

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 00 SC 0 P1 L 24 # 1
 Anslow, Pete Ciena

Comment Type E Comment Status X

This will be an amendment to IEEE Std 802.3-201x (the outcome of the 802.3bx revision) rather than IEEE Std 802.3-2012.

The headers in the draft incorrectly say "Draft Amendment to IEEE Std 802.3-2012" Also, all the headers are missing the "P" from "P802.3br" and the headers in the TOC are incorrect.

SuggestedRemedy

Change all of the headers to say "Draft Amendment to IEEE Std 802.3-201x" and also from: "IEEE 802.3br Interspersing Express Traffic Task Force" to: "IEEE P802.3br Interspersing Express Traffic Task Force".

This can be done by changing the base_year variable in each file and by changing the odd and even page headers in one of the files file to say "P802.3br", then with that file open, in the left hand pane highlight all of the other files in the book (including the TOC) and use File, Import, Formats, Deselect All, Page layouts, Import.

Proposed Response Response Status O

CI 00 SC 0 P10 L 54 # 2
 Anslow, Pete Ciena

Comment Type E Comment Status X

Incorrect copyright year shown in the TOC and Clause 30

SuggestedRemedy

change the copyright_year variable in the TOC and Clause 30 files to "2015"

Proposed Response Response Status O

CI 99 SC P4 L 19 # 3
 Anslow, Pete Ciena

Comment Type E Comment Status X

IEEE Std 802.3bk-2013 is expected to be superseded by the time that the P802.3br amendment is published, so remove the 802.3bk summary.

The summary of other amendments that are likely to be published before 802.3br (at least IEEE Std 802.3bw-201x) should be added here.

The summary of what this amendment includes should be filled out.

SuggestedRemedy

Remove the 802.3bk summary.

Add the summary of other amendments that are likely to be published before 802.3br (at least IEEE Std 802.3bw-201x).

Change: "IEEE Std 802.3xxTM-201x" to "IEEE Std 802.3brTM-201x"

Replace "This amendment includes [complete]" with the completed summary of the P802.3br amendment.

Proposed Response Response Status O

CI 99 SC P6 L 13 # 4
 Anslow, Pete Ciena

Comment Type E Comment Status X

"IEEE P802.3br Task Force name" should be "IEEE P802.3br Interspersing Express Traffic"

SuggestedRemedy

Change ""IEEE P802.3br Task Force name" to "IEEE P802.3br Interspersing Express Traffic" (2 instances)

Proposed Response Response Status O

CI 99 SC P13 L 44 # 5
 Anslow, Pete Ciena

Comment Type E Comment Status X

The editor's note refers to "IEEE P802.3bj and IEEE P802.3bk" which will both be superseded amendments by the time P802.3br is published.

SuggestedRemedy

Change:

"(e.g., IEEE P802.3bj and IEEE P802.3bk)" to: "(e.g., IEEE P802.3bq and IEEE P802.3bw)"

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 01 SC 1.4 P 14 L 15 # 6
 Anslow, Pete Ciena

Comment Type E Comment Status X

Provide the information as to where in 1.4 the various new definitions should be inserted.
 Change the editing instruction accordingly.

SuggestedRemedy

Change:
 "1.4.1 express Media Access Control (eMAC):..." to:
 "1.4.197a express Media Access Control (eMAC):..."
 "1.4.197b express traffic: ..." to "1.4.2 express traffic: ..."
 etc.

Replace the single editing instruction: "Insert the following new definitions into the list, in
 alphanumerical order:" with:

"Insert the following two new definitions into the list after "1.4.197 Exception Window"
 etc.

Proposed Response Response Status O

Cl 30 SC 30.2.2.1 P 15 L 3 # 7
 Anslow, Pete Ciena

Comment Type E Comment Status X

The intermediate headings between "30" and "30.2.2.1" should be shown.

SuggestedRemedy

Add headings for 3.2 and 30.2.2

Proposed Response Response Status O

Cl 30 SC 30.2.5 P 15 L 36 # 8
 Anslow, Pete Ciena

Comment Type E Comment Status X

Spurious "]" in heading

SuggestedRemedy

Change "]"Capabilities" to "Capabilities"

Proposed Response Response Status O

Cl 30 SC 30.12.1.1.1 P 18 L 28 # 9
 Anslow, Pete Ciena

Comment Type E Comment Status X

Headings for 30.12, 30.12.1, 30.12.1.1 are missing

SuggestedRemedy

Add the headings for 30.12, 30.12.1, 30.12.1.1

Proposed Response Response Status O

Cl 30 SC 30.12.2.1.30 P 19 L 2 # 10
 Anslow, Pete Ciena

Comment Type E Comment Status X

The heading for 30.12.2.1 is missing

SuggestedRemedy

Add the heading for 30.12.2.1

Proposed Response Response Status O

Cl 30 SC 30.12.2.1.30 P 19 L 4 # 11
 Anslow, Pete Ciena

Comment Type E Comment Status X

30.12.2.1.30 is already present in the base standard.

SuggestedRemedy

Change the editing instruction to:
 "Insert 30.12.2.1.34 through 30.12.2.1.37 after 30.12.2.1.33 as follows:"
 Renumber 30.12.2.1.30 through 30.12.2.1.33 to be 30.12.2.1.34 through 30.12.2.1.37.

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 30 SC 30.12.3.1.24 P 19 L 44 # 12
 Anslow, Pete Ciena
 Comment Type E Comment Status X
 The heading for 30.12.3.1 is missing
 SuggestedRemedy
 Add the heading for 30.12.3.1
 Proposed Response Response Status O

Cl 30 SC 30.14 P 20 L 29 # 15
 Anslow, Pete Ciena
 Comment Type E Comment Status X
 The editing instruction should be more explicit
 SuggestedRemedy
 Change to: "Insert 30.14 after 30.13 as follows:"
 Proposed Response Response Status O

Cl 79 SC 79.4.2 P 24 L 53 # 13
 Anslow, Pete Ciena
 Comment Type E Comment Status X
 Space missing in editing instruction.
 SuggestedRemedy
 Change "Table 79–9and Table 79–10" to "Table 79–9 and Table 79–10"
 Proposed Response Response Status O

Cl 79 SC 79.3.6 P 24 L 18 # 16
 Anslow, Pete Ciena
 Comment Type E Comment Status X
 79.3.6 is already present in the base standard.
 Figure 79-6 is already present in the base standard.
 SuggestedRemedy
 Change the new subclause from 79.3.6 to 79.3.7
 Change Figure 79-6 to Figure 79-8
 Proposed Response Response Status O

Cl 30 SC 30.12.3.1.24 P 19 L 46 # 14
 Anslow, Pete Ciena
 Comment Type E Comment Status X
 30.12.3.1.24 is already present in the base standard.
 SuggestedRemedy
 Change the editing instruction to:
 "Insert 30.12.3.1.28 through 30.12.3.1.31 after 30.12.3.1.27 as follows:"
 Renumber 30.12.3.1.24 through 30.12.3.1.27 to be 30.12.2.1.28 through 30.12.2.1.31.
 Proposed Response Response Status O

Cl 79 SC 79.3.6.1 P 25 L 14 # 17
 Anslow, Pete Ciena
 Comment Type E Comment Status X
 The IEEE style manual contains:
 "Ranges should repeat the unit (e.g., 115 V to 125 V). Dashes should never be used
 because they can be misconstrued as subtraction signs."
 SuggestedRemedy
 In Table 79-7a, change:
 "3-4" to "3 to 4" and "5-15" to "5 to 15"
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC 99 P 29 L 1 # 18
 Anslow, Pete Ciena
 Comment Type E Comment Status X
 Editing instruction says: "Insert new clauses and corresponding annexes as follows:" but there are no new annexes.
 SuggestedRemedy
 Change to "Insert new clause as follows:"
 Proposed Response Response Status O

CI 99 SC 99.5.2.2 P 47 L 34 # 21
 Anslow, Pete Ciena
 Comment Type E Comment Status X
 "IEEE Std 802.3br-2015" should be "IEEE Std 802.3br-201x" (2 instances)
 SuggestedRemedy
 Change the PICS_year variable in the clause 99 file from "2015" to "201x"
 Proposed Response Response Status O

CI 99 SC 99.1 P 30 L 6 # 19
 Anslow, Pete Ciena
 Comment Type E Comment Status X
 Figure 99-1 needs cleaning up
 SuggestedRemedy
 Remove the spurious dotted line that crosses the end of "MAC CLIENT supporting preemption".
 Shrink the curly bracket labelled "PHY" to start at the top of the PCS layer.
 Proposed Response Response Status O

CI 30 SC 30.12.1.1.1 P 18 L 30 # 22
 Anslow, Pete Ciena
 Comment Type ER Comment Status X
 The editing instruction should be more explicit.
 The format and text of 30.12.1.1.1 in the base standard (P802.3bx D3.0) is not the same as the unmodified text shown here.
 SuggestedRemedy
 Change editing instruction to:
 "Change 30.12.1.1.1 as follows:"
 Start with the text of this subclause from the base standard (P802.3bx D3.0).
 In the first paragraph show "6 bits" being changed to "7 bits".
 Show the second paragraph in strikethrough font followed by the new version in underline font.
 Proposed Response Response Status O

CI 99 SC 99.5 P 47 L 6 # 20
 Anslow, Pete Ciena
 Comment Type E Comment Status X
 "clause title" should be "MAC Merge sublayer"
 SuggestedRemedy
 Change "clause title" to "MAC Merge sublayer"
 Proposed Response Response Status O

CI 30 SC 30.14.1.2 P 21 L 10 # 23
 Anslow, Pete Ciena
 Comment Type T Comment Status X
 Issue in editor's note should be resolved
 SuggestedRemedy
 Resolve the issue and remove the editor's note.
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 79 SC 79.3 P 24 L 7 # 24
 Anslow, Pete Ciena

Comment Type T Comment Status X

The editing instruction does not say where the new row should be inserted and the modification to the reserved row should be explicit.
 The new subtype number should not be TBD.

SuggestedRemedy

Change the editing instruction to:
 "Change the reserved row in Table 79-1 and insert a new row above it as follows (unchanged rows not shown):"
 Add the reserved row to the table in the draft and show "7-255" in strikethrough font and "8 to 255" in underline font. (numbers separated by a "-" in this way are outlawed in the IEEE style guide).
 In the new row, change "TBD" to "7"
 In Figure 79-6 change "TBD" to "7"

Proposed Response Response Status O

CI 99 SC 99 P 45 L 38 # 25
 Anslow, Pete Ciena

Comment Type TR Comment Status X

There are several Editor's notes in Clause 99 discussing issues with the clause.
 All of these issues should have been resolved prior to WG ballot and will certainly have to be resolved prior to the draft being ready for Sponsor Ballot.

SuggestedRemedy

Resolve all of the issues and remove the editor's notes.

Proposed Response Response Status O

CI 99 SC 99.4.5 P 37 L 26 # 26
 Beaudoin, Denis Texas Instruments

Comment Type E Comment Status X

Sentence structure issue:
 An SMD containing an SMD-C an mPacket that continues the data for a preempted frame

SuggestedRemedy

An SMD containing an SMD-C is an mPacket that continues the data for a preempted frame

Proposed Response Response Status O

CI 99 SC 99.4.7.7 P 43 L 6 # 27
 Beaudoin, Denis Texas Instruments

Comment Type E Comment Status X

It would be nice to give a definition of UCT, even if it's buried in some other relevant doc.

SuggestedRemedy

Add to Abbreviations section 1.5

Proposed Response Response Status O

CI 99 SC 99.4.7.7 P 43 L 14 # 28
 Beaudoin, Denis Texas Instruments

Comment Type E Comment Status X

Figure 99-4
 Transitions into states TX_VERIFY and TX_RESPOND have an extra * after eTx=FALSE

SuggestedRemedy

Remove extra * after eTx=FALSE

Proposed Response Response Status O

CI 99 SC 99.4.7.7 P 43 L 77 # 29
 Beaudoin, Denis Texas Instruments

Comment Type ER Comment Status X

The state transition to START_PREAMBLE has the word FALSE misspelled
 send_v=FALE *

SuggestedRemedy

Correct line to state 'send_v=FALSE *'

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 99 SC 99.4.7.7 P 43 L 17 # 30
 Beaudoin, Denis Texas Instruments
 Comment Type ER Comment Status X
 The transition to EXPRESS_TX has the word done misspelled.
 'ipg_timer=dne'
 SuggestedRemedy
 Correct to 'ipg_timer=done'
 Proposed Response Response Status O

Cl 99 SC 99.4.8 P 45 L 49 # 33
 Beaudoin, Denis Texas Instruments
 Comment Type TR Comment Status X
 Since the section does not specify which MAC the pause MAC control frames are sent on.
 SuggestedRemedy
 Please specify which MAC the MAC control frames are sent on so that we can determine
 how the delay constraints are applied.
 Proposed Response Response Status O

Cl 99 SC 99.3.4 P 35 L 10 # 31
 Beaudoin, Denis Texas Instruments
 Comment Type T Comment Status X
 The Frag_count encoded value for fragment 3 is defined as 0x83. Shouldn't this be 0xb3
 (like SMD_S3)? All the other frac_counts match the SMD_S? values.
 SuggestedRemedy
 Change Frag_count 3 in the table to be B3
 Proposed Response Response Status O

Cl 00 SC 0 P 6 L 13 # 34
 Booth, Brad Microsoft
 Comment Type E Comment Status X
 Template information still being used.
 SuggestedRemedy
 Delete "Task Force name" from Ludwig and Pat's titles.
 Proposed Response Response Status O

Cl 30 SC 30.12.1.33 P 19 L 38 # 32
 Beaudoin, Denis Texas Instruments
 Comment Type TR Comment Status X
 aLldpXdot3LocAddFragSize is defined as a 2 bit value, but in section 99.4.7.3 it is given
 values 0-7
 SuggestedRemedy
 A 3-bit integer value used to indicate...
 Proposed Response Response Status O

Cl 01 SC 1.3 P 14 L 8 # 35
 Booth, Brad Microsoft
 Comment Type E Comment Status X
 Reference already exists in 802.3-2012, but name of the standard does need to be
 updated.
 SuggestedRemedy
 Change edit command from "insert" to "change".
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 30 SC 30.2.5 P 15 L 36 # 36
 Booth, Brad Microsoft
 Comment Type E Comment Status X
 There is a miscellaneous bracket in the heading.
 SuggestedRemedy
 Looks like the bracket for the editor's note got put in the heading. Relocate the bracket.
 Proposed Response Response Status O

Cl 79 SC 79.3 P 24 L 14 # 37
 Booth, Brad Microsoft
 Comment Type TR Comment Status X
 There should not be a TBD in Table 79-1.
 SuggestedRemedy
 Change TBD to be 6. Show the change to the last line of Table 79-1 to have a range of 7 to 255.
 Proposed Response Response Status O

Cl 01 SC 1.3 P 14 L 52 # 38
 Booth, Brad Microsoft
 Comment Type TR Comment Status X
 Reference to 802.1Qbu and 802.1Qbv should be in the Normative References with reference to the current draft.
 SuggestedRemedy
 Remove footnote and add a normative reference to the existing drafts for .1Qbu and .1Qbv. Keep the references up-to-date as the project progresses.
 Review all other footnote references in Clause 99 to 802.1Q to correctly reference to .1Qbu and .1Qbv.
 Proposed Response Response Status O

Cl 99 SC 99.2.3.1.1 P 32 L 29 # 39
 Dwelley, David Linear Technology
 Comment Type E Comment Status X
 Bad grammar: "The value HOLD suspends transmission from the pMAC by:
 a) preempt any preemptable frame in progress if preemption is active and
 b) not start transmission of frames from the pMAC"
 SuggestedRemedy
 Change to:
 "a) preempting..."
 "b) not starting..."
 Proposed Response Response Status O

Cl 99 SC 99.2.3.1.3 P 32 L 47 # 40
 Dwelley, David Linear Technology
 Comment Type E Comment Status X
 Two periods
 SuggestedRemedy
 Delete one period
 Proposed Response Response Status O

Cl 99 SC 99.3.3 P 34 L 3 # 41
 Dwelley, David Linear Technology
 Comment Type E Comment Status X
 Two periods
 SuggestedRemedy
 Delete one period. Is this some sort of secret code?
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC 99.4 P 35 L 31 # 42
 Dwelley, David Linear Technology
 Comment Type E Comment Status X
 "Behavior" appears twice: "...without MAC Merge behavior changing its behavior and..."
 SuggestedRemedy
 Change to: "...without MAC Merge behavior changing and..." - or something similar that doesn't repeat "behavior"
 Proposed Response Response Status O

