Cl **00** *SC* *P* *L* # 165

NoName

Comment Type **E** *Comment Status* **D**

SuggestedRemedy

Proposed Response *Response Status* **O**

Cl **00** *SC* *P* *L* # 15

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* **X**

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.

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

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

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.

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **D**

"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.

Proposed Response *Response Status* **W**

PROPOSED REJECT. Read the PAR. It says:
Type of Project: Amendment to IEEE Standard 802.3-2012

Of course we are keeping track against 802.3-201x plus all the amendment projects that are likely to finish before us. But officially the project is an amendment of 802.3-2012. When the revision finishes, the PAR will be updated by the system be an Amendment of 802.3-<year> and the draft will be updated to match.

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

Hajduczenia, Marek Bright House Network

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

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.

Proposed Response *Response Status* **O**

Cl **01** *SC* **1.3** *P* **15** *L* **5** # 69
Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **D**

No normative definitions included in 1.3

SuggestedRemedy

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

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **01** *SC* **1.4** *P* **15** *L* **12** # 70
Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **D**

"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

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **01** *SC* **1.4** *P* **15** *L* **32** # 71
Hajduczenia, Marek Bright House Network

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

Stray "1.4.340"

SuggestedRemedy

Remove empty line

Proposed Response *Response Status* **O**

Cl **01** *SC* **1.4.0a** *P* **15** *L* **12** # 29
Tretter, Albert Siemens AG

Comment Type **E** *Comment Status* **D**

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)...

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **01** *SC* **1.4.0a** *P* **15** *L* **12** # 3
Anslow, Pete Ciena

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

"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".

Proposed Response *Response Status* **O**

Cl **01** *SC* **1.4.0a** *P* **15** *L* **14** # 31
Tretter, Albert Siemens AG

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

(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:

Proposed Response *Response Status* **O**

Cl **01** *SC* **1.4.339a** *P* **15** *L* **25** # 30
Tretter, Albert Siemens AG

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

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)...

Proposed Response *Response Status* **O**

Cl **01** *SC* **1.4.339a** *P* **15** *L* **26** # 4
Anslow, Pete Ciena

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

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".

Proposed Response *Response Status* **O**

Cl **01** *SC* **1.4.340** *P* **15** *L* **32** # 5
Anslow, Pete Ciena

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

spurious heading for 1.4.340

SuggestedRemedy

Delete

Proposed Response *Response Status* **O**

Cl **30** *SC* **30.12.1.1.1** *P* **19** *L* **36** # 74
Hajduczenia, Marek Bright House Network

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

Unclear editorial instruction: "Change as 30.12.1.1.1 follows:"

SuggestedRemedy

Change to "Change 30.12.1.1.1 as follows:"

Proposed Response *Response Status* **O**

Cl **30** *SC* **30.12.1.1.1** *P* **19** *L* **48** # 75
Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **D**

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.

Proposed Response *Response Status* **W**

PROPOSED 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* **D**

"(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.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

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

Hajduczenia, Marek Bright House Network

Comment Type **TR** *Comment Status* **D**

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)

Proposed Response *Response Status* **W**

PROPOSED REJECT.
The text is clear. Ths suggested replacement text is not clear since if the value represents the minimum fragment size expressed in units of 64 octets, 0 would be a minimum fragment size of 0.

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

Hajduczenia, Marek Bright House Network

Comment Type **T** *Comment Status* **D**

"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."

Proposed Response *Response Status* **W**

PROPOSED 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 when the previous invocation of the SMD_DECODE function returned "C"."

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* **X**

The following reference is incomplete: (Fig 99-)

SuggestedRemedy

Please correct the reference

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

Comment Type **T** *Comment Status* **D**

"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."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Our state machine notation doesn't support state machine actions on transitions, but a management variable can specify that it is incremented on a transition.

For example, see 30.3.2.1.10 aTransmitLPITransitions, 30.4.3.1.16 aIsolates, 30.9.1.1.11 aPSEMPSAbsentCounter

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.

Should we count entries to CHECK_FRAG_CNT instead?

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

Hajduczenia, Marek Bright House Network

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

Stray ".;"

SuggestedRemedy

Remove

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

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

"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."

