ciena

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

The heading numbering in Clause 90 is incorrect between the clause heading and 90.5

SuggestedRemedy

Correct the numbering of these headings and also the editing instructions. (Note, I do not recommend using cross-references in editing instructions because it makes it much harder to spot when a change to the draft modifies the autonumbering.)

Response *Response Status* **C**

ACCEPT.

Cl **90** *SC* **90.0.1.1.1** *P* **30** *L* **17** # 7

Anslow, Pete Ciena

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

(Should be 90.4.3.1.1)
In "(see 90.5.1)", "90.5.1" should be a cross-reference
On lines 19 and 39 "Clause 99" should be a cross-reference
Also on line 42, in "(see Table 99-1)", "Table 99-1" should have character tag "External" applied (forest green).

SuggestedRemedy

In "(see 90.5.1)", make "90.5.1" a cross-reference
On lines 19 and 39 make "Clause 99" a cross-reference
Also on line 42, in "(see Table 99-1)", apply character tag "External" to "Table 99-1".

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. 90.5.1 and 90.5.2 are reference in unchange text from IEEE 802.3 and they point to clauses that are not in our draft so we can't make them cross references. Will add the External character tag to them.

Clause 99 on both lines will be made a reference. Table 99-1 isn't external. It is a table in the draft. Make it a reference.

Cl **90** *SC* **90.0.1.1.1** *P* **30** *L* **21** # 93

Hajduczenia, Marek Bright House Network

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

"The value PMAC indicates that a SMD-5 value" should be "The value PMAC indicates that >>an<< SMD-5 value"

SuggestedRemedy

Per comment

The same change in line 41, page 30

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. Also, SMD-5 should be SMD-S.

Cl **90** *SC* **90.0.1.1.1** *P* **30** *L* **21** # 33

Tretter, Albert Siemens AG

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

The value PMAC indicates that a SMD-5 value...

The SMD-5 value is not correct it should be SMD-Sx, or SMD-S or SMD-S0 to SMD-S3

The same typo exists in line 41 (same page)

SuggestedRemedy

Please correct

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. It should be SMD-S

Cl **90** *SC* **90.5.1** *P* **31** *L* **12** # 95

Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **A**

Wrong editorial markup for text in lines 12-17: this text is all new and should be all underlined.

SuggestedRemedy

Per comment.

Response *Response Status* **W**

ACCEPT.

Cl **90** *SC* **90.5.1** *P* **31** *L* **13** # 34

Tretter, Albert Siemens AG

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

preemptable packet start (SMD-E or SMD-S, see 99.3.3) in..

As we have not only one SMD-S value, the SMD-S should be named SMD-Sx or SMD-S0 to SMD-S3

SuggestedRemedy

Please correct

Response *Response Status* **C**

REJECT. In the referenced subclause (99.3.3) we define SMD-S as indicating any one of the 4 values:
SMD-S refers to any of the four SMD values in an mPacket carrying the initial fragment of a preemptable packet.

Cl **90** *SC* **90.5.2** *P* **31** *L* **23** # 94

Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **A**

Wrong editorial markup: "When the MAC Merge sublayer is not instantiated, the TS_SFD_Detect_RX function and"

SuggestedRemedy

Remove underline from text "the TS_SFD_Detect_RX function " - this text already exists in 90.5.2

Response *Response Status* **W**

ACCEPT.

Cl **90** *SC* **90.5.2** *P* **31** *L* **33** # 8

Anslow, Pete Ciena

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

Missing "." at the end of the paragraph

SuggestedRemedy

add the "."

Response *Response Status* **C**

ACCEPT.

Cl **90** *SC* **90.5.2** *P* **31** *L* **33** # 35

Tretter, Albert Siemens AG

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

The value of MM shall indicate whether an SMDE MM=EMAC) or an SMD-S (MM=PMAC) was detected

SuggestedRemedy

At the end of this clause the period is missing.
Please add

Response *Response Status* **C**

ACCEPT.

Cl **90** *SC* **90.8.1** *P* **32** *L* **9** # 96

Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **A**

Plenty of incorrect changes to PICS Support column in 90.8.1

SuggestedRemedy

Remove "No [ ]" in TS_TX, TS_RX, TS_T2, TS_T3, TS_R2, TS_R3 - these are mandatory items and not supporting them is NOT an option.
The new item MM is marked up correctly.

Response *Response Status* **W**

ACCEPT IN PRINCIPLE. Since they are conditionally mandatory - either mandatory when MM is not supported or when MM is supported, the Support column should have Y [ ] and N/A [ ]. Change No to N/A in TS_TX, TS_RX, TS_T2, TS_T3, TS_R2, TS_R3.

Cl **99** *SC* *P* *L* # 166

NoName

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

Comment from Don Pannell (802.1 member)

Must an 802.3br MAC transmitter pre-empt only on eight octet boundaries? What is the intention of the committee?

SuggestedRemedy

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
There is no requirement and none was intended.

The task force considered having such a requirement but in discussion with implementers, the feedback was that for many implementations don't have a problem with receiving frames preempted on non-multiple of 8 boundaries. It was a small burden for the receiver to handle this. Conversely, restricting the transmitter to only preempting on a multiple of 8 boundary was onerous for some transmitters.

Additionally, the requirement added a small amount of latency for preemption occurring (or a slightly larger guardband to ensure that preemption occurs before the time for sending scheduled traffic.

Given that feedback, we removed the requirement. Now preemption can occur on any octet boundary as long as at least 60 mData octets have been sent (to meet minimum 64 bit mData plus mCRC) and at least 64 mData octets remain.