CI 99 SC 99.4.6 P 37 L 50 # 45
 Dwelley, David Linear Technology
 Comment Type E Comment Status X
 Missing "the"s: "Express filter checks the SMD of each received mPacket. If an mPacket contains an SMD-E, express filter passes..."
 SuggestedRemedy
 Change to: "The express filter checks the SMD of each received mPacket. If an mPacket contains an SMD-E, the express filter passes..."
 Proposed Response Response Status O

CI 99 SC 99.4.3 P 36 L 17 # 43
 Dwelley, David Linear Technology
 Comment Type E Comment Status X
 Badly placed comma: "...7 octets of preamble,(0x55) an SMD-V,..."
 SuggestedRemedy
 Move the comma after the (0x55) or (preferred) lose the "(0x55)". If the latter, also delete "(0x55)" at line 21.
 While we're here, also fix the missing period at the end of line 18.
 Proposed Response Response Status O

CI 99 SC 99.4.8 P 46 L 38 # 46
 Dwelley, David Linear Technology
 Comment Type E Comment Status X
 "elsewhere in the standard" (3 places) - where?
 SuggestedRemedy
 Provide a specific reference so the hapless reader doesn't need to search the entire book
 Proposed Response Response Status O

CI 99 SC 99.4.4 P 36 L 29 # 44
 Dwelley, David Linear Technology
 Comment Type E Comment Status X
 Run-on sentence: "It preempts a preemptable frame when a MM_CTL.request(HOLD) is received or the eMAC has a frame to transmit if that can be done while meeting minimum mPacket data field size and a multiple of eight octets of the frame has been sent."
 SuggestedRemedy
 Change to: "It preempts a preemptable frame when a MM_CTL.request(HOLD) is received or the eMAC has a suitable frame to transmit. Suitable eMAC frames meet the minimum mPacket data field size when a multiple of eight octets of the frame has been sent."
 Might be worth verifying that I parsed that sentence properly...
 Proposed Response Response Status O

CI 99 SC 99.4.5 P 37 L 3 # 47
 Dwelley, David Linear Technology
 Comment Type T Comment Status X
 "If an mPacket contains an SMD-E, receive processing ignores the mPacket." This makes it sound like SMD-E packets are discarded!
 SuggestedRemedy
 Change to: "If an mPacket contains an SMD-E, receive processing does not modify the mPacket."
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 99 SC 99.4.5 P 37 L 26 # 48
 Dwelley, David Linear Technology
 Comment Type T Comment Status X
 Broken sentence: "An SMD containing an SMD-C an mPacket that continues the data for a preempted frame."
 SuggestedRemedy
 Fix appropriately. It's broken enough now that I can't divine the intended meaning.
 Proposed Response Response Status O

Cl 01 SC 1.3 P 14 L 8 # 51
 Grow, Robert RMG Consulting
 Comment Type E Comment Status X
 802.1Q is already in P802.3.
 SuggestedRemedy
 Delete insert instruction and reference.
 Proposed Response Response Status O

Cl 79 SC 79.3.6.1 P 24 L 41 # 49
 Grow, Robert RMG Consulting
 Comment Type T Comment Status X
 Ignore something that isn't received? That is pretty easy but not what I think was intended. PICS AET4 is not supported by text. Need to improve description.
 SuggestedRemedy
 An implementation shall transmit all Reserved bits as zero, and ignore received Reserved bits. Reserved octets shall not be transmitted and if more octets are received that were defined as other than Reserved, the additional octet(s) shall be ignored. If fewer octet(s) are received than defined, the implementation shall act as if the additional octet(s) were received as zero.
 Proposed Response Response Status O

Cl 79 SC 79.3.6 P 24 L 16 # 52
 Grow, Robert RMG Consulting
 Comment Type E Comment Status X
 Interesting that the draft follows the style guide for Figures and Tables but not for subclauses. As written, it is typical to include renumber in editing instruction unless following the IEEE Style guide for subclauses where this would become 79.3.5a.
 SuggestedRemedy
 Either follow the style guide, or include "renumbering following subclauses" in editorial instruction.
 Proposed Response Response Status O

Cl 99 SC P L # 50
 Grow, Robert RMG Consulting
 Comment Type E Comment Status X
 You get the joy of trying to figure out if a user of the Generic Comment tool following instructions is commenting on clause 99 or front matter.
 SuggestedRemedy
 Fix (or get someone to fix) the red text on the Generic Comment tool to suggest something other than 99 for front matter. I tried 999 for my front matter comment.
 Proposed Response Response Status O

Cl 99 SC 99.2.3.1 P 32 L 17 # 53
 Grow, Robert RMG Consulting
 Comment Type E Comment Status X
 Bad grammar, missing "of"?
 SuggestedRemedy
 Correct.
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 999 SC P 4 L 30 # 54

Grow, Robert RMG Consulting

Comment Type ER Comment Status X

Missing amendment description.

SuggestedRemedy

Please write description of this amendment so it can be reviewed by the ballot group.
Other projects will need to copy this description as part of their draft frontmatter.

Proposed Response Response Status O

Cl 99 SC 88.4.5 P 37 L 26 # 55

Grow, Robert RMG Consulting

Comment Type ER Comment Status X

Unparsable frame. Did some necessary text get deleted?

SuggestedRemedy

I have no clue what the sentence was attempting to say and therefore at am a loss on how to fix.

Proposed Response Response Status O

Cl 79 SC 79.3 P 24 L 14 # 56

Grow, Robert RMG Consulting

Comment Type T Comment Status X

I don't think order of assignment is a big secret, replace the TBD.

SuggestedRemedy

TBD goes to 7, reserved range to 8-255, and rewrite the editing instruction accordingly

Proposed Response Response Status O

Cl 00 SC 0 P L # 57

Grow, Robert RMG Consulting

Comment Type TR Comment Status X

Other than Figure 99-1, and a few other mentions of MAC control as part of express traffic delay requirements, the amendment doesn't address interaction with MAC Control pause. It seems that impacts on pause quanta and interruptability of MAC control frames should be addressed. Were these other optional protocols considered in development of this amendment?

SuggestedRemedy

Please address.

Proposed Response Response Status O

Cl 00 SC 0 P L # 58

Grow, Robert RMG Consulting

Comment Type TR Comment Status X

I am unable to convince myself that the amendment doesn't make what is to me are unacceptable and unstated assumptions of compatible MAC and PHY characteristics. For example, if it assumes all PCS layers use codes that either encode less than an octet (e.g., Manchester bit encoding) or that have an integer number of octets in the PCS code. This is a new requirement. I did not find a requirement that mPackets had to be contiguous and could not cause interframe to be signaled on an xMII unless until both a pFrame and one or more eFrames are completely transmitted when a preemption occurs. Failure to do this could result in RX_DV being deasserted falsely indicating an end of frame on the xMII.

I believe this is a problem for PCS layers that do not encode an integer number of octets. For example, if a 10 Mb/s or 100BASE-X MAC produces a non-integer number of octets, the MII nd currently defined PHYs convey that across the link so that an alignment error can be detected.

I similarly worry that a PHY code that does not include an integer number of octets in a code word could result in a false indication of interframe spacing at the receive xMII.

SuggestedRemedy

Assure MAC Merge will properly convey an alignment error across a link and that contiguous mPackets are required so that interframe will not be improperly created at a receive xMII.

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 30 SC 30.2.5 P 15 L 36 # 59
 Hajduczenia, Marek Bright House Network
 Comment Type E Comment Status X
 Extra "[" in heading of 30.2.5
 SuggestedRemedy
 Remove "[" in heading of 30.2.5
 Proposed Response Response Status O

Cl 79 SC 79.4.2 P 25 L 1 # 62
 Hajduczenia, Marek Bright House Network
 Comment Type E Comment Status X
 Text in column Function in Table 79-7a should be left justified and not centered.
 SuggestedRemedy
 Per comment. Also, break text lines in such a way that words are not broken between lines - it impares readability and serves no purpose. A force line break would be most welcome. Same observation applies to Table 79-9 and Table 79-10
 Proposed Response Response Status O

Cl 30 SC 30.14.1 P 20 L 37 # 60
 Hajduczenia, Marek Bright House Network
 Comment Type E Comment Status X
 Unnecessary empty lines 37-39
 SuggestedRemedy
 Remove empty lines
 Proposed Response Response Status O

Cl 99 SC 99.3 P 33 L 5 # 63
 Hajduczenia, Marek Bright House Network
 Comment Type E Comment Status X
 Unnecessary empty lines 5-7 and line 30
 SuggestedRemedy
 Per comment
 Proposed Response Response Status O

Cl 30 SC 30.14.1.8 P 22 L 24 # 61
 Hajduczenia, Marek Bright House Network
 Comment Type E Comment Status X
 missing "." in line 24. Multiple other lines are also missing "." at the end, for example (page / line):
 22 / 24
 22 / 34
 22 / 45
 22 / 54
 23 / 9
 23 / 18
 SuggestedRemedy
 Add missing "."
 Proposed Response Response Status O

Cl 99 SC 99.3.3 P 34 L 3 # 64
 Hajduczenia, Marek Bright House Network
 Comment Type E Comment Status X
 "." at the end of the sentence
 SuggestedRemedy
 Change ".." to "."
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 99 SC 99.3.4 P 34 L 35 # 65
 Hajduczenia, Marek Bright House Network

Comment Type E Comment Status X
 Figure 99-3 uses "FRAG_COUNT" but it is used inconsistently in Clause 99 as "frag_count", "Frag_count", or "FRAG_COUNT"

SuggestedRemedy
 Change "frag_count" to "FRAG_COUNT" to be consistent with Figure 99-3.

Proposed Response Response Status O

Cl 99 SC 99 P 4 L 1 # 68
 Hajduczenia, Marek Bright House Network

Comment Type ER Comment Status X
 Description of 802.3 status is incomplete.

SuggestedRemedy
 Please add latest updates to 802.3 family of standards: bm. Also, given the status of 802.3bx, this draft should be aligned with 802.3bx D3.0 given that by the time this draft goes to Sponsor ballot, P802.3bx will be a new base 802.3 standard.

Proposed Response Response Status O

Cl 99 SC 99.3.4 P 34 L 40 # 66
 Hajduczenia, Marek Bright House Network

Comment Type E Comment Status X
 Two sentences glued together without any sense: "The frag_count is set to zero at the start of each preemptable frame, and mPackets with SMD-S do not contain the frag_count field."

SuggestedRemedy
 Change to "The frag_count is set to zero at the start of each preemptable frame. mPackets with SMD-S do not contain the frag_count field."

Proposed Response Response Status O

Cl 01 SC 1.4.5 P 14 L 27 # 69
 Hajduczenia, Marek Bright House Network

Comment Type ER Comment Status X
 "See IEEE Std 802.3br, Clause 99." - we reference clauses, and not specific amendments.

SuggestedRemedy
 Change to "See IEEE Std 802.3, Clause 99."

Proposed Response Response Status O

Cl 99 SC 99.4.4 P 36 L 27 # 67
 Hajduczenia, Marek Bright House Network

Comment Type E Comment Status X
 Unnecessary "[" in heading of 99.4.4

SuggestedRemedy
 Remove "[" in heading of 99.4.4

Proposed Response Response Status O

Cl 30 SC 30.12.1.1.1 P 18 L 28 # 70
 Hajduczenia, Marek Bright House Network

Comment Type ER Comment Status X
 Align format of Clause 30 attributes to what is used in P802.3bx - they are different in terms of alignment and the use of tab, as well as spacing between lines. Also note that description in "BEHAVIOUR DEFINED AS:" ends with ":", and not just ";" like it is done in the draft right now.

SuggestedRemedy
 Changes per comment.

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 79 SC 79.4.2 P 25 L 23 # 71
 Hajduczenia, Marek Bright House Network
 Comment Type ER Comment Status X
 Format of Table 79–9 and Table 79–10 does not meet style manual and current template
 SuggestedRemedy
 Apply proper template to both tables.
 Proposed Response Response Status O

CI 90 SC 90.4.2 P 27 L 7 # 72
 Hajduczenia, Marek Bright House Network
 Comment Type ER Comment Status X
 There are no changes to 90.4.2, 90.4.3, 90.4.3.1, 90.4.3.1.2, 90.4.3.1.3, 90.4.3.2, 90.4.3.2.2, 90.4.3.2.3 - remove from the draft
 SuggestedRemedy
 pre comment
 Proposed Response Response Status O

CI 99 SC 99.1.1 P 30 L 1 # 73
 Hajduczenia, Marek Bright House Network
 Comment Type ER Comment Status X
 Several minor editorial issues with Figure 99-1:
 - some extra vertical line in box "MAC CLIENT supporting preemption" on the right half inch from the right edge
 - "TimeSync Client" should be centered vertically and horizontally in the box
 - "PHY" seems to span part of xMII - it should only cover PCS/PMA/PMD
 - line designating Physical layer seems to catch also part of MDI, which is incorrect
 - definition of pMAC and eMAC should be done under the figure (like xMII, MDI, and others) and not expanded in the drawing itself
 SuggestedRemedy
 Fix the issues listed in the comment.
 Proposed Response Response Status O

CI 99 SC 99.1 P 29 L 21 # 74
 Hajduczenia, Marek Bright House Network
 Comment Type T Comment Status X
 Sentence makes little sense: "When preemption is active, MAC Merge allows frames provided over an express MAC service interface (express traffic) to the eMAC to interrupt transmission of a preemptable frame being transmitted by the pMAC." - it seems that MAC Merge is located above MAC
 SuggestedRemedy
 Change to read: "When preemption is active, the MAC Merge sublayer allows frames provided over the express MAC service interface (express traffic) to interrupt transmission of frame provided over the preemptable MAC service interface (preemptable traffic). Preemption is enabled only when it has been determined that the link partner supports the preemption function." and avoid the discussion on what and where is transmitted. It is unnecessary.
 Strike line 39, page 29.
 Proposed Response Response Status O

CI 99 SC 99.1 P 29 L 23 # 75
 Hajduczenia, Marek Bright House Network
 Comment Type T Comment Status X
 Clarify the use of HOLD/RELEASE parameter in MMSI primitive: "Asserting hold over the MSSSI will also interrupt transmission of a preemptable frame being transmitted by the pMAC. Once transmission of the express traffic has finished and any hold from the MSSSI has been released, transmission of the preemptable frame is resumed."
 SuggestedRemedy
 Change to read: "When HOLD is asserted on the MM_CTL.request primitive, the MAC Merge sublayer interrupts any ongoing transmission of preemptable traffic and enables the transmission of express traffic. When RELEASE is asserted on the MM_CTL.request primitive, transmission of express traffic is completed and transmission of preemptable traffic is resumed."
 Proposed Response Response Status O

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CI 99 SC 99.1 P 29 L 27 # 76
 Hajduczenia, Marek Bright House Network

Comment Type T Comment Status X

Sentence makes little sense: "When preemption is not active, transmission of preemptable frames will not be interrupted. If the eMAC is providing an express frame and MAC Merge is idle (i.e. at least an interpacket gap has elapsed since ending transmission of any prior frame), MAC Merge will begin transmission of the express frame. If the eMAC is not providing a frame, transmission of preemptable frames is released and the pMAC is providing a preemptable frame and MAC Merge is idle, MAC Merge will transmit the preemptable frame." - language can be simplified a lot and avoid the use of "will" that is not allowed.

SuggestedRemedy

Change to read: "When preemption is not active, the MAC Merge sublayer does not interrupt transmission of preemptable traffic even if express traffic becomes available. If the MAC Merge sublayer is idle (at least an interpacket gap has elapsed since the end of transmission of a prior frame) and an express frame becomes available, the MAC Merge sublayer transmits the express frame. Otherwise, the MAC Merge sublayer transmits any presented preemptable frames."

Proposed Response Response Status O

CI 99 SC 99.1.2 P 31 L 22 # 77
 Hajduczenia, Marek Bright House Network

Comment Type T Comment Status X

Based on the following description, it seems that "Verification" function is optional and may be not implemented. If that is the case, the box should be marked in dotted line, like functions belonging to EEE

SuggestedRemedy

Change the designatio of "Verification" box if it is indeed meant to be optional.