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

Comment Type **TR** *Comment Status* **D**

"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

Proposed Response *Response Status* **W**

PROPOSED REJECT. The value unknown generally indicates that management can't access the information, not that the underlying variable is lacking a value. For examples, see:

30.3.1.1.32 aDuplexStatus
30.3.1.1.37 aMaxFrameLength
30.3.2.1.2 aPhyType
30.5.1.1.16 aFECmode
30.5.1.1.30 aRSFECBypassEnable
and numerous others.

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

Hajduczenia, Marek Bright House Network

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

"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

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

Comment Type **T** *Comment Status* **D**

"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."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

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

Hajduczenia, Marek Bright House Network

Comment Type **T** *Comment Status* **D**

"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."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

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

Hajduczenia, Marek Bright House Network

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

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."

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

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

"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"

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

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

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

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

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

Do not reference "subclause"

SuggestedRemedy

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

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

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

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

SuggestedRemedy

Change to "defined in Table 79–7a"

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

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

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

SuggestedRemedy

Remove change bars from the clean document.

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

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

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.

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **D**

"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"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

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

Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **D**

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.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

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

Anslow, Pete Ciena

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

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.)

Proposed Response *Response Status* **O**

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

Anslow, Pete Ciena

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

(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".

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

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

"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

Proposed Response *Response Status* **O**

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

Tretter, Albert Siemens AG

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

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

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **D**

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

SuggestedRemedy

Per comment.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

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

Tretter, Albert Siemens AG

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

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

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **D**

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

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

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

Tretter, Albert Siemens AG

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

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

Proposed Response *Response Status* **O**

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

Anslow, Pete Ciena

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

Missing "." at the end of the paragraph

SuggestedRemedy

add the "."

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **D**

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.

Proposed Response *Response Status* **W**

PROPOSED REJECT. They are conditionally mandatory - either mandatory when MM is not supported or when MM is supported. Since it is conditional, NO [ ] Is a valid response in some cases.

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

NoName

Comment Type **E** *Comment Status* **D**

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

Proposed Response *Response Status* **W**

PROPOSED 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* **X**

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

SuggestedRemedy

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

Proposed Response *Response Status* **O**

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

Anslow, Pete Ciena

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

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.

Proposed Response *Response Status* **O**

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

Tretter, Albert Siemens AG

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

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

Proposed Response *Response Status* **O**

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

Brandt, David Rockwell Automation

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

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."

Proposed Response *Response Status* **O**

Cl **99** *SC* **4.7.3** *P* **44** *L* **26** # 160
Brandt, David Rockwell Automation

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

The following has incorrect spacing:

"capability and FALSEto disable"

SuggestedRemedy

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

Proposed Response *Response Status* **O**

Cl **99** *SC* **4.7.4** *P* **45** *L* **49** # 161
Brandt, David Rockwell Automation

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

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>)"

Proposed Response *Response Status* **O**

Cl **99** *SC* **4.7.7** *P* **48** *L* **14** # 162
Brandt, David Rockwell Automation

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

Figure 99-4-Transmit Processing State Diagram

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

SuggestedRemedy

Add the t.

Proposed Response *Response Status* **O**

Cl **99** *SC* **4.7.7** *P* **48** *L* **17** # 164
Brandt, David Rockwell Automation

Comment Type **ER** *Comment Status* **D**

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.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **99** *SC* **4.7.7** *P* **48** *L* **45** # 163
Brandt, David Rockwell Automation

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

Figure 99-4-Transmit Processing State Diagram

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

SuggestedRemedy

Remove).

Proposed Response *Response Status* **O**

Cl **99** *SC* **99.1** *P* **33** *L* **1** # 13
Anslow, Pete Ciena

Comment Type **ER** *Comment Status* **D**

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"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

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

Hajduczenia, Marek Bright House Network

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

"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."

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

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

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."

Proposed Response *Response Status* **W**

Discuss
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.

The MMSI can only minimize latency when express traffic has an expected time for being ready to send so that the hold can be asserted before the traffic is present. The suggested rewording doesn't make it clear that this only works when that is known in advance.

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

Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **D**

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).