Cl **99** *SC* *P* **14** *L* **44** # 2

Anslow, Pete Ciena

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

The revision project does not have a "P" before 802.3bx

SuggestedRemedy

Change "P802.3bx" to "802.3bx"

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* *P* **3** *L* **20** # 1

Anslow, Pete Ciena

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

The introductory text provided by the IEEE 802.3 WG Chair has been changed.
The latest version can be found in the 802.3 FrameMaker template or in Section 1 of the Revision project 802.3bx D3.1

SuggestedRemedy

Update the introduction text (paragraphs 2, 3, and 4 on page 3 of the draft) to the latest version.

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* *P* **4** *L* **50** # 36

Tretter, Albert Siemens AG

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

Clause: Introduction
On page 4 the IEEE Std 802.3bw™-201x is mentioned.
Why is the IEEE Std 802.3bv™-201x not mentioned??

SuggestedRemedy

Please add also IEEE Std 802.3bv™-201x

Response *Response Status* **C**

REJECT. Because P802.3bv is not yet in Working Group ballot. The expectation is that they will complete after us. P802.3bw is in Sponsor ballot

Cl **99** *SC* **1** *P* **33** *L* **42** # 159

Brandt, David Rockwell Automation

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

In the line:

"One of the instantiations of the MAC is the eMAC and one of the instantiations of the MAC is the eMAC."

One of the instantiations s/b pMAC.

SuggestedRemedy

Change to:

"One of the instantiations of the MAC is the eMAC and one of the instantiations of the MAC is the pMAC."

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **4.7.3** *P* **44** *L* **26** # 160

Brandt, David Rockwell Automation

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

The following has incorrect spacing:

"capability and FALSEto disable"

SuggestedRemedy

Fix typo to: "capability and set FALSE to disable"

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **4.7.4** *P* **45** *L* **49** # 161

Brandt, David Rockwell Automation

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

Function parameter definition is incorrect and inconsistent with other definitions. See correct pRX_DATA(data<7:0>)directly below.

SuggestedRemedy

Change: "rTX_DATA<7:0>"
To: "rTX_DATA(data<7:0>)"

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **4.7.7** *P* **48** *L* **14** # 162

Brandt, David Rockwell Automation

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

Figure 99-4-Transmit Processing State Diagram

"ipg_imer_done" s/b "ipg_timer_done" in transition to TX_VERIFY

SuggestedRemedy

Add the t.

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **4.7.7** *P* **48** *L* **17** # 164

Brandt, David Rockwell Automation

Comment Type **ER** *Comment Status* **A**

Figure 99-4-Transmit Processing State Diagram

"!send_" s/b "!send_v" in transition to START_PREAMBLE

SuggestedRemedy

Change text to "!send_v", because it is otherwise ambiguous.

Response *Response Status* **W**

ACCEPT.

Cl **99** *SC* **4.7.7** *P* **48** *L* **45** # 163

Brandt, David Rockwell Automation

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

Figure 99-4-Transmit Processing State Diagram

"fragSize" has a right parenthesis ")" through the f in SEND_SMD-C

SuggestedRemedy

Remove).

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.1** *P* **33** *L* **1** # 13

Anslow, Pete Ciena

Comment Type **ER** *Comment Status* **A**

Comment i-31 against the revision project 802.3bx D3.0 has modified the layer diagrams in clauses for 10G and above since they are all full duplex.
The suggested remedy follows the changes made in response to comment i-31 to bring Figure 99-1 into line with the layer diagrams in Sections 4, 5, and 6

SuggestedRemedy

At the top of Figure 99-1 change "LAN LAYERS" to "ETHERNET LAYERS" (still on two lines).
In the title of Figure 99-1, change "the IEEE 802.3 Ethernet LAN model" to "the IEEE 802.3 Ethernet model"

Response *Response Status* **W**

ACCEPT.

Cl **99** *SC* **99.1** *P* **33** *L* **17** # 97

Hajduczenia, Marek Bright House Network

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

"The MAC Merge sublayer supports this with two methods to stop transmission of preemptable traffic so that express traffic can be transmitted. It can
preempt or prevent initiating transmission of preemptable traffic." - it is not clear what "this" and "it" are in this sentence.

SuggestedRemedy

Change the text to read: "The MAC Merge sublayer supports two ways to stop transmission of preemptable traffic in the presence of express traffic:
- the MAC Merge sublayer may preempt (interrupt) preemptable traffic being currently transmitted, and
- the MAC Merge sublayer may prevent pMAC from starting transmission of preemptable traffic."

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. "may prevent pMAC" in the suggested remedy should be "may prevent the pMAC"

Cl **99** *SC* **99.1** *P* **33** *L* **21** # 99

Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **A**

These two sentences just read wrong: "This clause also specifies a MAC Merge Service Interface (MMSI) providing a primitive that holds and resumes transmission of preemptable packets. The MMSI enables beginning preemption of a packet before express traffic is expected to minimize the latency for express traffic." - it is not clear what "hold a transmission" means and then the second sentence seems imply express traffic is expected to minimize latency ...

SuggestedRemedy

Change the text to read "This clause also specifies a MAC Merge Service Interface (MMSI) providing a primitive that suspends or resumes transmission of preemptable traffic, minimizing the latency for express traffic."

Response *Response Status* **W**

ACCEPT IN PRINCIPLE.
We had comments last time that asked us to consistently use "hold" when transmission of preemptable packets was suspended instead of using synonyms for hold. We resolved those comments by agreeing to always use hold.

Change "suspend" in the proposed resolution to "hold"

Cl **99** *SC* **99.1** *P* **33** *L* **27** # 98

Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **A**

The text in lines 27 - 38 belongs to definition of individual primitives and not the text of the introduction to the clause.

SuggestedRemedy

MOve text in lines 27 - 38 to subclause describing MMSI (likely location 99.2.1 at the very end of subclause).

Response *Response Status* **W**

ACCEPT IN PRINCIPLE. This text is a general introduction to what the MAC Merge sublayer does. One paragraph covers operation when preemption capability is active and the other when it is inactve. However, it would be better to reduce the amount of detail on the MMSI service interface here.