Proposed Response Response Status O

CI 99 SC 99.2 P 31 L 44 # 78
 Hajduczenia, Marek Bright House Network

Comment Type T Comment Status X

Odd restatement "This subclause specifies the services provided by MAC Merge to a MAC Client supporting preemption. The MAC Client may be a MAC Client supporting preemption." - the second sentence does not add anything new

SuggestedRemedy

Change to read: "This subclause specifies the services provided by the MAC Merge subclayer to any MAC Clients, including MAC Clients supporting preemption."

Proposed Response Response Status O

CI 99 SC 99.2.1 P 31 L 47 # 79
 Hajduczenia, Marek Bright House Network

Comment Type T Comment Status X

The subclause title says "Responsibilities of MAC Client using MAC Merge" implying that MAC Client has some requirements, but the text then says MAC Client can (optionally) do something. It is inconsistent.

SuggestedRemedy

Change title of 99.2.1 to "Functions of MMSI" and change description in this subclause to read: "The MMSI primitive is used to control the MAC Merge sublayer to either transmit express traffic (hold_req=HOLD) or preemptable traffic (hold_req=RELEASE)."

Proposed Response Response Status O

CI 99 SC 99.2.2 P 32 L 11 # 80
 Hajduczenia, Marek Bright House Network

Comment Type T Comment Status X

"MACMerge shall support the MM_CTL.request primitive described in this subclause." - MACMerge ???

SuggestedRemedy

Change to "The MAC Merge sublayer shall support the MM_CTL.request primitive defined in 99.2.3." - "this subclause" implies 99.2.2. and that is not where the primitive is defined in reality.

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 88 SC 99.2.3.1 P 32 L 18 # 81
 Hajduczenia, Marek Bright House Network

Comment Type T Comment Status X

"This primitive defines the transfer a request from a MAC Client to MAC Merge to hold or release transmission of frames from the pMAC." - "frames from the pMAC" are called "preemptable traffic" - defined before.

SuggestedRemedy

Change to read: "This primitive defines the transfer a request from a MAC Client to the MAC Merge sublayer, controlling the transmission of express and preemptable traffic."

Proposed Response Response Status O

CI 99 SC 99.2.3.1.1 P 32 L 26 # 82
 Hajduczenia, Marek Bright House Network

Comment Type T Comment Status X

The following does not read right, in terms of grammar:

The value HOLD suspends transmission from the pMAC by:

- a) preempt any preemptable frame in progress if preemption is active and
- b) not start transmission of frames from the pMAC regardless of whether the eMAC has a frame to transmit. The value RELEASE allows transmission by the pMAC when the eMAC does not have a frame to transmit.

SuggestedRemedy

Change to read

The value of hold_req=HOLD causes the MAC Merge sublayer to suspend transmission of preemptable traffic by:

- a) preempting any preemptable frame being transmitted, if the preemption function is enabled, and
- b) withholding from transmitting any preemptable frames regardless of whether eMAC has traffic to transmit. The value of hold_req=RELEASE causes the MAC Merge sublayer to terminate any preemption and allows transmission of preemptable traffic.

Proposed Response Response Status O

CI 99 SC 99.3 P 33 L 3 # 83
 Hajduczenia, Marek Bright House Network

Comment Type T Comment Status X

"When preemption capability is active, ..." - previously we spoke of "preemption function" or "preemption"

SuggestedRemedy

Change to "When the preemption function is enabled, "

Proposed Response Response Status O

CI 99 SC 99.3 P 33 L 4 # 84
 Hajduczenia, Marek Bright House Network

Comment Type T Comment Status X

mPacket used for the first time and without any explanation of what it is ...

SuggestedRemedy

Change "mPacket" to "MAC Merge Packet (mPacket)"

Proposed Response Response Status O

CI 99 SC 99.3.1 P 33 L 29 # 85
 Hajduczenia, Marek Bright House Network

Comment Type T Comment Status X

Figure 99-3 should be divided into two: one showing mPacket containing an express frame or an initial fragment of a frame, and one showing mPacket containing a non-initial fragment of a frame

SuggestedRemedy

Divide Figure 99-3 into two: new Figure 99-3 to show mPacket containing an express frame or an initial fragment of a frame (new caption: "mPacket with an express frame or an initial frame fragment") and new Figure 99-4 to show mPacket containing a non-initial fragment of a frame (new caption: "mPacket with a non-initial fragment of a frame").

Change text in line 10 to read: "Figure 99-3 shows the format of an mPacket containing a complete express frame or an initial frame fragment. Figure 99-4 shows the format of an mPacket containing a non-initial frame fragment."

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC 99.3.2 P 33 L 41 # 86
 Hajduczenia, Marek Bright House Network

Comment Type T Comment Status X

There are no requirements for preamble content. Also, the text is very confusing - we start with a definition of a single octet and then go into complex definition of the preamble structure. Text should be clarified.

SuggestedRemedy

Change the text in 99.3.2 to read:

The preamble in the mPacket shown in Figure 99-3 shall contain 7 preamble octets. The preamble in the mPacket shown in Figure 99-4 shall contain 6 preamble octets. Each preamble octet contains the value of 0x55 (binary 10101010).

Add entries into PICS.

Proposed Response Response Status O

CI 99 SC 99.3.3 P 33 L 45 # 87
 Hajduczenia, Marek Bright House Network

Comment Type T Comment Status X

No requirements for SMD values.

SuggestedRemedy

Change "All valid SMD values are defined in Table 99-1." to read "All valid SMD values shall be per Table 99-1."

Add new entry in PICS.

Proposed Response Response Status O

CI 99 SC 99.3.4 P 34 L 43 # 88
 Hajduczenia, Marek Bright House Network

Comment Type T Comment Status X

No requirements for FRAG_COUNT

SuggestedRemedy

Change "The valid values of frag_count values are shown in Table 99-2." to "The valid values of FRAG_COUNT field shall be per Table 99-2."

Add a new entry in PICS.

Proposed Response Response Status O

CI 30 SC 30.12.1.1.1 P 18 L 36 # 89
 Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status X

"A read-write string of 6 bits indicating, ..." but later on the list shows allocation of seven bits ...

SuggestedRemedy

Change "6" to "7", since we allocate 7 bits in the list below.

Proposed Response Response Status O

CI 30 SC 30.12.2 P 19 L 1 # 90
 Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status X

Newly added attributes do not define individual values in a clear fashion. For example, aLldpXdot3LocPreemptSupported indicates that "A read-only Boolean value used to indicate whether the given port (associated with the local system) supports preemption.capability;" - it is not clear what value is reported when said preemption is supported (true? supported? ok? anything else) and when not. Also, these attributes do not define what happens with SET and GET operations.

SuggestedRemedy

Clarify the values for the following attributes: aLldpXdot3LocPreemptSupported, aLldpXdot3LocPreemptEnabled, aLldpXdot3LocPreemptActive, aLldpXdot3LocAddFragSize, aLldpXdot3RemPreemptSupported, aLldpXdot3RemPreemptEnabled, aLldpXdot3RemPreemptActive, aLldpXdot3RemAddFragSize.

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 30 SC 30.12.3.1.27 P 20 L 19 # 91
 Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status X

Attribute aLldpXdot3RemAddFragSize has very cryptic definiton: "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 remote system;"

SuggestedRemedy

Is the intention to define the minimum fragment size? It would make much more sense to simply define it as INTEGER and then record the fragment size, and not some fragment size delta - these are MIB objects and not hardware registers!
 Similar comment on aMACMergeAddFragSize

Proposed Response Response Status O

Cl 99 SC 99 P 0 L 0 # 92
 Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status X

Where is Clause 45?????

SuggestedRemedy

Why there are no registers for Clause 45? Do we expect to have no need for MAC registers (counters) at all? Most of the counters from Clause 30 should be mapped into Clause 45 registers as well and these are missing right now ...

Proposed Response Response Status O

Cl 79 SC 79.3 P 24 L 14 # 93
 Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status X

TBD in Table 79-1 - time to decide what this is going to be

SuggestedRemedy

Change TBD with the appropriate value for this new "Additional Ethernet Capabilities" subtype. The same value should be then propagated into 79.3.6 as well and Figure 79-6. "6" seems to be the next free number as of 802.3bx

Proposed Response Response Status O

Cl 90 SC 90.4.3.1.1 P 27 L 32 # 94
 Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status X

Description of MM parameter is cryptic and does not follow standard 802.3 description.

SuggestedRemedy

Change lines 32-35 to read as follows:

The MM parameter is optional and present only when the MAC Merge (see Clause 99) is instantiated. The MM parameter, when present, can take one of two possible values, i.e., PMAC or EMAC. When PMAC value is set and the SFD parameter is asserted (SFD = DETECTED), the TimeSync Client is notified that a valid SFD from pMAC was detected. When EMAC value is set and the SFD parameter is asserted (SFD = DETECTED), the TimeSync Client is notified that a valid SFD from eMAC was detected.

Proposed Response Response Status O

Cl 90 SC 90.4.3.2.1 P 28 L 7 # 95
 Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status X

Description of MM parameter is cryptic and does not follow standard 802.3 description.

SuggestedRemedy

Change lines 32-35 to read as follows:

The MM parameter is optional and present only when the MAC Merge (see Clause 99) is instantiated. The MM parameter, when present, can take one of two possible values, i.e., PMAC or EMAC. When PMAC value is set and the SFD parameter is asserted (SFD = DETECTED), the TimeSync Client is notified that a valid SFD from pMAC was detected. When EMAC value is set and the SFD parameter is asserted (SFD = DETECTED), the TimeSync Client is notified that a valid SFD from eMAC was detected.

Proposed Response Response Status O

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CI 99 SC 99.1 P 29 L 15 # 96
 Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status X

"The MMSI enables beginning preemption of a frame slightly before express traffic is expected to minimize the latency for express traffic. "

SuggestedRemedy

This would imply some secret knowledge of when the express traffic will begin in the future, even before it arrives at the queue. I think this puts the effect before the cause. I do not know how you can guarantee that without delaying express traffic in a queue. Clarification on how this is achieved is needed, perhaps not within the text of introduction but where individual primitives are defined.

The example "For example, when the MAC Client supports scheduled traffic as defined in IEEE 802.1Q3, transmission of preemptable frames can be held before express traffic is scheduled to be transmitted." does not make much sense, since information about queuing is not available below MAC, where MAC Merge is instantiated.

Proposed Response Response Status O

CI 99 SC 99.2.3.1.3 P 32 L 39 # 97
 Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status X

Content in 99.2.3.1.3 is a repetition of content already included in 99.2.3.1.1, just a restatement

SuggestedRemedy

Consider either removing 99.2.3.1.3 altogether, or moving detailed description of what happens for each value from 99.2.3.1.1 to 99.2.3.1.3.

Proposed Response Response Status O

CI 99 SC 99.3.6 P 35 L 16 # 98
 Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status X

It is not clear what CRC covers: 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. - it seems it is calculated only on DATA field.

SuggestedRemedy

Clarify the coverage of CRC field in mPacket - it would be also suggested NOT to call DATA field "DATA" since it is confusing in context of 3.1.1, where DATA is used to indicate just the MAC Client Data.

Suggest to change "DATA" in Clause 99 to "mPacket Data" to distinguish it from regular MAC Client Data field defined in 3.1.1.

Proposed Response Response Status O

CI 99 SC 99.3.6 P 35 L 19 # 99
 Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status X

What is "the final mPacket"? Likely, "the mPacket containing the final fragment of a frame"

SuggestedRemedy

Per comment - this term is used without definition ...

Proposed Response Response Status O

CI 99 SC 99.3.6 P 35 L 14 # 100
 Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status X

No requirements for CRC are present. Also, no "mCRC" has been defined before ...

SuggestedRemedy

Change: "For the mPacket containing the final fragment of a frame, the CRC field shall carry the FCS of the original frame (last 4 octets of the frame). For other mPackets, the CRC fields shall carry the value calculated over the DATA field of the mPacket and then XORed with 0x0000 FFFF. The computation corresponds to performing steps a) through d) in 3.2.9."

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 30 SC 30.2.5 P 15 L 36 # 101
 Healey, Adam Avago Technologies
 Comment Type E Comment Status X
 Extraneous "]" in the heading.
 SuggestedRemedy
 Remove it.
 Proposed Response Response Status O

Cl 30 SC 30.12.1.1.1 P 18 L 36 # 102
 Healey, Adam Avago Technologies
 Comment Type E Comment Status X
 The changes to the definition aLldpXdot3PortConfigTLVsTxEnable relative to IEEE Std 802.3-2015 (and its approved amendments) are not correctly marked.
 SuggestedRemedy
 The second paragraph has been reformatted as a list. Show the original paragraph with strike-through text.
 Proposed Response Response Status O

Cl 00 SC 0 P 4 L 28 # 103
 Healey, Adam Avago Technologies
 Comment Type E Comment Status X
 This is a comment on the frontmatter (the comment tool needs to be updated now that 99 is an actual clause number).
 IEEE Std 802.3-2012 has two other approved amendments: IEEE Std 802.3bj-2014 and IEEE Std 802.3bm-2015.
 In addition IEEE Std 802.3br-201x should also be described.
 SuggestedRemedy
 Add the descriptions of all approved amendments to the introduction (refer to the introduction of IEEE Std 802.3bm-2015).
 Include a description of this amendment to the introduction.
 Proposed Response Response Status O

Cl 00 SC 0 P 13 L 44 # 104
 Healey, Adam Avago Technologies
 Comment Type E Comment Status X
 This is a comment on the frontmatter (the comment tool needs to be updated now that 99 is an actual clause number).
 Even though the editor's note is removed prior to final publication, IEEE P802.3bj and IEEE P802.3bk are no longer amendment projects running in parallel with P802.3br.
 SuggestedRemedy
 Delete the parenthetical "(e.g., IEEE P802.3bj and IEEE P802.3bk)".
 Proposed Response Response Status O

Cl 99 SC 99.5.2.2 P 47 L 40 # 105
 Healey, Adam Avago Technologies
 Comment Type E Comment Status X
 The ruling at the bottom of the first table and the top of the second table should be changed to "Thin".
 SuggestedRemedy
 Per comment.
 Proposed Response Response Status O

Cl 99 SC 99.5.3.1 P 48 L 3 # 106
 Healey, Adam Avago Technologies
 Comment Type E Comment Status X
 Regarding the PICS proforma tables:
 1. Move the table with items MMx so that it precedes the heading for 99.5.3.2.
 2. The base standard left justifies the text in the cells of the PICS proforma table but text in the "Support" column of the tables is right justified. Change it to left justified.
 3. The status column is blank. Designate each item as mandatory, optional, or conditional as appropriate.
 SuggestedRemedy
 Per comment.
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 30 SC 30.2.5 P 17 L 46 # 107
 Healey, Adam Avago Technologies
 Comment Type T Comment Status X
 Several attributes are not assigned to any package (aMACMergeVerifyDisable, aMACMergeVerifyTime, aMACMergeAddFragSize, aMACMergeHoldCount).
 SuggestedRemedy
 Assign the attributes to the appropriate package.
 Proposed Response Response Status O

CI 30 SC 30.2.5 P 15 L 36 # 110
 Hidaka, Yasuo Fujitsu Lab of America
 Comment Type E Comment Status X
 There is a garbage character ']' in front of clause title text.
 SuggestedRemedy
 Remove ']' in front of clause title text.
 Proposed Response Response Status O

CI 79 SC 79.3 P 24 L 14 # 108
 Healey, Adam Avago Technologies
 Comment Type T Comment Status X
 In Table 79-1 and Figure 79-6, the IEEE 802.3 subtype is TBD. The subclause reference in Table 79-1 is 79.3.6 which defines "EEE Fast Wake TLV" in the approved amendment IEEE Std 802.3bj-2014.
 SuggestedRemedy
 Assign the "Additional Ethernet Capabilities" subtype (suggest 7). Renumber 79.3.6 to 79.3.7 and update the subclause reference in Table 79-1 accordingly.
 Proposed Response Response Status O