Proposed Response *Response Status* **W**

PROPOSED REJECT. This text is a general introduction to what the MAC Merge sublayer does.
The first sentence talks about expreess traffic causing preemption and the next two sentences describe that the MSSI primitives can also preempt and resume. The text in the next paragraph (lines 33 to 38) has nothing to do with the MSSI primitives.

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

Ran, Adee Intel

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

Typo

SuggestedRemedy

Change "tthe" to "the"

Proposed Response *Response Status* **O**

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

Tretter, Albert Siemens AG

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

When preemption is inactive, tthe MAC Merge

Please

SuggestedRemedy

Please correct "tthe"

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

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

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"

Proposed Response *Response Status* **O**

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

Ran, Adee Intel

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

"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.

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

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

"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"

Proposed Response *Response Status* **O**

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

Ran, Adee Intel

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

Uncommon spelling.

SuggestedRemedy

Change "Reconcilliation" to "Reconciliation".

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

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

Empty lines in 45-48

SuggestedRemedy

Remove.

Proposed Response *Response Status* **O**

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

Ran, Adee Intel

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

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".

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

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

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

Proposed Response *Response Status* **W**

Check with 802.1 - it was their name for the primitive but they many not be using it anymore.

Delete if 802.1 isn't using?

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

Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **D**

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.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

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

Hajduczenia, Marek Bright House Network

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

Empty lines 45-48

SuggestedRemedy

Remove

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

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

"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"

Proposed Response *Response Status* **O**

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

Ran, Adee Intel

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

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."

Proposed Response *Response Status* **W**

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.

Receipt of the prmitive with the value hold causes preemption if the current conditions allow preemption and always 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* **X**

"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.

Proposed Response *Response Status* **W**

Discuss -
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.

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

Hajduczenia, Marek Bright House Network

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

"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"

Proposed Response *Response Status* **O**

Cl **99** *SC* **99.3.1** *P* **38** *L* **20** # 107
Hajduczenia, Marek Bright House Network

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

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"

Proposed Response *Response Status* **O**

Cl **99** *SC* **99.3.1** *P* **38** *L* **29** # 109
Hajduczenia, Marek Bright House Network

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

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"

Proposed Response *Response Status* **O**

Cl **99** *SC* **99.3.1** *P* **38** *L* **33** # 110
Hajduczenia, Marek Bright House Network

Comment Type **ER** *Comment Status* **D**

"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

Proposed Response *Response Status* **W**

PROPOSED 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** # 111
Hajduczenia, Marek Bright House Network

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

Wrong reference format

SuggestedRemedy

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

Proposed Response *Response Status* **O**

Cl **99** *SC* **99.3.2** *P* **38** *L* **37** # 14
Anslow, Pete Ciena

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

"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"

Proposed Response *Response Status* **O**

Cl **99** *SC* **99.3.3** *P* **38** *L* **43** # 112
Hajduczenia, Marek Bright House Network

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

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. "

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

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

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."

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

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

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."

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

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

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. "

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

Comment Type **TR** *Comment Status* **D**

"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.

Proposed Response *Response Status* **W**

PROPOSED 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 unpreepmted minimum size packets.

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

Hajduczenia, Marek Bright House Network

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

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)"

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

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

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."

Proposed Response *Response Status* **O**

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

Hajduczenia, Marek Bright House Network

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

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

Proposed Response *Response Status* **O**

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

Ran, Adee Intel

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

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".

Proposed Response *Response Status* **O**

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

Ran, Adee Intel

Comment Type **ER** *Comment Status* **D**

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"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

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

Ran, Adee Intel

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

"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."

Proposed Response *Response Status* **W**

We could remove "by implementation dependent means" and just be silent on it. It wouldn't be correct to say it is beyond the scope of this standard because IEEE 802.3 does specify ways for some PHYs to detect link failures. It just doesn't happen to specifiy how to get that information above the RS.

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

Ran, Adee Intel

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

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.

Proposed Response *Response Status* **O**

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

Ran, Adee Intel

Comment Type **TR** *Comment Status* **D**

"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".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Don't add the note because it isn't generally true across IEEE 802.

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

Ran, Adee Intel

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

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.