The behavior of the primitives are fully defined in 99.2 and this text is not needed there.

Replace the first paragraph with:
When preemption capability is active, the MAC Merge sublayer allows frames provided over the express MAC service interface (express traffic) or the MMSI service primitives to interrupt transmission of preemptable frames provided over the preemptable MAC service interface (preemptable traffic).

At the start of the next paragraph, "When preemption is" will be replaced by "When preemption capability is".

Cl **99** *SC* **99.1** *P* **33** *L* **33** # 44

Ran, Adee Intel

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

Typo

SuggestedRemedy

Change "tthe" to "the"

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.1** *P* **33** *L* **34** # 37

Tretter, Albert Siemens AG

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

When preemption is inactive, tthe MAC Merge

Please

SuggestedRemedy

Please correct "tthe"

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.1** *P* **33** *L* **40** # 100

Hajduczenia, Marek Bright House Network

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

Clerical error: "One of the instantiations of the MAC is the eMAC
and one of the instantiations of the MAC is the eMAC" - one is eMAC and the other one is pMAC

SuggestedRemedy

Change to "One of the instantiations of the MAC is the eMAC and one of the instantiations of the MAC is the pMAC"

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.1** *P* **33** *L* **42** # 41

Ran, Adee Intel

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

"eMAC" appears twice in this sentence. One should be the eMAC and the other is the pMAC.

"Instantiation" is an action. "Instance" is more appropriate here.

It seems that with MAC Merge there are no other options (more than or fewer than two instances) so the sentence can be reworded for clarity.

This sentence repeats the information included the figure, so is somewhat redundant.

SuggestedRemedy

Change
"One of the instantiations of the MAC is the eMAC and one of the instantiations of the MAC is the eMAC."

to
"The MAC Merge sublayer has two clients that are instances of the MAC: the eMAC and the pMAC."

Alternatively, delete this sentence.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. The figure shows IEEE 802.3 sublayers, but doesn't describe what the two MACs in the figure are.

"The MAC Merge sublayer has two clients that are MAC sublayer instances: the eMAC and the pMAC."

Cl **99** *SC* **99.1** *P* **33** *L* **44** # 101

Hajduczenia, Marek Bright House Network

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

"Figure 99–2 shows the service interfaces of the MAC Merge sublayer and its associated MAC" - likely, "MACs", since there are two of them

SuggestedRemedy

Change "Figure 99–2 shows the service interfaces of the MAC Merge sublayer and its associated MAC" to "Figure 99–2 shows the service interfaces of the MAC Merge sublayer and its associated MACs"

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.1** *P* **33** *L* **45** # 42

Ran, Adee Intel

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

Uncommon spelling.

SuggestedRemedy

Change "Reconcilliation" to "Reconciliation".

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.1** *P* **33** *L* **46** # 102

Hajduczenia, Marek Bright House Network

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

Empty lines in 45-48

SuggestedRemedy

Remove.

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.1** *P* **34** *L* **1** # 43

Ran, Adee Intel

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

The right hand layer diagram is specific to Ethernet LANs. The top right label in other architecture diagrams (as of D3.1 of 802.3bx) is "Ethernet Layers".

SuggestedRemedy

Change "LAN Layers" to "Ethernet Layers".

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.1** *P* **35** *L* **5** # 103

Hajduczenia, Marek Bright House Network

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

What is "M_P_HOLD.request" in Figure 99-3? The line from "MAC client supporting preemption" to "MAC Merge" is already correctly marked as "MM_CTL.request" below. It is the only location where it is used.

SuggestedRemedy

Remove "M_P_HOLD.request" in Figure 99-3

Response *Response Status* **W**

ACCEPT. This was 802.1's name for the primitive but they are not using it anymore.

Cl **99** *SC* **99.1.2** *P* **36** *L* **39** # 108

Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **A**

There are two different Figure 99-2 instances in the document.

SuggestedRemedy

Update figure numbering to auto-numbering and update all cross references in the document.

Response *Response Status* **W**

ACCEPT.

Cl **99** *SC* **99.2** *P* **36** *L* **45** # 104

Hajduczenia, Marek Bright House Network

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

Empty lines 45-48

SuggestedRemedy

Remove

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.2.2.1** *P* **37** *L* **11** # 105

Hajduczenia, Marek Bright House Network

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

"to hold or release transmission" - it does not really read very well - we can "suspend or resume transmission"

SuggestedRemedy

Change from "to hold or release transmission" to "to suspend or resume transmission" - leave the names of values for hold_req as they are defined today.

Also, page 37, line 21, change "hold transmission of preemptable traffic" to "suspend transmission of preemptable traffic"

Response *Response Status* **C**

REJECT. Based on comments last time, we agreed to only use "hold" to describe what the primitive does rather than using two words, hold and suspend, for the same thing. Also some people feel that suspend implies that transmission is underway and stopped but in some cases there is nothing underway and hold is just preventing transmission from starting.

Cl **99** *SC* **99.2.2.1.3** *P* **37** *L* **32** # 45

Ran, Adee Intel

Comment Type **ER** *Comment Status* **A**

The first part of this subclause (starting with "The receipt of this primitive with the value HOLD causes MAC Merge"...) is a long compond complex sentence, which is split over two paragraphs separated by a short list, with a peculiar logical order. It is difficult to read and understand.

SuggestedRemedy

Change the text in lines 32 to 38 to:

"If preemption is active, a packet from the pMAC is currently being transmitted, and the minimum fragment size requirements are met, then the receipt of this primitive with the value HOLD causes MAC Merge to preempt regardless of whether the eMAC has a packet to transmit, and to cease transmitting packets from the pMAC."

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. The proposed replacement text doesn't work as it implies that "to cease transmitting packets from the pMAC." is subject to the conditions in the if. It is not. Use the following instead.