CI 30 SC 30.2.5 P 17 L 1 # 111
 Hidaka, Yasuo Fujitsu Lab of America
 Comment Type E Comment Status X
 New Table 30-8 should be amendment to Table 30-7 at the right most column, not a new table.
 SuggestedRemedy
 Add LLDP MAC Merge Package (optional) as the right most column of Table 30-7.
 Add aLldpXdot3Loc* in Table 30-8 in page 17 at the end of "oLldpXdot3LocSystemsGroup managed object class (30.12.2)" in Table 30-7.
 Add aLldpXdot3Rem* in Table 30-8 in page 17 at the end of "oLldpXdot3RemSystemsGroup managed object class (30.12.3)" in Table 30-7.
 Change "Table 30-8 and Table 30-9" in page 15, line 38 with "Table 30-8".
 Change "Table 30-9" in page 15, line 48 with "Table 30-8".
 Renumber "Table 30-9" in page 17 as "Table 30-8".
 Proposed Response Response Status O

CI 00 SC 0 P 1 L 2 # 109
 Hidaka, Yasuo Fujitsu Lab of America
 Comment Type E Comment Status X
 This draft is an amendment of IEEE Std802.3-2012 which is under revision by IEEE P802.3bx, and will not be the latest version when IEEE P802.3br is published.
 SuggestedRemedy
 Make the entire draft as an amendment of IEEE Std802.3-201x based on the latest draft of P802.3bx.
 Proposed Response Response Status O

CI 30 SC 30.2.5 P 17 L 46 # 112
 Hidaka, Yasuo Fujitsu Lab of America
 Comment Type E Comment Status X
 The order of rows of Table 30-9 is inconsistent with the order of subclauses of 30.14.1.
 SuggestedRemedy
 Move the row of "aMACMergeVerifyDisable" after the row of "aMACMergeStatusEnable".
 Move the row of "aMACMergeStatusTx" before the row of "aMACMergeVerifyTime".
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 30 SC 30.14.1 P 20 L 35 # 113
 Hidaka, Yasuo Fujitsu Lab of America
 Comment Type E Comment Status X
 A period '.' is missing.
 SuggestedRemedy
 Add a period '.' at the end of the line 35, page 20.
 Proposed Response Response Status O

Cl 99 SC 99 P 29 L 1 # 116
 Hidaka, Yasuo Fujitsu Lab of America
 Comment Type E Comment Status X
 There is only one clause to insert.
 There is no annex to insert.
 SuggestedRemedy
 Change "new clauses and corresponding annexes" with "a new clause".
 Proposed Response Response Status O

Cl 79 SC 79.4.2 P 25 L 37 # 114
 Hidaka, Yasuo Fujitsu Lab of America
 Comment Type E Comment Status X
 The bottom border line of Table 79-9 is not thick.
 SuggestedRemedy
 Make the bottom border line of Table 79-9 thick.
 Proposed Response Response Status O

Cl 99 SC 99.2.2 P 32 L 7 # 117
 Hidaka, Yasuo Fujitsu Lab of America
 Comment Type E Comment Status X
 Only one primitive is defined.
 SuggestedRemedy
 Change "primitives are" with "primitive is".
 Proposed Response Response Status O

Cl 79 SC 79.4.2 P 25 L 54 # 115
 Hidaka, Yasuo Fujitsu Lab of America
 Comment Type E Comment Status X
 The bottom border line of Table 79-10 is not thick.
 SuggestedRemedy
 Make the bottom border line of Table 79-10 thick.
 Proposed Response Response Status O

Cl 99 SC 99.4.4 P 36 L 27 # 118
 Hidaka, Yasuo Fujitsu Lab of America
 Comment Type E Comment Status X
 There is a garbage character "[" in front of clause title.
 SuggestedRemedy
 Remove a garbage character "[" in front of clause title.
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC 99.4.5 P 37 L 26 # 119
 Hidaka, Yasuo Fujitsu Lab of America

Comment Type E Comment Status X

The sentence on line 26, page 37 looks odd.

SuggestedRemedy

Change the sentence on line 26, page 37 as follows:

"An mPacket that contains SMD-C continues the data for a preempted frame."

Proposed Response Response Status O

CI 99 SC 99.5.2.2 P 47 L 41 # 120
 Hidaka, Yasuo Fujitsu Lab of America

Comment Type E Comment Status X

The external border lines are not thick.

SuggestedRemedy

Make the external border lines above and below line 41, page 47 thick.

Or, remove the blank line 41.

Proposed Response Response Status O

CI 30 SC 30.14 P 20 L 33 # 121
 Hidaka, Yasuo Fujitsu Lab of America

Comment Type T Comment Status X

A managed object "oMACMergeEntity" is also called "oMACMerge".
 It is inconsistent.

SuggestedRemedy

Change "oMACMerge" with "oMACMergeEntity" at the following locations:

- page 10, line 26
- page 17, line 42
- page 20, line 33
- page 20, line 35

Proposed Response Response Status O

CI 30 SC 30.2.5 P 17 L 46 # 122
 Hidaka, Yasuo Fujitsu Lab of America

Comment Type T Comment Status X

Some Xs are missing in Table 30-9.

SuggestedRemedy

Add Xs for the following rows in Table 30-9:

- aMACMergeVerifyDisable
- aMACMergeVerifyTime
- aMACMergeAddFragSize
- aMACMergeHoldCount

Proposed Response Response Status O

CI 99 SC 99.3.1 P 33 L 33 # 123
 Hidaka, Yasuo Fujitsu Lab of America

Comment Type T Comment Status X

It is not clear how it is guaranteed that an mPacket carrying an express frame has the same format as the express frame.

SuggestedRemedy

Insert the following phrase after "the express frame" in page 33, line 33:

", because SMD-E (i.e. SMD value for an express frame) is same as the SFD value".

Split the left figure of Figure 99-3 to two figures, one for mPacket containing an express frame and another for mPacket containing an initial fragment of a frame. Change "SMD" of the mPacket containing an express frame with "SMD-E".

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC 99.3.3 P 33 L 52 # 124
 Hidaka, Yasuo Fujitsu Lab of America
 Comment Type T Comment Status X
 It seems "frame number" is also called as "frame count".
 SuggestedRemedy
 Change "frame number" with "frame count" in the following locations:
 Page 33, line 52 (2 locations)
 Page 33, line 54
 Page 37, line 31
 Page 41, line 39
 Proposed Response Response Status O

CI 99 SC 99.4.3 P 36 L 17 # 127
 Hidaka, Yasuo Fujitsu Lab of America
 Comment Type T Comment Status X
 "mCRC" is also written as "MCRC".
 It is inconsistent.
 SuggestedRemedy
 Change "MCRC" with "mCRC" in the following locations:
 Page 36, line 17
 Page 36, line 20
 Page 36, line 21
 Page 36, line 23
 Proposed Response Response Status O

CI 99 SC 99.4 P 35 L 27 # 125
 Hidaka, Yasuo Fujitsu Lab of America
 Comment Type T Comment Status X
 "enabled" seems more relevant in this context than "active", because "enabled" and "disabled" are used in the rest of the paragraph.
 SuggestedRemedy
 Change "active" in page 35, line 27 with "enabled".
 Proposed Response Response Status O

CI 99 SC 99.4.5 P 37 L 20 # 128
 Hidaka, Yasuo Fujitsu Lab of America
 Comment Type TR Comment Status X
 It seems that preemption and an end of mPacket is detected by simply checking mCRC.
 This is not an acceptable method, because the original data in the middle of a frame may match the mCRC, and a false end of mPacket is detected. Such a false detection of end of mPacket is repeated, when the same frame is retransmitted.
 SuggestedRemedy
 Use one of the following schemes:
 Option 1: Use a fixed length of mPacket.
 Option 2: Decide the length of mPacket before sending mPacket and send the length information at the beginning of mPacket.
 Option 3: In the transmit process, encode the original data of the frame so that a false mCRC will not be detected by adding some additional information. In the receive process, decode the original data using the additional information.
 I recommend option 1, because it is the simplest.
 Proposed Response Response Status O

CI 99 SC 99.4.1 P 35 L 36 # 126
 Hidaka, Yasuo Fujitsu Lab of America
 Comment Type T Comment Status X
 "disabled" may be more relevant here than "not enabled".
 SuggestedRemedy
 Change "not enabled" with "disabled" on line 36 and 38 in page 35.
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 99 SC 99.4.5 P 37 L 20 # 129
 Hidaka, Yasuo Fujitsu Lab of Americ

Comment Type TR Comment Status X

It seems that preemption and an end of mPacket is detected by simply checking mCRC.

This is not an acceptable method, because the original data in the middle of a frame may match the mCRC, and a false end of mPacket is detected. Such a false detection of end of mPacket is repeated, when the same frame is retransmitted.

This is an update to my previous comment with additional remedy.

SuggestedRemedy

Use one of the following schemes:

Option 1: Use a fixed length of mPacket.

Option 2: Decide the length of mPacket before sending mPacket and send the length information at the beginning of mPacket.

Option 3: In the transmit process, encode the original data of the frame so that a false mCRC will not be detected by adding some additional information. In the receive process, decode the original data using the additional information.

Option 4: Transmitter monitors the original data values in the frame if there is a false match of mCRC while transmitting mPacket. If the transmitter detects the original data values matching mCRC, the transmitter stops sending mPacket as if it was preempted, because the receiver will detect it as an end of mPacket. The transmitter resumes sending mPacket from the original data that has caused false match of mCRC, as if it was preempted.

I recommend option 1 or 4.

Option 1 is the simplest.

Option 4 is more complexed, but is more efficient than option 1.

Proposed Response Response Status O

Cl 99 SC 99.4.3 P 36 L 12 # 130
 Laubach, Mark Broadcom Corporation

Comment Type E Comment Status X

Change "the the" to "the".

SuggestedRemedy

Proposed Response Response Status O

Cl 99 SC 99 P 29 L 1 # 131
 Laubach, Mark Broadcom Corporation

Comment Type T Comment Status X

Personally, I would like to see some explicit statement in the text of this Clause that in some manner indicates support for TF Objective #13: "IET frames will be constructed such that they will not be recognized as valid MAC frames by a non-IET-capable device.". Others more skilled in those other clauses may not need this statement and the IET frame construction non-impact may be readily apparent to them. E.g., something like "IET frames are constructed so they are not recognized as valid MAC frames by the XX state machine(s) in {one or more cross-references}.

SuggestedRemedy

Up to the TF.

Proposed Response Response Status O

Cl 30 SC 30.2.5 P 17 L 20 # 132
 Law, David HP

Comment Type E Comment Status X

We use 'GET-SET' in the packet tables, not 'GET/SET'.

SuggestedRemedy

Replace 'GET/SET' with 'GET-SET' here, on line 46, and on page 18 lines 17 and 18.

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 30 SC 30.2.5 P 17 L 46 # 133

Law, David

HP

Comment Type E Comment Status X

Recommend that the order of the capabilities table follows the subclause order.

SuggestedRemedy

Order should be:

aMACMergeSupport
aMACMergeStatusVerify
aMACMergeStatusEnable
aMACMergeVerifyDisable
aMACMergeStatusTx
aMACMergeVerifyTime
aMACMergeAddFragSize
aMACMergeFrameAssErrorCount
aMACMergeFrameSmdErrorCount
aMACMergeFrameAssOkCount
aMACMergeFragCountRx
aMACMergeFragCountTx
aMACMergeHoldCount

Proposed Response Response Status O

CI 99 SC 99.1.1 P 30 L 1 # 134

Law, David

HP

Comment Type E Comment Status X

Centre align the words 'LAN' 'LAYERS' and 'HIGHER LAYERS'. The text 'HIGHER LAYERS' should also be centred, moved nearer to the top of the MAC Client box, and there should be dotted lines at each side aligned to the edge of the MAC Client box, the spurious dotted line attached the end of the word preemption (line 6) should be deleted.

SuggestedRemedy

See comment.

Proposed Response Response Status O

CI 99 SC 99.1.1 P 30 L 1 # 135

Law, David

HP

Comment Type E Comment Status X

I don't think the text 'PCS, PMA and PMD represent an example of PHY sublayers' is necessary as we don't normally include such text.

SuggestedRemedy

Remove text as suggested.

Proposed Response Response Status O

CI 99 SC 99.1.1 P 30 L 12 # 136

Law, David

HP

Comment Type E Comment Status X

Expand eMAC and pMAC to be 'express MEDIA ACCESS CONTROL' and 'preemptable MEDIA ACCESS CONTROL' in the abbreviation expansion list below the figure.

SuggestedRemedy

Change 'eMAC (express MEDIA ACCESS CONTROL)' to read 'eMAC' and 'pMAC (preemptable MEDIA ACCESS CONTROL)' to read pMAC. Add 'eMAC = EXPRESS MEDIA ACCESS CONTROL' and 'pMAC = PREEMPTABLE MEDIA ACCESS CONTROL' to the abbreviation expansion list below the figure.

Proposed Response Response Status O

CI 99 SC 99.1.1 P 30 L 17 # 137

Law, David

HP

Comment Type E Comment Status X

I believe that the PHY consists of the PCS, PMA and PMD, but does not include any of the xMII (see IEEE Std 802.3-2012 Figure 1-1).

SuggestedRemedy

Move the curly bracket marked PHY to only extend to the top of the PCS.

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 99 SC 99.1.1 P 30 L 30 # 138
 Law, David HP
 Comment Type E Comment Status X
 I'd prefer that we use the note in respect to xMII found in Figure 1-1 since it states that the term os for 100Mb/s and above.
 SuggestedRemedy
 Change the note to read 'NOTE-In this figure, the xMII is used as a generic term for the Media Independent Interfaces for implementations of 100 Mb/s and above. For example: for 100 Mb/s implementations this interface is called MII; for 1 Gb/s implementations it is called GMII; for 10 Gb/s implementations it is called XGMII; etc.'
 Proposed Response Response Status O

Cl 99 SC 99.1 P 29 L 23 # 139
 Law, David HP
 Comment Type E Comment Status X
 I think that reference to the 'MSSI' here and on the following line are typos, and should be to the MAC Merge Service Interface (MMSI).
 SuggestedRemedy
 Change '... the MSSI ...' to read '... the MMSI ...' here and on the following line.
 Proposed Response Response Status O

Cl 99 SC 99.1 P 29 L 28 # 140
 Law, David HP
 Comment Type E Comment Status X
 Suggest that 'transmitting' should be used rather that 'providing' here and twice on line 30.
 SuggestedRemedy
 Suggest the text '... is providing an ...' is changed to read '... is transmitting an ...' here and twice on line 30.
 Proposed Response Response Status O

Cl 99 SC 99.4.7.4 P 39 L 53 # 141
 Law, David HP
 Comment Type E Comment Status X
 Typo.
 SuggestedRemedy
 Chnage '... a pMAC detectsa CRC ...' to read '... a pMAC detects a CRC ...'.
 Proposed Response Response Status O

Cl 99 SC 99.5.3 P 47 L 46 # 142
 Law, David HP
 Comment Type E Comment Status X
 Match subclause title the overall Clause title, 'MAC Merge sublayer'.
 SuggestedRemedy
 Change title to read 'PICS proforma tables for MAC Merge sublayer'.
 Proposed Response Response Status O

Cl 99 SC 99 P 6 L 1 # 143
 Law, David HP
 Comment Type E Comment Status X
 Please include the working group balloter list supplied in the file <IEEE_P802d3br_WG_names.pdf>.
 SuggestedRemedy
 See comment.
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 99 SC 99.4.7.1 P 38 L 17 # 144

Law, David

HP

Comment Type ER Comment Status X

The subclause 99.4.7.1 'State diagram conventions' defines prefaces for the PLS service interface, 'e', 'p' and 'r'. Figure 99-2 'MAC Merge Functional Block Diagram' defines a different set of prefaces for the PLS service interface, 'eMAC:', 'pMAC:' and 'RS:', however these are not used anywhere else.

SuggestedRemedy

To aid clarity I suggest that one set of prefaces are used, and I would suggest that it be those used in Figure 99-2 as they are similar to those used elsewhere, for example IEEE Std 802.3-2012 subclause 80.3.2 'Instances of the Inter-sublayer service interface'.

Proposed Response Response Status O

Cl 99 SC 99.4.7 P 46 L 3 # 145

Law, David

HP

Comment Type ER Comment Status X

Please provide separate figure numbers and titles for the two state diagrams currently illustrated in Figure 99-7 'Verify State Diagram'.

SuggestedRemedy

Place the second state diagram in Figure 99-7 in a new Figure 99-8 'Verify Response State Diagram'. In addition change the text at the end of the last paragraph of subclause 99.4.3 'Verifying preemption operation' from '... in Figure 99-7.' to read '... in Figure 99-7 and Figure 99-8.' and add the text 'The Verify Response State Diagram is shown in Figure 99-8.' to the end of the first paragraph of subclause 99.4.7.7 'State diagrams'.