Proposed Response *Response Status* **O**

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

Ran, Adee Intel

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

missing space between "FALSE" and "to"

SuggestedRemedy

Add space

Proposed Response *Response Status* **O**

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

Ran, Adee Intel

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

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.

Proposed Response *Response Status* **O**

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

Ran, Adee Intel

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

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).

Proposed Response *Response Status* **O**

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

Tretter, Albert Siemens AG

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

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).

Proposed Response *Response Status* **O**

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

Ran, Adee Intel

Comment Type **ER** *Comment Status* **D**

"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,".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

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

Ran, Adee Intel

Comment Type **TR** *Comment Status* **D**

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).

Proposed Response *Response Status* **W**

PROPOSED REJECT. 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.

This is not the only case in 802.3 where this occurs. See for example, 46.3.3.1 and 81.3.3.1

Should we change the text to be more similar to?:
shall ensure that the MAC will
detect 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. The RS generates eight PLS_DATA.indication
primitives for each Error control character received within a frame, and may generate eight PLS_DATA.indication primitives to ensure FrameCheckError when a control character other than Terminate
causes the end of the frame.
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* **X**

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

SuggestedRemedy

Change "prefaced" to "prefixed".

Proposed Response *Response Status* **O**

Cl **99** *SC* **99.4.7.3** *P* **43** *L* **44** # 53
Ran, Adee Intel

Comment Type **TR** *Comment Status* **D**

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."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **99** *SC* **99.4.7.3** *P* **43** *L* **45** # 9
Anslow, Pete Ciena

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

"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..."

Proposed Response *Response Status* **O**

Cl **99** *SC* **99.4.7.3** *P* **43** *L* **45** # 139
Slavick, Jeff Avago Technologies

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

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

SuggestedRemedy

Remove "indicating," from addFragSize definition

Proposed Response *Response Status* **O**

Cl **99** *SC* **99.4.7.3** *P* **44** *L* **16** # 49
Ran, Adee Intel

Comment Type **TR** *Comment Status* **D**

"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.

Proposed Response *Response Status* **W**

PROPOSED 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.

Cl **99** *SC* **99.4.7.3** *P* **44** *L* **8** # 138
Slavick, Jeff Avago Technologies

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

Missing space after FALSE in pEnable definition

SuggestedRemedy

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

Proposed Response *Response Status* **O**

Cl **99** *SC* **99.4.7.4** *P* **45** *L* **13** # 63
Ran, Adee Intel

Comment Type **ER** *Comment Status* **D**

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."

Proposed Response *Response Status* **W**

PROPOSED 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 will detect a FrameCheckError in that frame 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)."

Cl **99** *SC* **99.4.7.4** *P* **45** *L* **30** # 10
Anslow, Pete Ciena

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

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

SuggestedRemedy

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

Proposed Response *Response Status* **O**

Cl **99** *SC* **99.4.7.4** *P* **46** *L* **23** # 140
Slavick, Jeff Avago Technologies

Comment Type **TR** *Comment Status* **D**

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

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **99** *SC* **99.4.7.6** *P* **47** *L* **25** # 60
Ran, Adee Intel

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

9 point font in text.

SuggestedRemedy

Change to normal 10 point.

Proposed Response *Response Status* **O**

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

Ran, Adee Intel

Comment Type **ER** *Comment Status* **D**

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.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

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

Ran, Adee Intel

Comment Type **TR** *Comment Status* **D**

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"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

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

Anslow, Pete Ciena

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

"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"

Proposed Response *Response Status* **O**

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

Anslow, Pete Ciena

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

"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"

Proposed Response *Response Status* **O**

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

Ran, Adee Intel

Comment Type **TR** *Comment Status* **D**

"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)."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

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

Ran, Adee Intel

Comment Type **TR** *Comment Status* **D**

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).

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Actually, it is correct as it is. Preemption only occurs if at least 60 octets of the preemptable frame have been transmitted. Then the mCRC is sent which ensures that the minimum fragment non-final fragmet is 64 octets.

If addFragSize is non-zero, the minimum non-final fragment size is 64 x (1 + addFragSize).

The error is in preempt where:
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.