"Receipt of the primitive with the value HOLD causes preemption if the current conditions allow preemption and prevents starting transmission of pMAC packets."

Cl **99** *SC* **99.2.2.1.3** *P* **37** *L* **39** # 39

Ran, Adee Intel

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

"and to not start transmitting packets from the pMAC" seems to apply indefinitely. Surely there is some condition that will enable this transmission again.

Suggested remedy assumes that this condition is receiving the value RELEASE. If it's incorrect then something else should be defined.

SuggestedRemedy

Add after "transmitting packets from the pMAC": "until this primitive is received with the value RELEASE".

Alternatively, add "and resume transmission of packets from the pMAC" in the description of the value RELEASE.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Add after "transmitting packets from the pMAC": "until after this primitive is received with the value RELEASE".

Receiving the prmimitive with the value RELEASE may not immediately allow the start of transmission of packets from the pMAC because packets from the eMAC may be being sent.

"The receipt of this primitive with the value RELEASE allows MAC Merge to transmit packets from the pMAC when the eMAC does not have a packet to transmit."

Cl **99** *SC* **99.3** *P* **37** *L* **46** # 106

Hajduczenia, Marek Bright House Network

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

"An mPacket contains a fragment of a preemptable packet that has been preempted or a whole packet." - not all options are covered here.

SuggestedRemedy

Change to read: "An mPacket contains either of the following:
- a complete express packet,
- a complete preemptable packet, or
- an initial or continuation fragment of a preemptable packet"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
"An mPacket contains one of the following:
- a complete express packet,
- a complete preemptable packet,
- an initial fragment of a preemptable packet, or
- an continuation fragment of a preemptable packet."

In Figure 99-3a), change the caption:
"mPacket containing an express packet
or an initial fragment of a packet"
to
"mPacket containing an express packet, a complete preemptable packet or an initial fragment of a preemptable packet

Cl **99** *SC* **99.3.1** *P* **38** *L* **20** # 107

Hajduczenia, Marek Bright House Network

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

textual description in Figure 99-3 is not needed

SuggestedRemedy

Remove "mPacket containing an express packet or an initial fragment of a packet" and "mPacket containing a continuation fragment of a packet"

Response *Response Status* **C**

REJECT. The captions aren't essential, but people felt that the captions make the figure easier to understand.

Cl **99** *SC* **99.3.1** *P* **38** *L* **29** # 109

Hajduczenia, Marek Bright House Network

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

Reference to Table 99-1 would be welcome at the end of statement "express packet) is same as the SFD value"

SuggestedRemedy

Change "express packet) is same as the SFD value" to "express packet) is same as the SFD value, per Table 99-1"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. It seems something is editorially wrong if one is referencing the same table 3 times in the same paragraph. Also, most of this text is a description of SMD and should be in the SMD subclause.

Replace the paragraph with:
The format of an mPacket depends on the contents of the mPacket. The format is indicated by the SMD (see 99.3.3).

Move the rest of the content of the paragraph to after the first paragraph of 99.3.3 and remove the Table reference since the first paragraph provides the reference.

Cl **99** *SC* **99.3.1** *P* **38** *L* **33** # 110

Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **R**

"fragment counter octet (frag_count) following the SMD." - Figure 99-3 shows "FRAG_COUNT" and not "frag_count"

SuggestedRemedy

Change to "fragment counter octet (FRAG_COUNT) following the SMD."

Similar change is needed in 99.3.4, where lower case version is used and not consistent with Figure 99-3.

Also, change needed in Table 99-2, where "Frag_count" is used

Response *Response Status* **W**

REJECT. It is captialized in the figure because the convention in similar 802.3 figures is to use upper case for these labels, not because that is the usual case for the field title.

See Figure 3-1 for example where Preamble, Destination Address, etc are all upper case in the figure but not in text.

Cl **99** *SC* **99.3.2** *P* **38** *L* **37** # 14

Anslow, Pete Ciena

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

"Figure 99-3a" on line 37 and "Figure 99-4b" on line 38 should be cross-references.
On page 41, line 2 "79.3.6" should be a cross-reference to "79.3.7"

SuggestedRemedy

Make "Figure 99-3a" on line 37 and "Figure 99-4b" on line 38 cross-references
On page 41, line 2 change "79.3.6" to be a cross-reference to "79.3.7"

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.3.2** *P* **38** *L* **37** # 111

Hajduczenia, Marek Bright House Network

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

Wrong reference format

SuggestedRemedy

"Figure 99-3a" should be "Figure 99-3(a)"
"Figure 99-3b" should be "Figure 99-3(b)"

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.3.3** *P* **38** *L* **43** # 112

Hajduczenia, Marek Bright House Network

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

Incomplete list of options ... "The value of the SMD indicates whether the mPacket contains an express packet, the initial fragment of a
preemptable packet, or any of continuation fragments of a preemptable packet. "

SuggestedRemedy

Change to "The value of the SMD indicates whether the mPacket contains a complete express packet, a complete preemptable packet, the initial fragment of a preemptable packet, or a continuation fragment of a preemptable packet. "

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. The SMD is the same for a complete preemptable packet and for the initial fragment of a preemptable packet because when we start transmitting, we don't know which it will be. The suggested text makes it sound like the value differentiates between these.

"The value of the SMD indicates whether the mPacket contains an express packet, the start of a preemptable packet (intial fragment or complete packet) or a continuation fragment of a preemptable packet."

Cl **99** *SC* **99.3.4** *P* **39** *L* **1** # 113

Hajduczenia, Marek Bright House Network

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

The text could be more explicit as to what values are referred to in SMD-S and SMD-C definitions. "SMD-S refers to any of the four SMD values in an mPacket carrying the initial fragment of a preemptable
packet. SMD-C refers to any of the four SMD values in an mPacket carrying any of the continuation
fragments of a preemptable packet."