Proposed Response Response Status O

Cl 30 SC 30.14.1.7 P 22 L 16 # 146

Law, David

HP

Comment Type T Comment Status X

The attribute aMACMergeAddFragSize states that it is a '2-bit integer value used to indicate the value of addFragSize variable used by the Transmit Processing State Machine' yet subclause 99.4.7.3 'Variables' of the Transmit Processing State Machine states that addFragSize is an 'integer in the range 0:7' which requires 3 bits.

SuggestedRemedy

Change 'A 2-bit integer value ...' to read 'A 3-bit integer value ...'.

Proposed Response Response Status O

Cl 30 SC 30.14.1.2 P 21 L 10 # 147

Law, David

HP

Comment Type T Comment Status X

Agree with note, the enumeration 'unknown' should be used when the verification status is unknown. Instead an additional enumeration should be provided for when verification has not been initiated.

SuggestedRemedy

Change the description of the enumeration 'unknown' to read 'verification of preemption operation is unknown'. Add an enumeration 'not initiated' that reads 'verification of preemption operation has not been initiated'. Delete the note.

Proposed Response Response Status O

Cl 30 SC 30.14.1.3 P 21 L 14 # 148

Law, David

HP

Comment Type T Comment Status X

Since this is a GET-SET attribute, and therefore not just status, suggest that 'status' be removed from the attribute name.

SuggestedRemedy

Change 'aMACMergeStatusEnable' to 'aMACMergeEnable' here, and throughout the draft.

Proposed Response Response Status O

Cl 30 SC 30.2.5 P 17 L 46 # 149

Law, David

HP

Comment Type T Comment Status X

The attributes aMACMergeVerifyDisable, aMACMergeVerifyTime, aMACMergeAddFragSize and aMACMergeHoldCount are missing any indication of the package they belong to, assume they should be part of the MAC Merge Basic Package.

SuggestedRemedy

Add an 'X' in the MAC Merge Basic Package for the attributes attributes aMACMergeVerifyDisable (line 46), aMACMergeVerifyTime (page 18, line 18), aMACMergeAddFragSize (page 18, line 19) and aMACMergeHoldCount (page 18, line 25).

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 99 SC 99.1.1 P 30 L 10 # 150

Law, David

HP

Comment Type T Comment Status X

I believe that the MAC CLIENT is part of the Data Link layer (see IEEE Std 802.3-2012 Figure 1-1).

SuggestedRemedy

Move the dotted line from the top of the DATA LINK layer to go to the top of the MAC CLIENT.

Proposed Response Response Status O

Cl 99 SC 99.1.1 P 30 L 16 # 151

Law, David

HP

Comment Type T Comment Status X

I don't believe we use the 'blocks' at the top and the bottom of the xMII (see IEEE Std 802.3-2012 Figure 1-1) as some forms of xMII don't support physical instantiations.

SuggestedRemedy

Removed the 'blocks' at the top and the bottom of the xMII (line 16 and 18).

Proposed Response Response Status O

Cl 99 SC 99.1.1 P 30 L 22 # 152

Law, David

HP

Comment Type T Comment Status X

I believe that the MDI is part of the PHYSICAL layer (see IEEE Std 802.3-2012 Figure 1-1).

SuggestedRemedy

Move the dotted line from the bottom of the PHYSICAL layer to go to the bottom of the MDI.

Proposed Response Response Status O

Cl 99 SC 99.1 P 29 L 1 # 153

Law, David

HP

Comment Type T Comment Status X

Since the MMSI is not a sublayer, and since the TSSI is also shown in the figure but not mentioned here, suggest that only the MAC Merge sublayer is mentioned.

SuggestedRemedy

Suggest the text '... the relationship of MAC Merge and the MMSI to the other sublayers ...' be changed to read '... the relationship of MAC Merge sublayer to the other sublayers ...'.

Proposed Response Response Status O

Cl 99 SC 99.1 P 29 L 22 # 154

Law, David

HP

Comment Type T Comment Status X

The text states that the MAC merge allows '... frames provided over an express MAC service interface (express traffic) to the eMAC to interrupt transmission ...'. Is it correct that express frames are '... to the eMAC ...', aren't the from the eMAC?

SuggestedRemedy

Suggest that '... to the eMAC to ...' be changed to read '... by the eMAC to ...'.

Proposed Response Response Status O

Cl 99 SC 99.4.2 P 36 L 1 # 155

Law, David

HP

Comment Type T Comment Status X

The text states that 'The preemption capability should be disabled on link failure.', however the use of 'should' means that this is only recommended. It would seem to me this needs to be mandatory. As an example a link failure could be the result of a connection being unplugged from a link partner that does support preemption, then being plugged in to a link partner that does not support preemption. Due to this it would seem preemption has to be disabled on link failure, and this is what is shown in Figure 99-7 Verify State Diagram with verify set to FALSE in the INIT_VERIFICATION state if link_fail=TRUE.

SuggestedRemedy

Change '... capability should be disabled ...' to read '... capability shall be disabled ...'.

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC 99.4.7.3 P 38 L 38 # 156
 Law, David HP

Comment Type T Comment Status X

The description states that addFragSize is an integer in the range 0 to 7 indicating, as a multiple of 64, the minimum additional length for nonfinal mPackets.

Suggest the calculation used in the 'preempt' variable later in this subclause, and subclause 99.4.4 'Transmit processing', $64 \times (1 + \text{addFragSize})$, be stated here so there's no misunderstanding that the length is simply the multiplication of addFragSize by 64.

I'm not sure why the term 'additional' is used in respect to the length of non-final mPackets, from examination of the use of the 'preempt' variable in the state diagram, and the description in subclause 99.4.4 'Transmit processing' which reads 'preemption will not occur until at least $64 \times (1 + \text{addFragSize})$ octets have been sent' it seems that addFragSize is used to calculate the minimum length of a non-final mPacket.

It also seems that this variable is the input that controls the minimum length, not just an indication of it.

SuggestedRemedy

Change the description to read 'Integer in the range 0:7 used to configure the minimum non-final mPacket length. The minimum non-final mPacket length is $64 \times (1 + \text{addFragSize})$ octets.'

Proposed Response Response Status O

CI 99 SC 99.4.7.3 P 39 L 14 # 157
 Law, David HP

Comment Type T Comment Status X

As far as I can tell the variable pActive is not used in any state diagram, only as a variable in definition of preempt (line 21). Suggest for improved clarity that the variable pActive is deleted and the definition of preempt be updated.

SuggestedRemedy

Change 'The value of preempt is: $\text{pActive} * (\text{eTx}=\text{TRUE} + \dots)$ ' to read 'The value of preempt is: $\text{pEnable} * (\text{verified} + \text{disableVerify}) * (\text{eTx}=\text{TRUE} + \dots)$ '.

Proposed Response Response Status O

CI 99 SC 99.4.7.3 P 39 L 17 # 158
 Law, David HP

Comment Type T Comment Status X

The description of the 'pEnable' variable states that it '... is TRUE when preemption capability is enabled and FALSE otherwise.'. This makes it sound like pEnable is a status, rather than a control, also pEnable only has an impact on transmit, it has no effect on Figure 99-5 'Receive Processing State Diagram' and the ability to process mPackets from the link partner.

SuggestedRemedy

Change the description to read 'A Boolean variable that is set TRUE to enable transmit preemption and FALSE to disable transmit preemption.'. If this change is not implemented the behaviour of the attribute 30.14.1.3 'aMACMergeStatusEnable' may need to be updated.

Proposed Response Response Status O

CI 99 SC 99.4.7.6 P 41 L 48 # 159
 Law, David HP

Comment Type T Comment Status X

The verify_timer uses a variable verifyTime to set when it expires, however the variable verifyTime doesn't appear in the variable list, nor are it bounds defined.

SuggestedRemedy

Delete the text 'The default value of verifyTime is 10 ms.' From subclause 99.4.7.6 (page 41, line 50), add the following variable definition to subclause 99.4.7.3 Variables:

verifyTime

An integer in the range 1:128 used to configure the number of ms after which the verify_timer is done (see 99.4.7.6). The default value of verifyTime is 10 ms.

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 30 SC 30.14.1.2 P 21 L 8 # 160
 Law, David HP

Comment Type TR Comment Status X

To ensure interoperability, further details should be provided as to how this attribute reflects the normative MAC Merge state diagrams, as for example is already done for 30.14.1.7 'aMACMergeAddFragSize' and 30.14.1.8 'aMACMergeFrameAssErrorCount'. Since this attribute relates to the verify status suggest it should map to Figure 99-7 'Verify State Diagram'.

SuggestedRemedy

Suggest the behaviour should be updated to read:

This attribute indicates (when accessed via a GET operation) the status of the MAC Merge verification function defined in 99.4.3 on the given device. The SET operation shall have no effect on a device.

The enumeration "unknown" indicates that the Verify State diagram (Figure 99-7) is in the state INIT_VERIFICATION. The enumeration "verifying" indicates that the Verify State diagram (Figure 99-7) is in the state VERIFICATION_IDLE, SEND_VERIFY or WAIT_FOR_RESPONSE. The enumeration "succeeded" indicates that the Verify State diagram is in the state VERIFIED. The enumeration "failed" indicates that the Verify State diagram is in the state VERIFY_FAIL.;

Proposed Response Response Status O

CI 30 SC 30.14.1.3 P 21 L 21 # 161
 Law, David HP

Comment Type TR Comment Status X

To ensure interoperability, further details should be provided as to how this attribute interacts with the normative MAC Merge state diagrams, as for example is already done for 30.14.1.7 'aMACMergeAddFragSize' and 30.14.1.8 'aMACMergeFrameAssErrorCount'. Since this attribute relates to the enabling MAC Merge suggest it should map the state diagram variable pEnable.

SuggestedRemedy

Suggest the text 'This attribute maps to the variable pEnable (see 99.4.7.3).' should be added to the end of the behaviour description.

Proposed Response Response Status O

CI 30 SC 30.14.1.4 P 21 L 28 # 162
 Law, David HP

Comment Type TR Comment Status X

To ensure interoperability, further details should be provided as to how this attribute interacts with the normative MAC Merge state diagrams, as for example is already done for 30.14.1.7 'aMACMergeAddFragSize' and 30.14.1.8 'aMACMergeFrameAssErrorCount'. Since this attribute relates to the disabling verification suggest it should map the state diagram variable disableVerify.

SuggestedRemedy

Suggest the text 'This attribute maps to the variable disableVerify (see 99.4.7.3).' should be added to the end of the behaviour description.

Proposed Response Response Status O

CI 30 SC 30.14.1.5 P 21 L 43 # 163
 Law, David HP

Comment Type TR Comment Status X

To ensure interoperability, further details should be provided as to how this attribute reflects the normative MAC Merge state diagrams, as for example is already done for 30.14.1.7 'aMACMergeAddFragSize' and 30.14.1.8 'aMACMergeFrameAssErrorCount'. Since this attribute relates to the transmit preemption status suggest it should map to Figure 99-4 'Transmit Processing State Diagram'.

In addition, since the status of the MAC Merge function in the transmit direction is not impacted by the status of verification when disableVerify is set TRUE, and the state of disableVerify and verification are indicated by the aMACMergeVerifyDisable and aMACMergeStatusVerify attributes respectively, suggest that this attribute should only reflect the status of the MAC Merge function in the transmit direction.

SuggestedRemedy

Suggest that there should only be three enumerations that read:

unknown transmit preemption status is unknown
 inactive transmit preemption is inactive
 active verification succeeded and transmit preemption is active

and that the text 'This attribute maps to the variable preempt (see 99.4.7.3).' should be added to the end of the behaviour description.

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 30 SC 30.14.1.6 P 22 L 6 # 164

Law, David HP

Comment Type TR Comment Status X

To ensure interoperability, further details should be provided as to how this attribute reflects the normative MAC Merge state diagrams, as for example is already done for 30.14.1.7 'aMACMergeAddFragSize' and 30.14.1.8 'aMACMergeFrameAssErrorCount'. Since this attribute relates to configuring the rate at which verification mPacket retries occur suggest this map to verify_timer.

SuggestedRemedy

Assuming my comment to define the variable verifyTime is accepted, suggest the text 'This attribute maps to the variable verifyTime (see 99.4.7.3).' should be added to the end of the behaviour description. If not the text 'This attribute maps to verifyTime (see 99.4.7.6).' should be added to the end of the behaviour description.

Proposed Response Response Status

Cl 99 SC 99.1.1 P 30 L 1 # 165

Law, David HP

Comment Type TR Comment Status X

This figure is a mixture of the layer diagram that we usually provide, along with some interlayer service interface information. I would prefer that [1] we limit this particular diagram to show, as usual, just the location of the sublayer defined by the Clause in relation to the OSI seven layer model and the IEEE 802.3 Ethernet Layers and [2] provide a more detailed interlayer service interfaces diagram similar to IEEE Std 802.3-2012 Figure 78-1 and 90-1.

SuggestedRemedy

Please replace the current Figure 99-1 layer model with the figure found on page 1 of IEEE_P802d3br_figures_DL.pdf and insert a new Figure 99-2 to provide a detailed interlayer service interfaces diagram using the figure found on page 2 of IEEE_P802d3br_figures_DL.pdf. I have provided this file in both pdf for posting along with the comment database, and in FrameMaker to ease incorporation should this comment be accepted.

Please not I've included a number of comments on the existing figure if this comment isn't accepted.

Proposed Response Response Status

Cl 99 SC 99.4.7.3 P 38 L 44 # 166

Law, David HP

Comment Type TR Comment Status X

The description for the variable 'disableVerify' states that it is 'A Boolean variable that is set TRUE to disable verification and FALSE to enable verification'. I however don't see how it has any effect on the operation of the Figure 99-7 'Verify State Diagram'. Instead the only use of the variable I can find is in the equation for the variable 'pActive' (line 14), and the only use of the pActive variable is in the equation for the variable 'preempt' (line 21). Based on these equations, when disableVerify is set to TRUE, the variable preempt is no longer dependant on the state of the variable 'verified', the output of the Verify State Diagram.

Hence the variable 'disableVerify' removes the need for successful verification before the operation of preemption. However when disableVerify is set to TRUE, the Verify State Diagram will still operate as normal, sending verify frames and looking for responses. This seems contrary to the variable description since I wouldn't expect verification frames to be sent when it is stated that the variable disableVerify '... is set TRUE to disable verification ...'. This also doesn't seem to match the subclause 99.4.3 'Verifying preemption operation' statement that 'Verification may be disabled'.

Instead I think disableVerify set to TRUE should set the Figure 99-7 'Verify State Diagram' back to its initial state 'INIT_VERIFICATION'.

SuggestedRemedy

Update the Figure 99-7 'Verify State Diagram' so that disableVerify set to TRUE places the state diagram back to its initial state INIT_VERIFICATION. This can be achieved by adding disableVerify as an additional OR condition to the current open arrow in to this state. This will not result in verification mPacket truncation if disableVerify is set to TRUE during a verification mPacket transmission as the Verify State Diagram doesn't send packets. Instead it causes Figure 99-4 'Transmit Processing State Diagram' to send them through the 'send_v' variable, and that process will still complete regardless of the state of Verify State Diagram and the variable disableVerify.

In summary on page 46, line 2, change the text to read 'begin + link_fail + disableVerify'. Note I have also submitted a comment suggesting that pEnable be added to this equation.

Proposed Response Response Status

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 99 SC 99.4.7.6 P 41 L 43 # 167
 Law, David HP

Comment Type TR Comment Status X

The timers should be defined with reference to subclause 14.2.3.2, see subclause 73.10.2 'State diagram timers' for an example. This will define what 'start ipg_timer' means and when ipg_timer_done is cleared.

SuggestedRemedy

Change the subclause to read:

All timers operate in the manner described in 14.2.3.2.

ipg_timer

A timer counting bit times since the end of the prior frame. The timer will expire 96 bit times after being started.

verify_timer

A timer of time from when a verification mPacket was sent to initiating the next attempt. The timer will expire verifyTime ± 20% ms after being started. The default value of verifyTime is 10 ms.

Proposed Response Response Status O

Cl 99 SC 99.4.7.7 P 43 L 13 # 168
 Law, David HP

Comment Type TR Comment Status X

When the ipg_timer timer expires, ipg_timer_done is set true, hence ipg_timer_done should be used as the condition for the transition, not ipg_timer = done.