SuggestedRemedy

Change to read: "SMD-S refers to any of the four SMD values (SMD-S0, SMD-S1, SMD-S2, and SMD-S3) in an mPacket carrying the initial fragment of a preemptable packet. SMD-C refers to any of the four SMD values (SMD-C0, SMD-C1, SMD-C2, and SMD-C3) in an mPacket carrying a continuation fragment of a preemptable packet."

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. "SMD-S refers to any of the four SMD values (SMD-S0, SMD-S1, SMD-S2, and SMD-S3) in an mPacket carrying the start of a preemptable packet. SMD-C refers to any of the four SMD values (SMD-C0, SMD-C1, SMD-C2, and SMD-C3) in an mPacket carrying a continuation fragment of a preemptable packet."

Cl **99** *SC* **99.3.4** *P* **39** *L* **37** # 114

Hajduczenia, Marek Bright House Network

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

The sentence reads awkward: "The frag_count protects against reassembling an incorrect packet if up to 3 packet fragments are lost."

SuggestedRemedy

Change to read: "The FRAG_COUNT protects against mPacket reassembly errors and allows the MAC Merge sublayer detect the loss of up to 3 packet fragments."

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. "The frag_count protects against mPacket reassembly errors by enabling detection of the loss of up to 3 packet fragments."

Cl **99** *SC* **99.3.4** *P* **39** *L* **41** # 115

Hajduczenia, Marek Bright House Network

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

Unnecessary explanation: "Since a frag_count of 0 is implicit for mPackets with SMD-S, such packets do not contain the frag_count field."

SuggestedRemedy

Remove this statement. We already have a statement before that is sufficient: "The frag_count field is only present in mPackets with SMD-C. "

Response *Response Status* **C**

REJECT. The sentence is there because there were readers who were confused without it.

Cl **99** *SC* **99.3.5** *P* **39** *L* **50** # 116

Hajduczenia, Marek Bright House Network

Comment Type **TR** *Comment Status* **R**

"The minimum size of the mData field is 60 octets." - it is not clear how it plays with the minimum fragment size of 64 bytes, which is defined in attributes defined in Clasue 30 objects.

SuggestedRemedy

The minimum fragment size as defined in aLldpXdot3LocAddFragSize with this statement. What is the size of the fragment then? The size of mData field or something else altogether? it is not defined anywhere right now.

Response *Response Status* **W**

REJECT. The minimum mData field size is 60 octets because 60 octets plus an mCRC yields a 64 octet minimum fragment.

This is the minimum size - when aLldpXdot3LocAddFragSize is non-zero, this minimum doesn't occur in non-final fragments of a preempted packet but it still occurs in final fragments (and unpreempted minimum size packets).

The minimum size of an mpacket is defined by the minimum size of the mData field plus the packet format. The mData field is the only part that has a variable size. No other information is needed.

Cl **99** *SC* **99.3.6** *P* **40** *L* **19** # 117

Hajduczenia, Marek Bright House Network

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

Odd wording and mixing packets and frames, where previously we had just packets: "For the final mPacket of a frame, "

SuggestedRemedy

Change "For the final mPacket of a frame, the CRC field contains the last 4 octets of the MAC frame (the FCS field)." to read "In the final fragment of a preemptable packet, the CRC field contains the last 4 octets of the original fragmented MAC frame (the FCS field)"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. This text is defining the contents of the CRC field for mPackets carrying express frames or complete preemptable frames as well as for final fragments. For complete frames, the final mPacket is also the initial and only mPacket so the text is correct.
"In the final mPacket of a MAC frame, the CRC field contains the last 4 octets of the MAC frame (the FCS field)"

Cl **99** *SC* **99.3.6** *P* **40** *L* **21** # 118

Hajduczenia, Marek Bright House Network

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

Unclear what "it" is in the statement "For other mPackets, it contains an mCRC value. This includes mPackets used to verify that a link can support preemption capability."

SuggestedRemedy

Change "For other mPackets, it contains an mCRC value. This includes mPackets used to verify that a link can support preemption capability." to "For other mPackets, the CRC field contains the value of mCRC. This includes mPackets used to verify that a link can support preemption capability."

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.3.6** *P* **40** *L* **22** # 119

Hajduczenia, Marek Bright House Network

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

Calculation of the mCRC is separated from the description of what mCRC is.

SuggestedRemedy

Move the following text with minor changes (marked with >><<) "The mCRC shall be calculated on the octets of the >>mPacket<< from the first octet of the >>mPacket<< (i.e.>>,<< the octet following the SFD sent by the pMAC) to the last octet transmitted in that mPacket by:
— performing steps a) through d) in 3.2.9 and then
— XORing the calculated >>32-bit value<< with 0x0000 FFFF."
to line 17, page 40

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. We will put a comma after "i.e.".
The existing text is the entire description of mCRC including the calculation so they aren't separated. The subclause talks about the mPacket CRC field in general. Then about the case where the CRC field contains the MAC frame CRC and then about when it contains the mCRC.

The calculation described in the suggested remedy would be incorrect. The first octet of the mPacket is the first preamble and CRC is not calculated over it. The octet following the SFD is not the first octet of the mPacket for continuation mPackets. It is the first octet of the initial mPacket for the preempted frame.

The mCRC is calculated over all the octets of the frame that have been sent (from those in the initial mPacket to those in the current mPacket). This is necessary for tehcnical correctness because it ensures that the mCRC is always different from a MAC CRC value.

Cl **99** *SC* **99.3.6** *P* **40** *L* **23** # 46

Ran, Adee Intel

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

This sentence is proken into a list that has only two items. There is no need for a list here and it makes the text less readable. Rephrasing is suggested.

SuggestedRemedy

Delete the list items and change the last sentence in the paragraph above to
"The mCRC shall be calculated from the octets of the frame from the first octet of the frame (i.e., the octet following the SFD sent by the pMAC) to the last octet transmitted in that mPacket. The mCRC is obtained by performing steps a) through d) in 3.2.9 and then XORing the calculated 32 bits with 0x0000 FFFF".