SuggestedRemedy

Change 'ipg_timer=done' to read 'ipg_timer_done' here and on line 14, 15, 17, 49 and 50, and twice on line 34.

Proposed Response Response Status O

Cl 99 SC 99.4.7.7 P 44 L 23 # 169
 Law, David HP

Comment Type TR Comment Status X

I don't see when pRX_DV is set to FALSE in the 99-5 'Receive Processing State Diagram' for a verify or respond packet. Such packets will enter the pMAC_DATA_VALID state when mRxDV becomes TRUE setting pRX_DV to TRUE. They will then transition between CHECK_FOR_START and RX_PREAMBLE until either a V or R SMD which will transition them in to RCV_V or RCV_R respectively. On a bad CRC there will be a transition directly to IDLE_RX_PROC, a good CRC will transition through V_MCRC_OK or R_MCRC_OK respectively. In none of these cases is pRX_DV set back to FALSE causing the verify or respond packet to be appended to the next packet in the pMAC.

SuggestedRemedy

Add pRX_DV(FALSE) to both the RCV_V and RCV_R states. This will cause the pMAC to discard the preamble and SMD since they will be shorter than a minimum size packet.

Proposed Response Response Status O

Cl 99 SC 99.4.7.7 P 45 L 19 # 170
 Law, David HP

Comment Type TR Comment Status X

I don't see the exit from the CHECK_FOR_EXPRESS state in the Figure 99-6 'Express Filter State Diagram' in the case of a verify or respond packet. Such packets will set mRxDv to TRUE therefore causing the state diagram to enter eMAC_RECEIVE_DATA_VALID and then with a UCT to CHECK_FOR_EXPRESS. There are exits from that state for preamble, SMD-E, SMD-S, SMD-C and ERR, but none for SMD-V and SMD-R.

SuggestedRemedy

Add 'V' and 'R' as additional OR conditions on the transition to the state 'NOT_EXPRESS' so it reads 'S + C + V + R + ERR'. Alternative change this condition to read 'ELSE' (see referenced subclause 21.5, Table 21-1 'State diagram operators').

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC 99.4.7.7 P 46 L 15 # 171
 Law, David HP

Comment Type TR Comment Status X

Setting the variable 'pEnable' to TRUE will cause the Figure 99-7 'Verify State Diagram' to stop sending verification mPackets, however it will not reset the verification process. As a result, for example, if verification with a link partner has failed, and as a result the Verify State Diagram is in the VERIFY_FAIL state, disabling and then enabling preemption through the use of the pEnable will have no effect. This doesn't seem correct, nor match the subclause 99.4.3 'Verifying preemption operation' statement that 'If preemption capability is enabled and has not been verified, MAC Merge initiates transmission of a verify mPacket.'

SuggestedRemedy

Update the Figure 99-7 'Verify State Diagram' so that pEnable set to TRUE places the state diagram back to its initial state INIT_VERIFICATION. This can be achieved by adding pEnable as an additional OR condition to the current open arrow in to this state. This will not result in verification mPacket truncation if pEnable is set to TRUE during a verification mPacket transmission as the Verify State Diagram doesn't send packets. Instead it causes Figure 99-4 'Transmit Processing State Diagram' to send them through the 'send_v' variable, and that process will still complete regardless of the state of Verify State Diagram and the variable pEnable.

In summary on page 46, line 2, change the text to read 'begin + link_fail + pEnable'. Note I have also submitted a comment suggesting that disableVerify be added to this equation.

Proposed Response Response Status O

CI 30 SC 30.12.2.1.30 P L # 172
 Law, David HP

Comment Type E Comment Status X

Change '.. preemption capability ..' to read '... the preemption capability ...' as is already done in subclause 99.4.2 (page 35, line 45).

SuggestedRemedy

Change '.. preemption capability ..' to read '... the preemption capability ...' here and all other locations in the draft.

Proposed Response Response Status O

CI 99 SC 99.4.7.4 P 40 L 15 # 173
 Law, David HP

Comment Type T Comment Status X

Define the mapping from PLS_DATA.request to bit values, and the order, as is done in a number of other functions, for the functions FRAG_DECODE, SFD_DET, SMD_DECODE.

SuggestedRemedy

Add the text 'The bit is 1 if the corresponding primitive value is ONE and 0 if the corresponding primitive is ZERO. The primitives are mapped to bit 0 to bit 7 in sequence.' after the first sentence.

Proposed Response Response Status O

CI 99 SC 99.4.7.7 P 44 L 30 # 174
 Law, David HP

Comment Type T Comment Status X

Although I don't think there is anything incorrect with the use of the prescient function RX_MCRC_CHK, would it not be simpler to calculate mCRC when mRxDv transitions to FALSE, and that be used to determine the transition. This would also seem to remove the need for the prescient function, which to me in implementation terms implies some form of pipelining, and therefore latency.

SuggestedRemedy

Suggest that [1] the condition to transition from P_RECEIVE_DATA back to P_RECEIVE_DATA to be 'mRxDv = TRUE'; [2] the condition to transition from P_RECEIVE_DATA to FRAME_COMPLETE to be 'mRxDv = FALSE * RX_MCRC_CHK = FALSE'; [3] the transition from P_RECEIVE_DATA to WAIT_FOR_DV_FALSE be deleted; [4] a transition be added from P_RECEIVE_DATA to WAIT_FOR_RESUME under the condition 'mRxDv = FALSE * RX_MCRC_CHK = TRUE'; the description of the RX_MCRC_CHK function be changed to read 'Function returning a Boolean value. The value is TRUE if last 32 pPLS_DATA.indications equal the computed mCRC result for the preemptable frame being received. It is false otherwise.'

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC 99.4.7.7 P 44 L 41 # 175
 Law, David HP

Comment Type T Comment Status X

On the basis of being conservative on what we send and liberal on what we receive, while we don't allow the sending of a verify or response frame while a preemptable frame is being preempted, I suggest we define the behaviour of the Receive Process State Diagram if a SMD-V or SMD-R is decoded in the CHECK_FOR_RESUME state. Since a SMD encoding that is error causes the frame to be discarded, suggest the same for a SMD encoding of 'V' or 'R'.

SuggestedRemedy

Add 'V' and 'R' as additional OR conditions on the transition to the state 'WAIT_FOR_DV_FALSE' so it reads 'E + V + R + ERR'. Alternative change this condition to read 'ELSE' (see referenced subclause 21.5, Table 21-1 'State diagram operators').

Proposed Response Response Status O

CI 99 SC 99.4.7.7 P 44 L 50 # 176
 Law, David HP

Comment Type T Comment Status X

In the state ASSEMBLY_ERROR, doesn't the pRX_DV function need to be called to set data_valid = FALSE. Without this it appears the fragments that occur up to the transition in to ASSEMBLY_ERROR state will be concatenated with the next frame that causes an exit from the CHECK_FOR_START state.

SuggestedRemedy

Add the function call pRX_DV (FALSE) after the existing function call DISCARD.

Proposed Response Response Status O

CI 99 SC 99.4.7.3 P 38 L 43 # 177
 Law, David HP

Comment Type T Comment Status X

Suggest that text be added to state that the variable 'cFrameCnt' is set by the 'SMD_DECODE' function. Add similar text for the cFrameCnt, rxFragCnt and rxFrameCnt variables.

SuggestedRemedy

Change the text '... in a continuation mPacket.' to read '... in a continuation mPacket, returned by the SMD_DECODE function.'

Proposed Response Response Status O

CI 99 SC 99.4.7.4 P 40 L 52 # 178
 Law, David HP

Comment Type T Comment Status X

Suggest that the SFD_DET detect function should be defined as a prescient function as it is looking ahead at the next 8 bits.

SuggestedRemedy

See comment.

Proposed Response Response Status O

CI 99 SC 99.4.7.5 P 41 L 30 # 179
 Law, David HP

Comment Type T Comment Status X

The definition of the fragSize counter states that it is 'the number of octets transmitted in the current preemptable mPacket'. A packet however includes the Preamble and the Start Frame Delimiter (see Figure 99-3).

Since this counter is set to zero in the IDLE_TX_PROC state, and will not start to increment until the PREEMPTABLE_TX state in the Transmit Processing State Diagram, which is after the SMD-S has been sent in the previous SEND_SMD-S state, this is not a count of the octets transmitted in the mPacket, but instead the octets transmitted in the preemptable frame.

SuggestedRemedy

Change the text '... in the current preemptable mPacket' to read '... in the current preemptable frame'.

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 30 SC 30.14.1.9 P 22 L 38 # 180
 Law, David HP

Comment Type T Comment Status X

The behaviour states that the counter is incremented when a fragment is rejected due to a unknown SMD value, but an unknown SMD value in the state CHECK_FOR_RESUME will cause a transition to WAIT_FOR_DV_FALSE, not to BAD_FRAG which is what the behaviour states will increment the counter.

SuggestedRemedy

Suggest the text '... is entered (see 99.4.7.7);' be changed to read 'is entered, or when 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);'.

Proposed Response Response Status O

Cl 30 SC 30.14.1.11 P 23 L 2 # 181
 Law, David HP

Comment Type T Comment Status X

Both this subclause, and subclause 30.14.1.12 references 'mFrame' but the only other instance of mFrame I can find in the whole draft is the heading of the first column of Table 99-1. It therefore may be clearer to reference mPacket. Regardless, is it correct to state that this would be a count of 'MAC frame fragments' since mFrames (or mPackets) include non-fragmentable verify, respond and express frames as well as non-fragmented preemptable frames.

SuggestedRemedy

Suggest the subclause 30.14.1.11 'aMACMergeFragCountRx' behaviour be updated to read 'A count of received mPackets (see 99.3.1);' and the subclause 30.14.1.12 'aMACMergeFragCountTx' behaviour be updated to read 'A count of transmitted mPackets (see 99.3.1);'.

Proposed Response Response Status O

Cl 99 SC 99.4.7.7 P 44 L 41 # 182
 Law, David HP

Comment Type TR Comment Status X

Typo in the 'Receive Processing State Diagram' transition from the CHECK_FOR_RESUME state to CHECK_FRAG_CNT state.

SuggestedRemedy

'cFameCn' should read 'cFrameCn'.

Proposed Response Response Status O

Cl 99 SC 99.4.7.7 P 43 L 41 # 183
 Law, David HP

Comment Type TR Comment Status X

The counter 'txFrameCnt' is incremented in the state P_TX_COMPLETE, however no such counter is defined in subclause 99.4.7.5 'Counters', and the state INIT_TX_PROC sets the 'txFrame' counter to zero.

SuggestedRemedy

Change 'THEN txFramecnt++' to read 'THEN txFrame++'.

Proposed Response Response Status O

Cl 99 SC 99.4.7.7 P 44 L 50 # 184
 Law, David HP

Comment Type TR Comment Status X

The counter 'nxtRxFragcnt' is incremented in the state INCREMENT_FRAG_CNT, however no such counter is defined in subclause 99.4.7.5 'Counters', and the state IDLE_RX_PROC sets the 'nxtRxFrag' counter to zero.

SuggestedRemedy

Change 'nxtRxFragCnt++' to read 'nxtRxFrag++'.

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC 99.4.7.4 P 40 L 15 # 185

Law, David

HP

Comment Type TR Comment Status X

The function FRAG_DECODE states 'Returns a Boolean value of TRUE if the primitives contain a valid frag_count value and FALSE otherwise'. I can't see any use of this Boolean, there is no variable defined for it, and I don't see any effect on the Receive Processing State Diagram.

The exit from the CHECK_FRAG_CNT state in the Receive Processing State Diagram is based only on the value of rxFragCnt returned by the FRAG_DECODE function equalling, or not equalling, nxtRxFrag. Since the function definition does not define what value to set rxFragCnt to in the case of an invalid frag_count value, it is bit unclear what is being defined as the require behaviour.

SuggestedRemedy

Either [a] define the Boolean that is set by the FRAG_DECODE function, set that variable to FALSE in the IDLE_RX_PROC state, and test that variable on exit from the CHECK_FRAG_CNT state with it being FALSE causing a transition to the ASSEMBLY_ERROR state, alternatively (b) update the definition of the FRAG_DECODE function to set rxFragCnt to (nxtRxFrag - 1) if the primitives contain an invalid frag_count value, to force an exit to ASSEMBLY_ERROR out of the CHECK_FRAG_CNT state, and delete mention of the Boolean from the definition of the FRAG_DECODE function.

Proposed Response Response Status O

CI 99 SC 99.4.7.7 P 44 L 43 # 186

Law, David

HP

Comment Type TR Comment Status X

The reception of a SMD-S while in the CHECK_FOR_RESUME state with keepSaferD set to TRUE cause a transition to DISCARD_KEEP_S and then to REPLACE_SMD state. I however don't see the state of data_valid being changed in any of these states through calls to the PRX_DV function, and without this it appears the discarded frame and the SMD-S frame will be concatenated.

SuggestedRemedy

Add the following to the DISCARD_KEEP_S state after the call to the DISCARD function:

pRX_DV (FALSE)
A timer to provide an IPG delay
pRX_DV (TRUE)

Proposed Response Response Status O

CI 30 SC 30.14.1.10 P 22 L 47 # 187

Law, David

HP

Comment Type TR Comment Status X

To ensure interoperability, further details should be provided as to when this attribute is incremented.

SuggestedRemedy

Suggest the text 'The counter is incremented each time the FRAME_COMPLETE state of the Receive Processing state Diagram is entered when the previous invocation of the SMD_DECODE function returned "C" should be added to the end of the behaviour description.

Proposed Response Response Status O

CI 90 SC 90.4.3.1.1 P 27 L 33 # 188

Law, David

HP

Comment Type TR Comment Status X

The TSII is defined in terms of xMIT signalling yet the MAC MERGE sublayer does not have access to xMIT, so I don't see how the MAC MERGE can be the gRS sublayer when instantiated. In addition this text states the value PMAC indicates a SFD from the PMAC, but at the xMII there will not be the SFD value, instead a SMD-S will occur (see Table 99-1).

SuggestedRemedy

Change the text so that that MM parameter is mandatory for gRS sublayer supporting TimeSync when layer above is MACMerge. The value EMAC indicates the SMD-E (SFD) value has been detected at the xMII, the value PMAC indicates that a SMD-5 value has been detected at the xMII (see Table 99-1). Make similar changes for the receive path.

Proposed Response Response Status O

CI 30 SC 30.2.5 P 15 L 36 # 189

Marris, Arthur

Cadence Design Syst

Comment Type E Comment Status X

Remove spurious "]"

SuggestedRemedy

Change:
"30.2.5]Capabilities"
to:
"30.2.5 Capabilities"

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 30 SC 30.14.1 P 20 L 36 # 190
 Marris, Arthur Cadence Design Syst
 Comment Type E Comment Status X
 Spelling
 SuggestedRemedy
 Change "behaviors" to "behaviours"
 Proposed Response Response Status O

Cl 79 SC 79.3 P 24 L 14 # 193
 Marris, Arthur Cadence Design Syst
 Comment Type TR Comment Status X
 TBD value in table.
 Also 79.3.6 is currently used by "EEE Fast Wake TLV"
 SuggestedRemedy
 Replace TBD with actual value, probably 7.