Response *Response Status* **C**

REJECT. We broke it into a list because of prior comments.

Cl **99** *SC* **99.4** *P* **40** *L* **31** # 47

Ran, Adee Intel

Comment Type **ER** *Comment Status* **A**

Sentence starting with "This allows" is repeated twice with a minor change. The first time includes "enable" while the second time includes "enable and use", which is inclusive of the first.

SuggestedRemedy

Delete "This allows MAC Merge sublayers to enable preemption once the other side has indicated support for it without synchronizing the transition between the two ends of the link"

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.4.2** *P* **41** *L* **7** # 48

Ran, Adee Intel

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

"If link failure is detected by implementation dependent means"

This may be incorrectly read as if the "implementation dependent means" is conditional.

In fact, if link failure _is_ detected (we don't care how) then preemption has to be disabled - since the next time the link is established may be with a different partner.

If link failure detection is not implemented then link failure will never be detected (and that's fine).

The usual statement in similar cases is that the function in question (link failure detection) is beyond the scope of the standard.

SuggestedRemedy

Replace the last sentence of this subclause with the following text and note:

"The preemption capability shall be disabled if link failure is detected.
NOTE--Link failure detection is implementation dependent and beyond the scope of this standard."

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. Change to:
"The preemption capability shall be disabled if the MAC Merge sublayer receives indication of link failure.
NOTE--Indication of link failure to the MAC Merge sublayer is implementation dependent."

Cl **99** *SC* **99.4.3** *P* **41** *L* **2** # 54

Ran, Adee Intel

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

In definition of eTx, what does "there is an ePLS_DATA.request" mean? is it invocation or handling of the primitive?

Similary for pTx.

SuggestedRemedy

Change "when there is" to "when the MAC Merge Sublayer is handling" in definitions of eTx and pTx.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. Comment appears to be on page 44 and line 1
Use "when an ePLS_DATA.request has been received and a corresponding rPLS_DATA.request has not yet been generated" and similarly for pTX.

Cl **99** *SC* **99.4.3** *P* **44** *L* **16** # 56

Ran, Adee Intel

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

"by implementation dependent means" refers to the detection, not to the setting (the way a variable is set is always implementation dependent).

If a link failure is detected then the variable should be set true. It should be false by default.

SuggestedRemedy

Delete "by implementation dependent means" and add "Default value is FALSE".

Add a NOTE: "NOTE--link failure detection is beyond the scope of this standard".

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change to:
"Boolean variable that is TRUE when the MAC Merge sublayer receives indication of link failure.
NOTE--Indication of link failure to the MAC Merge sublayer is implementation dependent."

Cl **99** *SC* **99.4.3** *P* **44** *L* **2** # 55

Ran, Adee Intel

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

Some variables are defined with "Set TRUE/FALSE" and others with just the value. There does not seem to be a reason for this inconsistency.

"Set" implies a memory - the value is "set" by some event and held until the variable is "set" to another value. This seems to suit some of the definitions, but not others. If a variable is "set TRUE" by some condition, then it must be FALSE by default or be "set FALSE" by some other condition, and vice versa.

SuggestedRemedy

Delete "set" from definitions of eTx, pTx, resumeRx, resumeTx, which are simple indicators of a condition.

Add the (missing) conditions for setting to FALSE (or state that this is the default value) in definitions of link_fail, rcv_r, rcv_v, send_r, send_v, verified, verify_fail.

Change "FALSE" to "set FALSE" in definitions of hold, pActive, pEnable.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. Accept the suggested remedy except:
Link_fail doesn't have memory - "set" should be deleted.

pActive is the result of a logic calculation not a set/reset and needs no change.

Cl **99** *SC* **99.4.3** *P* **44** *L* **26** # 57

Ran, Adee Intel

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

missing space between "FALSE" and "to"

SuggestedRemedy

Add space

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.4.3** *P* **46** *L* **12** # 59

Ran, Adee Intel

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

Definition of SMD_DECODE is unclear. What bit does "The bit" refer to?

Translation of ZERO to 0 and ONE to 1 is obvious and is not mentioned in similar occasions (e.g. clause 46) so it needs not be listed here. This also applies to several other function definitions, this repetition clutters the text.

Also, the marking in figure 99-5 (using return values of SMD_DECODE as conditions for transitions) seems unconventional.

SuggestedRemedy

Change beginning of this definition to
"Decodes the octet created by eight rPLS_DATA.indication primitives (bit 0 is received first) according to Table 99–1, and returns one of the following values:"

Remove the translation of ONE to 1 and ZERO to 0 from all function definitions.

Update figure 99-5 to use existing conventions (e.g. in figure 49-16) for state transition conditions.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Agree that there are a lot of repetitions discribing converting a vector to primitives and vice versa. Put one description of each at the beginning of the Functions subclause and delete from the individual funtion descriptions.

Use "A bit" rather than "the bit"

Cl **99** *SC* **99.4.3** *P* **46** *L* **12** # 58

Ran, Adee Intel

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

Piling on comment #174 against D2.0, prescient functions are rare birds in 802.3. From reading the text (without the comment and response) it may not be clear that this implies pipelining.

SuggestedRemedy

A specific remedy is beyond my expertise. Please consider changing the state diagram to avoid using prescient functions or clarifying the variable definitions (perhaps by adding a NOTE).

Response *Response Status* **C**

REJECT. We are not able to find a better way. Prescient functions are used in serveral places in 802.3 and have not caused issues.

Cl **99** *SC* **99.4.4** *P* **41** *L* **49** # 38

Tretter, Albert Siemens AG

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

Statement: When a packet is preempted, transmit processing appends the mCRC to the mPacket.