Cl 99 SC 99.4.4 P 36 L 27 # 191
 Marris, Arthur Cadence Design Syst
 Comment Type E Comment Status X
 Remove "["
 SuggestedRemedy
 Change "99.4.4 [Transmit processing" to "99.4.4 Transmit processing"
 Proposed Response Response Status O

Proposed Response Response Status O
 Make new subclause 79.3.7

Cl 90 SC 90.4.3.1.1 P 27 L 32 # 194
 Marris, Arthur Cadence Design Syst
 Comment Type TR Comment Status X
 It is not clear why Clause 90 needs to be modified to indicate the source of the SFD indication.
 SuggestedRemedy
 Either:
 Do not include Clause 90 in 802.3br
 Or:
 Give a proper description of the purpose of the MM parameter
 Proposed Response Response Status O

Cl 30 SC 30.12.1.1.1 P 18 L 36 # 192
 Marris, Arthur Cadence Design Syst
 Comment Type TR Comment Status X
 It is 7 bits not 6.
 SuggestedRemedy
 Change to:
 "A read-write string of 7 bits indicating"
 Also clean up editing instructions to make it clearer what has changed from the base standard. For example the formatting has changed and "seventh" should be under-lined.
 Proposed Response Response Status O

Cl 99 SC 99.4.8 P 46 L 38 # 195
 Marris, Arthur Cadence Design Syst
 Comment Type TR Comment Status X
 "shall meet the delay specified elsewhere in this standard" is not an appropriate way to standardize something.
 SuggestedRemedy
 Replace "the delay specified elsewhere in this standard" with an actual value.
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 01 SC 1.4 P 14 L 15 # 196
 Ran, Adee Intel
 Comment Type E Comment Status X
 Definitions in 1.4 that are used in specific clauses should include clause references.
 SuggestedRemedy
 Add references to IEEE 802.3 clause 99 in 1.4.1, 1.4.2, 1.4.3, and 1.4.4.
 Proposed Response Response Status O

Cl 79 SC 79.3.6 P 24 L 28 # 199
 Ran, Adee Intel
 Comment Type E Comment Status X
 Inconsistent alignment.
 SuggestedRemedy
 Align "7 bits" to the center of the TLV type box.
 Proposed Response Response Status O

Cl 30 SC 30.12.2 P 19 L 1 # 197
 Ran, Adee Intel
 Comment Type E Comment Status X
 Editing instruction is in 30.12.2, but the changes are to a lower rank subclause, 30.12.2.1.
 Similarly for 30.12.3.
 SuggestedRemedy
 Add subclause: 30.12.2.1 LLDP Local System Group attributes, and change the editing instruction to "insert new subclauses after..."
 Similarly add subclause 30.12.3.1 and change editing instruction.
 Proposed Response Response Status O

Cl 90 SC 90.5 P 28 L 29 # 200
 Ran, Adee Intel
 Comment Type E Comment Status X
 gRs should be gRS.
 SuggestedRemedy
 Change gRs to gRS.
 Proposed Response Response Status O

Cl 30 SC 30.12.2.1.30 P 19 L 12 # 198
 Ran, Adee Intel
 Comment Type E Comment Status X
 Missing period at end of sentence (before semicolon).
 Also in 30.12.3.1.24, 30.12.3.1.27, 30.12.3.1.33, 30.14.1
 Also, missing semicolon after period in 30.14.1.6, 30.14.1.7.
 SuggestedRemedy
 Update to use periods and semicolons consistently in these definitions.
 Proposed Response Response Status O

Cl 99 SC 99.1 P 29 L 9 # 201
 Ran, Adee Intel
 Comment Type E Comment Status X
 Repetitive text in parentheses. It doesn't seem necessary to have any further definition here.
 SuggestedRemedy
 Delete "(MAC Merge)".
 Proposed Response Response Status O

Cl 99 SC 99.1 P 29 L 31 # 202
 Ran, Adee Intel
 Comment Type E Comment Status X
 Long conditional statement - it isn't immediately clear where the condition ends.
 SuggestedRemedy
 Insert "then" before "MAC Merge will transmit".
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC 99.1 P 29 L 39 # 203
 Ran, Adee Intel
 Comment Type E Comment Status X
 How is it determined that the link partner supports preemption?
 SuggestedRemedy
 Add a reference to 79.3(.7).
 Proposed Response Response Status O

CI 99 SC 99.2 P 31 L 44 # 204
 Ran, Adee Intel
 Comment Type E Comment Status X
 "The MAC Client may be a MAC Client supporting preemption." - this sentence seems badly phrased, and is implicit from the previous sentence.
 SuggestedRemedy
 Delete "The MAC Client may be a MAC Client supporting preemption."
 Proposed Response Response Status O

CI 99 SC 99.2.2 P 32 L 11 # 205
 Ran, Adee Intel
 Comment Type E Comment Status X
 Missing space between "MAC" and "Merge".
 SuggestedRemedy
 Add space.
 Proposed Response Response Status O

CI 99 SC 99.2.3.1 P 32 L 17 # 206
 Ran, Adee Intel
 Comment Type E Comment Status X
 Missing "of".
 SuggestedRemedy
 Add "of" after "transfer".
 Proposed Response Response Status O

CI 99 SC 99.2.3.1.1 P 32 L 29 # 207
 Ran, Adee Intel
 Comment Type E Comment Status X
 List items are syntactically after the word "by".
 The sentence seems to continue after the list, in a new paragraph, and description of the effect of RELEASE (a different topic) immediately follows. This is unusual and difficult to follow.
 The list can be changed into a normal paragraph and RELEASE can be separated for clarity.
 SuggestedRemedy
 Change "preempt" to "preempting" and "start" to "starting".
 Change the list into a regular statement: "... by preempting ... and not starting ... , regardless of ..."
 Insert new line before "The value RELEASE".
 Proposed Response Response Status O

CI 99 SC 99.2.3.1.2 P 32 L 35 # 208
 Ran, Adee Intel
 Comment Type E Comment Status X
 This part of the service interface is almost always titled "When generated" - clause 90 is the only exception.
 SuggestedRemedy
 Rename to "When generated".
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC 99.2.2 P 32 L 3 # 209

Ran, Adee Intel

Comment Type E Comment Status X

Phrasing can be improved and made more consistent with service interface definitions in most of the other clauses.

SuggestedRemedy

Change "The following" to "This subclause".

Change "These services" to "The service interface".

Proposed Response Response Status O

CI 99 SC 99.2.3.1.3 P 32 L 47 # 210

Ran, Adee Intel

Comment Type E Comment Status X

Duplicate period at end of sentence ("pMAC..")

SuggestedRemedy

Remove one period.

Proposed Response Response Status O

CI 99 SC 99.1 P 29 L 23 # 211

Ran, Adee Intel

Comment Type E Comment Status X

According to the style manual: "The use of the word will is deprecated and shall not be used when stating mandatory requirements; will is only used in statements of fact."

Here "will" should probably be changed to "shall".

Clause 99 contains many instances of "will", they should be changed per case.

SuggestedRemedy

Go over clause 99 and change text containing "will" as appropriate.

Proposed Response Response Status O

CI 99 SC 99.3.1 P 33 L 35 # 212

Ran, Adee Intel

Comment Type E Comment Status X

Missing cross reference top table 99-1 (twice in this paragraph).

SuggestedRemedy

Add cross references.

Proposed Response Response Status O

CI 99 SC 99.3.2 P 33 L 41 # 213

Ran, Adee Intel

Comment Type E Comment Status X

According to the style manual: "In general text, isolated numbers less than 10 should be spelled out".

SuggestedRemedy

Change "7" and "6" to "seven" and "six" respectively.

Proposed Response Response Status O

CI 99 SC 99.4 P 35 L 29 # 214

Ran, Adee Intel

Comment Type E Comment Status X

This sentence is somewhat confusing. Is there a normative statement here? what does "can" mean when referring to the link partner?

Also "behavior" is repeated twice, which does not seem correct.

The whole paragraph should be rephrased.

SuggestedRemedy

Change the text in this paragraph to:

"The MAC Merge receiver always operates the same way regardless of whether preemption in the remote transmitter is active or not. This allows MAC Merge sublayers to enable and use 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 O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC 99.4 P 35 L 33 # 215

Ran, Adeo Intel

Comment Type E Comment Status X

The MAC frame format is an already established concept. The express mPacket is new.

The sentence is long and contains "will", so should be rephrased.

SuggestedRemedy

Change to
"The express mPacket format is the same as the MAC format. As a result, any frames received from a device that does not support preemption or that has preemption disabled are received through the eMAC."

Proposed Response Response Status O

CI 99 SC 99.4.4 P 36 L 27 # 216

Ran, Adeo Intel

Comment Type E Comment Status X

Stray character "["

SuggestedRemedy

Delete "["

Proposed Response Response Status O

CI 99 SC 99.4.5 P 37 L 12 # 217

Ran, Adeo Intel

Comment Type E Comment Status X

"Then PLS_DATA_VALID.indication(DATA_NOT_VALID) is sent to the pMAC"

This either isn't a complete sentence, or a full-stop is missing. The meaning is not clear.

The previous sentences already describe what should happen "prior to indicating DATA_NOT_VALID to the pMAC", so this addition may not be necessary.

SuggestedRemedy

Rephrase to clarify what this sentence means, or delete it.

Proposed Response Response Status O

CI 99 SC 99.4.5 P 37 L 20 # 218

Ran, Adeo Intel

Comment Type E Comment Status X

Wording of "checks... to see" can be improved.

SuggestedRemedy

Change "checks the last four octets of the mPacket to see if they match" to "checks whether last four octets of the mPacket match".

Proposed Response Response Status O

CI 99 SC 99.4.5 P 37 L 26 # 219

Ran, Adeo Intel

Comment Type E Comment Status X

"An SMD containing an SMD-C an mPacket that continues the data for a preempted frame."

This does not seem to be a complete sentence.

SuggestedRemedy

Rephrase to clarify the intended meaning.

Proposed Response Response Status O

CI 99 SC 99.4.8 P 45 L 47 # 220

Ran, Adeo Intel

Comment Type E Comment Status X

Punctuation can be improved in this sentence to help the readers.

SuggestedRemedy

Add comma after "is active".

Change "hold response time, HRT," to "hold response time (HRT)".

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 99 SC 99.4.8 P 46 L 4736 # 221

Ran, Adee Intel

Comment Type E Comment Status X

The second paragraph on this page seems to allow a longer delay for for an express frame in some cases.

In the first and third paragraphs, it isn't clear if there is anything specified - it seems like a long way of saying "all other requirements are still valid". If there is something else, it should be rephrased to clarify. Otherwise, this text is obvious and should be deleted.

Long sentences similar to each other makes it difficult to understand what is required here.

SuggestedRemedy

Clarify or delete the first and third paragraphs.

If possible, use a table or a list or some other format to help readers discriminate these cases.

Proposed Response Response Status O

Cl 01 SC 1.4 P 14 L 27 # 222

Ran, Adee Intel

Comment Type ER Comment Status X

References should be made to the base document rather than to the amendment.

SuggestedRemedy

Change "802.3br" to "802.3".

Proposed Response Response Status O

Cl 30 SC 30.12.1.1.1 P 18 L 2741 # 223

Ran, Adee Intel

Comment Type ER Comment Status X

The changes in this subclause, relative to the base document, are more substantial than what the text marking indicates.

SuggestedRemedy

Include the original text with strikethrough font, and underline all text after the first paragraph.

Proposed Response Response Status O

Cl 30 SC 30.12.2.1.30 P 19 L 5 # 224

Ran, Adee Intel

Comment Type ER Comment Status X

802.3bx already added subclauses starting at "30.12.2.1.30 aLldpXdot3LocTxFw" and up to 30.12.2.1.33.

SuggestedRemedy

Renumber new subclauses starting at 30.12.2.1.34 instead of 30.12.2.1.30.

Proposed Response Response Status O

Cl 79 SC 79.3.6 P 24 L 18 # 225

Ran, Adee Intel

Comment Type ER Comment Status X

Subclause 79.3.6 already exists, EEE fast wake (added in 802.3bj).

SuggestedRemedy

Renumber 79.3.6 to 79.3.7.

Proposed Response Response Status O

Cl 99 SC 99.4.3 P 36 L 4 # 226

Ran, Adee Intel

Comment Type ER Comment Status X

This paragraph addresses possible behavior of devices that do not comply with another standard. Non-compliant behavior can take many forms, and this standard should not address possible consequences or proprietary devices.

It is sufficient to state that verification check is required for preemption.

SuggestedRemedy

Delete the first paragraph.

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 79 SC 79.3.6 P 24 L 28 # 227

Ran, Adeo Intel

Comment Type T Comment Status X

No previous TLV defined in clause 79 has variable length and such a generic name.

It seems likely that new capabilities will define new TLV subtypes rather than piggyback on an existing subtype format (this new TLV is a good example - it is defined instead of using reserved bits in previously defioned TLVs).

SuggestedRemedy

Rename this TLV to "Preemption capability" and set a fixed length of 1 octet.

Proposed Response Response Status O

CI 90 SC 90.4.3.1.1 P 27 L 26 # 228

Ran, Adeo Intel

Comment Type T Comment Status X

"MM" is not a meaningful name for this parameter. Also, this name is used both in TS_TX.indication and in TS_RX.indication, although tha parameter meaning is not identical.

SuggestedRemedy

Rename MM to MM_SOURCE in TS_TX and to MM_SINK in TS_RX.

Proposed Response Response Status O

CI 99 SC 99.4.2 P 36 L 2 # 229

Ran, Adeo Intel

Comment Type T Comment Status X

Disabling preemption on link failure is phrased as a recommendation (should), it should probably be normative.

SuggestedRemedy

Change "should" to "shall".

Proposed Response Response Status O

CI 99 SC 99.4.4 P 36 L 35 # 230

Ran, Adeo Intel

Comment Type T Comment Status X

addFragSize is not a multiple of 64 octets - it is the multiplier.

"can" should be "may" here, since it describes a permissible action (is permitted to) rather than a capability.

"will" should be "shall" here, as this is the normative behavior.

SuggestedRemedy

Change paragraph to

"A device may indicate that its receiver requires an additional multiple of 64 octets before preemption occurs, using the addFragSize field in the TLV. If addFragSize in the TLV received from the link partner is non-zero, then preemption shall not occur until at least 64 * (1 + addFragSize) octets of the preemptable frame have been sent. "

Proposed Response Response Status O

CI 99 SC 99.4.7.3 P 38 L 37 # 231

Ran, Adeo Intel

Comment Type T Comment Status X

addFragSize is a small number which is technically not a multiple of 64.

SuggestedRemedy

Change "multiple" to "multiplier".

Proposed Response Response Status O

CI 79 SC 79.3 P 24 L 14 # 232

Ran, Adeo Intel

Comment Type TR Comment Status X

In Table 79-1, subtype should have a value (not TBD).

SuggestedRemedy

Change TBD to 7 (first unused subtype as of 802.3bx).
Change last row to define subtypes 8-255 as reserved.