Comment to draft D2.0:
If a frame is preempted, transmit processing appends the mCRC to the mPacket.
This statment is not true for the final mPacket, as described in clause 9.3.6 CRC:
The CRC field contains a cyclic redundancy check (CRC) for mPacket data and an indication of whether this is the final mPacket of a frame. For the final mPacket of a frame, the CRC field contains the last 4 octets of the MAC frame (the FCS field).

This comment is not resolved in draft D2.1

SuggestedRemedy

Please correct the statement in a way like:
When a packet is preempted, transmit processing appends the mCRC to the mPacket, for the final mPacket of a preempted frame, the CRC field contains the CRC of the preempted MAC frame (the FCS field).

Response *Response Status* **C**

ACCEPT. Change "If" to "When"

Cl **99** *SC* **99.4.5** *P* **42** *L* **12** # 50

Ran, Adee Intel

Comment Type **ER** *Comment Status* **A**

"Receive processing was processing an incomplete preempted packet," is repeated twice in this sentence.

SuggestedRemedy

Delete the first instance of "Receive processing was processing an incomplete preempted packet,".

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.4.5** *P* **42** *L* **13** # 51

Ran, Adee Intel

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

Discard is used in the normative Receive processing state diagram, but the definition of the DISCARD function in 99.4.7.4 is too vague. The required functionality of DISCARD should be described within its normative definition, even if it is implementation dependent. Providing examples of possible behavior (as done here) is out of place, and is insufficent.

(the definition of DISCARD is the subject of another comment)

SuggestedRemedy

Change the text starting from "Receive processing ensures" to the end of the paragraph to "receive processing discards the mPacket (see DISCARD function in 99.4.7.4)".

Delete "and Receive processing ensures that the pMAC detects a FrameCheckError as described above." (line 39-40).

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. Receive processing can't discard the packet. Part of the packet is already in the MAC which is going to process it. Receive processing has to ensure that the MAC discards the packet.

Put the full description here but make it more similar to the description of similar functionality in RS sublayers.
(46.3.3.1 and 81.3.3.1)

"shall ensure that the MAC detects a FrameCheckError in that frame. This requirement may be met by incorporating a function in the RS that produces a received frame data sequence delivered to the MAC sublayer that is guaranteed to not yield a valid CRC result, as specified by the frame check sequence algorithm (see 3.2.8). This data sequence may be produced by substituting data delivered to the MAC. It can do this by checking that the prior four octets sent to the MAC did not match the CRC of the data sent before them or by sending eight
additional PLS_DATA.indication primitives to the pMAC or by implementation dependent means. Other techniques may be employed to respond to a received Error control character provided that the result is that the MAC sublayer behaves as though a FrameCheckError occurred in the received frame.

Cl **99** *SC* **99.4.7.1** *P* **43** *L* **23** # 52

Ran, Adee Intel

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

The primitive names have a letter prefix, not a preface.

SuggestedRemedy

Change "prefaced" to "prefixed".

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.4.7.3** *P* **43** *L* **44** # 53

Ran, Adee Intel

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

How is disableVerify set? What is the default value?

SuggestedRemedy

Change definition of disableVerify to
"A Boolean variable that is set by management to control verification of preemption operation (see 99.4.3). TRUE disables verification and FALSE enables verification. Default value is FALSE."

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.4.7.3** *P* **43** *L* **45** # 139

Slavick, Jeff Avago Technologies

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

The word "indicating," needs to be removed from the addFragSize definition

SuggestedRemedy

Remove "indicating," from addFragSize definition

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. See #64

Cl **99** *SC* **99.4.7.3** *P* **43** *L* **45** # 9

Anslow, Pete Ciena

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

"An integer in the range 0:3 indicating, used to configure..." does not make sense

SuggestedRemedy

Change to "An integer in the range 0:3 used to configure..."

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. See #64

Cl **99** *SC* **99.4.7.3** *P* **44** *L* **16** # 49

Ran, Adee Intel

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

"The preemption capability shall be active only if the capability has been enabled and verified." - but then "Verification may be disabled".

If verification is disabled then the "only if" does not hold, so preemption capablility is (normatively) not active. That makes disabling verification equivalent to disabling preemption.

Is that the intent?

SuggestedRemedy

Either of the following:

==option 1== (assuming preemption is allowed if verification is disabled)
Change the second sentence (line 16) to "If verification is enabled, the preemption capability shall be active only after verification has completed successfully".

==option 2== (assuming preemption requires successful verification)
Remove the option to disable verification.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. It is the intent to allow disabling verify. In some closed systems this is the preferred mechanism because it allows for faster initialization of the system. Use Option 1:

"If verification is enabled, the preemption capability shall be active only after verification has completed successfully".

Cl **99** *SC* **99.4.7.3** *P* **44** *L* **8** # 138

Slavick, Jeff Avago Technologies

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

Missing space after FALSE in pEnable definition

SuggestedRemedy

Add a space after FALSE and before to in the pEnable definition

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.4.7.4** *P* **45** *L* **13** # 63

Ran, Adee Intel

Comment Type **ER** *Comment Status* **A**

Definition of DISCARD is vague and mostly describes the pMAC behavior (which is the subject of another clause). One sublayer cannot "ensure" the behavior of another sublayer.

Also, pRX_DV is another function of the MAC merge (defined in the following page) and not part of the service interface, so the MAC does not receive it. It should be invoked.

Also, "used if Receive processing detects an error".

SuggestedRemedy

Change the definition of DISCARD to read:

"Marks a preemptable packet as invalid in order to cause the pMAC to generate a FrameCheckError status code (see 4A.2.9), and then invokes pRX_DV(FALSE). Used when Receive processing detects that the packet cannot be continued after it was preempted (see 99.4.5).
NOTE--The method for marking a packet as invalid is implementation dependent and beyond the scope of this standard."

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. There is no way to mark a preemptable packet as invalid because there is no invalid marking provided by the service interface.

"Ensures that the MAC detects a FrameCheckError in that frame (see 99.4.5) and then invokes pRX_DV(FALSE). Used when Receive processing detects that the packet cannot be continued after it was preempted."

Cl **99** *SC* **99.4.7.4** *P* **45** *L* **30** # 10

Anslow, Pete Ciena

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

"(see Table 99–2)..Produces" has two "." and no space.

SuggestedRemedy

Change "(see Table 99–2)..Produces" to "(see Table 99–2). Produces"

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.4.7.4** *P* **46** *L* **23** # 140

Slavick, Jeff Avago Technologies

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

In Figure 99-5 one of the exit paths out of the CHECK_FOR_START and CHECK_FOR_RESUME states is based on preamble, but the output of SMD_DECODE is Preamble (with a capital P)

SuggestedRemedy

Change SMD_DECODE to
P 0x55 - Preamble

in Figure 99-5 replace the 2 instances of preamble with P
in Figure 99-6 replace preamble with P

Response *Response Status* **W**

ACCEPT.

Cl **99** *SC* **99.4.7.6** *P* **47** *L* **25** # 60

Ran, Adee Intel

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

9 point font in text.

SuggestedRemedy

Change to normal 10 point.

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.4.7.7** *P* **48** *L* **17** # 61

Ran, Adee Intel

Comment Type **ER** *Comment Status* **A**

In condition for transition from IDLE_TX_PROC to START_PREAMBLE, variable name "send_" should probably be "send_v".

Text for condition for transition from P_RECEIVE_DATA to WAIT_FOR_DV_FALSE is quite far from the arrow.

SuggestedRemedy

Change variable name to send_v.

Move text box near its corresponding arrow.

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.4.8** *P* **50** *L* **48** # 62

Ran, Adee Intel

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

Inconsistent dimensions: bit times are time values, but addFragSize is a pure number.

SuggestedRemedy

Change "1240 bit times plus 512 times addFragSize"
to "(1240 + 512 x addFragSize) bit times"

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.5.1** *P* **52** *L* **6** # 11

Anslow, Pete Ciena

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

"Clause 99, MAC Mere sublayer" should be "Clause 99, MAC Merge sublayer"

SuggestedRemedy

Change "Clause 99, MAC Mere sublayer" to "Clause 99, MAC Merge sublayer"

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99.5.3.1** *P* **53** *L* **30** # 12

Anslow, Pete Ciena

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

"Performed as specified in 99–6" should be "Performed as specified in Figure 99–6"

SuggestedRemedy

Change "99-6" to "Figure 99-6" by applying the cross-reference format "FigureNumber"

Response *Response Status* **C**

ACCEPT.

Cl **99.** *SC* **99.4.7.2** *P* **43** *L* **45** # 64

Ran, Adee Intel

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

"indicating, used to configure"

Is addFragSize an indicator or a control? does the variable affect the transmitted TLV value or is it set by the the received TLV value?

Since it is defined in this clause, it seems that it is set by the received value and affects the behavior of preemption in the transmit direction, per 99.4.4.

SuggestedRemedy

Change the definition of addFragSize to:

"An integer in the range 0:3 that controls the minimum non-final mPacket length, as specified in 99.4.4. Set to the value of the addFragSize field in the received Additional Ethernet Capabilities TLV (see 79.3.7)."

Response *Response Status* **C**

ACCEPT.

Cl **99.4.** *SC* **99.4.4** *P* **41** *L* **35** # 65

Ran, Adee Intel

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

It isn't clear from the text if the value addFragSize=0 is a special case. The text in line 35 "at least 60 octets" but if addFragSize=0 the calculation in line 42 yields 64 octets. The value 64 is also consistent with the definition of addFragSize in 99.4.7.3.

Since addFragSize field is part of the same TLV that announces preemption capability, it is always communicated, and the calculation should hold with any value. To prevent ambiguity it would be best to have a single formula and avoid making "additional multiple of 64 octets" conditional.

Changing the minimum from 60 to 64 would allow a single calculation.

Also, the behavior of the transmit processing is controlled by the addFragSize _variable_. The variable is defined in 99.4.7.3. The fact that the variable is set from the received TLV should be stated, with a reference to 79.3.7. Discussion of the receiver requirements is out of place here (this subclause is "Transmit processing" so should only address the transmit behavior). If receiver requirement need to be addressed, the discussion should be moved to 99.4.4.

SuggestedRemedy

== Option 1 ==
Assuming the value 0 is not special:

Change "60" to "64" in line 35.

Change the text in lines 39 to 42 to read:

"The earliest starting position of preemption is controlled by the addFragSize variable. Preemption does not occur until at least 64 x (1+addFragSize) octets have been sent. addFragSize is set to the value of addFragSize field in the received Additional Ethernet Capabilities TLV (see 79.3.7).

==Option 2==
Assuming 0 is a special case that sets the minimum to 60:

Change the text in lines 39 to 42 to read:

"The earliest starting position of preemption is controlled by the addFragSize variable. If addFragSize is 0, preemption does not occur until at least 60 octets have been sent. If addFragSize is nonzero, preemption does not occur until at least 64 x (1+addFragSize) octets have been sent. addFragSize is set to the value of addFragSize field in the received Additional Ethernet Capabilities TLV (see 79.3.7).

Response *Response Status* **C**

ACCEPT IN PRINCIPLE. Change to:

"The earliest starting position of preemption is controlled by the addFragSize variable.
Preemption does not occur until at least 64 x (1+addFragSize) - 4 octets have been sent.
The addFragSize variable is set to the value of the addFragSize field in the received
Additional Ethernet Capabilities TLV (see 79.3.7)."

Also in the variable preempt:
fragSize>=(minFrag x (1 + addFragSize))
should be
fragSize>=(minFrag x (1 + addFragSize) - 4)
to account for the 4 octets of mCRC that will be added.