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC 99.4.5 P 37 L 11 # 233
 Ran, Adeo Intel
 Comment Type TR Comment Status X
 This is the DISCARD function. "Ensure" by "implementation dependent means" seems dangerous - what is the MTTFPA with an unknown implementation? The DISCARD should definitely be a normative function, and it is much more difficult to verify that "implementation dependent" does what it should do.
 SuggestedRemedy
 There are two well-described methods of achieving this requirement here. Please choose one or the other (or another one) and make it normative.
 Proposed Response Response Status O

CI 99 SC 99.2.3.1.3 P 32 L 45 # 234
 Regev, Alon Ixia
 Comment Type E Comment Status X
 In the line "minimum fragment size requirements are met," the comma should be a semicolon as the "inner" serier contains a comma.
 SuggestedRemedy
 change "minimum fragment size requirements are met,"
 To "minimum fragment size requirements are met;"
 Proposed Response Response Status O

CI 999 SC P 3 L 14 # 235
 Regev, Alon Ixia
 Comment Type E Comment Status X
 Extra space before period
 SuggestedRemedy
 Change "Traffic ." to "Traffic."
 Proposed Response Response Status O

CI 79 SC 79.5.11 P 26 L 18 # 236
 Regev, Alon Ixia
 Comment Type E Comment Status X
 "Capabilities" misspelled as "Capabilites"
 SuggestedRemedy
 change "Capabilites" to "Capabilities".
 Also regenerate the Table of Contents to correct there.
 Proposed Response Response Status O

CI 30 SC 30.2.5 P 15 L 36 # 237
 Regev, Alon Ixia
 Comment Type E Comment Status X
 Extra "]" before Capabilities
 SuggestedRemedy
 Change "]Capabilities" to "Capabilities"
 Proposed Response Response Status O

CI 99 SC 99.2.2 P 32 L 11 # 238
 Regev, Alon Ixia
 Comment Type E Comment Status X
 "MACMerge" should be "MAC Merge"
 SuggestedRemedy
 Change "MACMerge" to "MAC Merge"
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 99 SC 99.3.3 P 33 L 49 # 239
 Regev, Alon Ixia
 Comment Type E Comment Status X
 "inTable 99-1" should be "in Table 99-1"
 SuggestedRemedy
 change "inTable 99-1" to "in Table 99-1"
 Proposed Response Response Status O

Cl 99 SC 99.4.7.3 P 39 L 39 # 243
 Regev, Alon Ixia
 Comment Type E Comment Status X
 "inital" should be "initial"
 SuggestedRemedy
 change "inital" to "initial"
 Proposed Response Response Status O

Cl 99 SC 99.3.3 P 34 L 3 # 240
 Regev, Alon Ixia
 Comment Type E Comment Status X
 Two periods instead of 1.
 SuggestedRemedy
 Change "." to "."
 Proposed Response Response Status O

Cl 99 SC 99.4.7.6 P 41 L 46 # 244
 Regev, Alon Ixia
 Comment Type E Comment Status X
 missing period.
 SuggestedRemedy
 Change
 "A timer counting bit times since the end of the prior frame The timer will set
 ipg_timer_done when it reaches 96 bit times."
 to
 "A timer counting bit times since the end of the prior frame. The timer will set
 ipg_timer_done when it reaches 96 bit times."
 Proposed Response Response Status O

Cl 99 SC 99.4.3 P 36 L 12 # 241
 Regev, Alon Ixia
 Comment Type E Comment Status X
 "the" repeated twice
 SuggestedRemedy
 change "the the" to "the"
 Proposed Response Response Status O

Cl 99 SC 99.4.7.7 P 42 L 3 # 245
 Regev, Alon Ixia
 Comment Type E Comment Status X
 Figure is repeated twice
 SuggestedRemedy
 change "Figure Figure 99-4" to "Figure 99-4"
 Proposed Response Response Status O

Cl 99 SC 99.4.7.3 P 39 L 24 # 242
 Regev, Alon Ixia
 Comment Type E Comment Status X
 "an pPLS_DATA.request" should be "a pPLS_DATA.request"
 SuggestedRemedy
 Chagne "an pPLS_DATA.request" to "a pPLS_DATA.request"
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC 99.5.3.2 P 48 L 40 # 246
 Regev, Alon Ixia
 Comment Type E Comment Status X
 "fram" should be "frame" (really it should be packet, but there is a separate comment on that).
 SuggestedRemedy
 change "fram" to "frame"
 Proposed Response Response Status O

CI 79 SC 79.4.2 P 24 L 54 # 247
 Regev, Alon Ixia
 Comment Type E Comment Status X
 missing space between "Table 79-9" and "and"
 SuggestedRemedy
 Change "Table 79-9and" to "Table 79-9 and"
 Proposed Response Response Status O

CI 79 SC 79.4.2 P 25 L 12 # 248
 Regev, Alon Ixia
 Comment Type E Comment Status X
 "0=not active" should be "0 = not active" to match the format elsewhere
 SuggestedRemedy
 Chagne "0=not active" to "0 = not active"
 Proposed Response Response Status O

CI 99 SC 99.2.3.1.1 P 32 L 29 # 249
 Regev, Alon Ixia
 Comment Type E Comment Status X
 the a) and b) should be in the present progressive tense (to match the beginning of the sentence "The value HOLD suspends transmission from the pMAC by"
 SuggestedRemedy
 Change
 "a) preempt any preemptable frame in progress if preemption is active and
 b) not start transmission of frames from the pMAC"

To
 "a) preempting any preemptable frame in progress if preemption is active and
 b) not starting transmission of frames from the pMAC"
 Proposed Response Response Status O

CI 99 SC 99.2.3.1.3 P 32 L 47 # 250
 Regev, Alon Ixia
 Comment Type E Comment Status X
 two periods at the end of the sentence.
 SuggestedRemedy
 Change "." to "."
 Proposed Response Response Status O

CI 99 SC 99.3.1 P 33 L 32 # 251
 Regev, Alon Ixia
 Comment Type E Comment Status X
 "The format of an mPacket depends on data it carries." should be "The format of an mPacket depends on the data it carries."
 SuggestedRemedy
 Change "The format of an mPacket depends on data it carries."
 to "The format of an mPacket depends on the data it carries."
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 99 SC 99.3.1 P 33 L 35 # 252
 Regev, Alon Ixia
 Comment Type E Comment Status X
 the reference to Table 99-1 is text instead of being a link
 SuggestedRemedy
 In both 35 and 37, change the text "Table 99-1" to a link to Table 99-1.
 Proposed Response Response Status O

Cl 99 SC 99.4.7.5 P 41 L 41 # 255
 Regev, Alon Ixia
 Comment Type E Comment Status X
 use "attempts" instead of "tries" as it's meaning is clearer.
 SuggestedRemedy
 Change "tries" to "attempts"
 Proposed Response Response Status O

Cl 99 SC 99.4.4 P 36 L 27 # 253
 Regev, Alon Ixia
 Comment Type E Comment Status X
 "[Transmit Processing" contains an extra "[
 SuggestedRemedy
 Remove the "[
 Proposed Response Response Status O

Cl 999 SC P 4 L 28 # 256
 Regev, Alon Ixia
 Comment Type T Comment Status X
 "This amendment includes [complete]" is not complete.
 While we don't yet know exactly which version of 802.3 (802.3-2015 most likely) and amendments will be included, we do need to include a description of this amendment.
 SuggestedRemedy
 Change
 "IEEE Std 802.3xx™-201x
 This amendment includes [complete]"
 To
 "IEEE Std 802.3br™-201x
 Amendment X - This amendment specifies additions to and appropriate modifications of IEEE Std 802.3-201X to add support for interspersing express traffic with preemptable traffic. This is achieved by defining a MAC Merge sublayer which attaches an express Media Access Control (MAC) and a preemptable MAC to a single Physical Signaling Sublayer (PLS) service."
 Proposed Response Response Status O

Cl 99 SC 99.4.7.4 P 39 L 53 # 254
 Regev, Alon Ixia
 Comment Type E Comment Status X
 "detectsa" should be "detects a"
 "(99.4.5)" should be "(see 99.4.5)"
 SuggestedRemedy
 change "detectsa" to "detects a"
 change "(99.4.5)" to "(see 99.4.5)"
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 79 SC 79.3 P 24 L 14 # 257

Regev, Alon Ixia

Comment Type T Comment Status X

Working Group ballots should not contain TBD values.

SuggestedRemedy

On Page 24, line 14, change "TBD" to "6"

On Page 24, line 25, change "802.3 subtype = TBD" to "802.3 subtype = 6"

Proposed Response Response Status O

Cl 99 SC 99.3.1 P 33 L 36 # 258

Regev, Alon Ixia

Comment Type T Comment Status X

The sentence "An mPacket carrying any of the noninitial fragments of a preempted preemptable frame (transmitted by pMAC) has an SMD value, per Table 99-1, and includes an additional fragment counter octet (FRAG_COUNT) following the SMD." is correct, but would be clearer if instead of just saying "has an SMD value" the spec states "has a non-initial fragment SMD value"

SuggestedRemedy

Change "has an SMD value" to "has a non-initial fragment SMD value"

Proposed Response Response Status O

Cl 99 SC 99.4.4 P 36 L 33 # 259

Regev, Alon Ixia

Comment Type T Comment Status X

Only 60 data octets need to remain in a packet for it to be able to be preempted (there are 4 FCS octets in addition to the 60 data octets).

SuggestedRemedy

Change "64 data octets remain to be transmitted"

To "60 data octets remain to be transmitted"

Proposed Response Response Status O

Cl 99 SC 99.4.5 P 37 L 8 # 260

Regev, Alon Ixia

Comment Type T Comment Status X

In the sentence "If receive processing was processing an incomplete preempted frame, receive processing ensures that the pMAC will detect a FrameCheckError prior to indicating DATA_NOT_VALID to the pMAC." it is not clear that this only applies if an SMD containing an SMD-S is received

SuggestedRemedy

Change

"If receive processing was processing an incomplete preempted frame, receive processing ensures that the pMAC will detect a FrameCheckError prior to indicating DATA_NOT_VALID to the pMAC."

To

"If an mPacket containing an SMD-S is received when receive processing was processing an incomplete preempted frame, receive processing ensures that the pMAC will detect a FrameCheckError prior to indicating DATA_NOT_VALID to the pMAC."

Proposed Response Response Status O

Cl 99 SC 99.4.5 P 37 L 28 # 261

Regev, Alon Ixia

Comment Type T Comment Status X

It is not clear that "Receive processing checks that:" only applies when receiveing an SMD containing an "SMD-C".

SuggestedRemedy

Change "Receive processing checks that:"

To "Upon receiving an SMD value of SMD-C, receive processing checks that"

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC 99.4.5 P 37 L 26 # 262
 Regev, Alon Ixia
 Comment Type T Comment Status X
 "An SMD containing an SMD-C an mPacket that continues the data for a preempted frame." is missing a verb.
 SuggestedRemedy
 Change "An SMD containing an SMD-C an mPacket that continues the data for a preempted frame."
 To "An SMD containing an SMD-C indicates the start of an mPacket that continues the data for a preempted frame."
 Proposed Response Response Status O

CI 99 SC 99.4.7.3 P 38 L 43 # 264
 Regev, Alon Ixia
 Comment Type T Comment Status X
 "continuation mPacket" is not defined. There is no indication anywhere in the draft that the C in SMD-C stands for "continuation".
 SuggestedRemedy
 Change the definition of cFrameCnt from
 "An integer in the range 0:3 indicating the frame count in a continuation mPacket."
 To
 "An integer in the range 0:3 indicating the frame count in a non-initial mPacket."
 Change the definition of rxFragCnt from
 "An integer in the range 0:3 indicating the fragment count in a continuation mPacket."
 To
 "An integer in the range 0:3 indicating the fragment count in a non-initial mPacket."
 Proposed Response Response Status O

CI 99 SC 99.4.7.3 P 38 L 37 # 263
 Regev, Alon Ixia
 Comment Type T Comment Status X
 AddFragSize is now 2 bits and should therefore have a range of 0:3
 SuggestedRemedy
 change "0:7" to "0:3"
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 99 SC 99.3.6 P 35 L 19 # 265
 Regev, Alon Ixia

Comment Type T Comment Status X

Verify & respond frames should always contain an mCRC. The CRC section makes this ambiguous in the statement "For the final mPacket of a frame, the CRC field contains the last 4 octets of the MAC frame (the FCS field)." as the verify & respond packets could be considered final mPackets.

SuggestedRemedy

Change
 "For the final mPacket of a frame, the CRC field contains the last 4 octets of the MAC frame (the FCS field).

For other mPackets, it contains an mCRC value calculated on the data octets of the frame from the first octet of the frame to the last octet transmitted in that mPacket. The computation corresponds to performing steps a) through d) in 3.2.9. The mCRC is the XOR of the calculated 32 bits and 0x0000 FFFF."

To

"For non-final mPackets of a frame as well as mPackets starting with SMD-V or SMD-R, the CRC field contains an mCRC value calculated on the data octets of the frame from the first octet of the frame to the last octet transmitted in that mPacket. The computation corresponds to performing steps a) through d) in 3.2.9. The mCRC is the XOR of the calculated 32 bits and 0x0000 FFFF."

For all other mFrames, the CRC field contains the last 4 octets of the MAC frame (the FCS field)."

Proposed Response Response Status O

Cl 99 SC 99.4.7.4 P 40 L 14 # 266
 Regev, Alon Ixia

Comment Type T Comment Status X

Add a reference to the frag_count encoding table

SuggestedRemedy

Change
 "Returns an 8-bit vector with the frag_count encoding for a fragment count of frag_cnt."

To
 "Returns an 8-bit vector with the frag_count encoding for a fragment count of frag_cnt (see Table 99-2)."

Proposed Response Response Status O

Cl 99 SC 99.4.7.4 P 40 L 16 # 267
 Regev, Alon Ixia

Comment Type T Comment Status X

in FRAG_DECODE, the eight mPLS_DATA.indication primitives contain an "encoded" frag_count (not frag_count itself)

SuggestedRemedy

Change
 "Decodes eight mPLS_DATA.indication primitives containing frag_count."

To
 "Decodes eight mPLS_DATA.indication primitives containing an encoded frag_count (see Table 99-2)."

Proposed Response Response Status O

Cl 99 SC 99.4.7.4 P 40 L 49 # 268
 Regev, Alon Ixia

Comment Type T Comment Status X

In the definition of RX_MCRC_CHK, pPLS_DATA.indication should be mPLS_DATA.indication

SuggestedRemedy

change "pPLS_DATA.indications" to "mPLS_DATA.indications"

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 99 SC 99.4.7.4 P 41 L 1 # 269
Regev, Alon Ixia

Comment Type T Comment Status X

Add a referece to the SMD values table

SuggestedRemedy

On Page 41, Line 1

Change "based on the value of the primitives:"

to "based on the value of the primitives (see Table 99-1):"

On Page 42, Line 12

Change "Returns an 8-bit vector with the SMD encoding for an SMD-C with frame count of frame_cnt."

To "Returns an 8-bit vector with the SMD encoding for an SMD-C with frame count of frame_cnt (see Table 99-1)."

On Page 42, Line 14

Change "Returns an 8-bit vector with the SMD encoding for an SMD-S with frame count of frame_cnt. Consumes 8 pPLS_DATA.request primitives containing the SFD."

To "Returns an 8-bit vector with the SMD encoding for an SMD-S with frame count of frame_cnt (see Table 99-1). Consumes 8 pPLS_DATA.request primitives containing the SFD."

Proposed Response Response Status O

Cl 99 SC 99.4.7.7 P 43 L 17 # 270
Regev, Alon Ixia

Comment Type T Comment Status X

done misspelled as dne

SuggestedRemedy

change "dne" to "done"

Proposed Response Response Status O

Cl 99 SC 99.4.7.7 P 43 L 13 # 271
Regev, Alon Ixia

Comment Type T Comment Status X

Express traffic is given priority over sending a respond mPacket. If express traffic continues for 10ms, it can delay sending a respond mPacket causing a timeout on the link partner. If this continues for 30ms (+/- 20%), the validation will fail.

SuggestedRemedy

Give priority to to respond mPackets over priority frames:

Change the condition for transition from IDLE_TX_PROC to EXPRESS_TX from "eTx=TRUE * ipg_timer=dne" to "eTx=TRUE * send_r=FALSE * ipg_timer=done"

Change the condition for transition from IDLE_TX_PROC to TX_RESPOND from "send_r=TRUE * ipg_timer=done * eTx=FALSE" to "send_r=TRUE * ipg_timer=done"

Proposed Response Response Status O

Cl 99 SC 99.4.7.7 P 43 L 46 # 272
Regev, Alon Ixia

Comment Type T Comment Status X

When transitioning from the PREMPT_WAIT to RESUME_PREAMBLE, preambleCnt is never set to 0.

SuggestedRemedy

In the PREMPT_WAIT state, add a line with "preambleCnt <= 0"

Proposed Response Response Status O

Cl 99 SC 99.5.2.2 P 47 L 34 # 273
Regev, Alon Ixia

Comment Type T Comment Status X

As the release of 802.3br is unlikely to happen in 2015, I suggest we change the draft text from "802.3br-2015" to "802.3br-201x".

SuggestedRemedy

Change all instances of "802.3br-2015" to "802.3br-201x".

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 99 SC 99.4.3 P 36 L 25 # 274

Regev, Alon

Ixia

Comment Type T Comment Status X

The text states that "Verificaion may be disabled", but this is not handled properly in multiple places (for example, it doesn't actually disable the verification).

SuggestedRemedy

In Figure 99-7 (Verify State Diagram) on page 46, change the transition from VERIFICATION IDLE to SEND_VERIFY from "pEnable=TRUE" to "pEnable=TRUE * disableVerify=FALSE"

In section 30.14.1.2 on page 21 on line 2, change

"An ENUMERATED VALUE that has one of the following entries:

unknown verification of preemption operation with the link partner has not been initiated

verifying verification has been initiated and has not completed

succeeded preemption operation has been verified

failed verification of preemption operation failed"

To

"An ENUMERATED VALUE that has one of the following entries:

unknown verifcaiton status is unknown

not started verifcaiton has not been initiated

verifying verification has been initiated and has not completed

succeeded preemption operation has been verified

failed verification of preemption operation failed

disabled verification of preemption operation is disabled

"

Delete the editor's note on page 21 starting on lines 10-12

Proposed Response Response Status O

Cl 99 SC 99.4 P 35 L 34 # 275

Regev, Alon

Ixia

Comment Type TR Comment Status X

A MAC frame cannot have the same format of an mPacket as an mPacket is a packet (contains preamble & SFD) and a MAC frame does not contain these. See definition of MAC frame and packet in section 1.4. All instances of "MAC frame" should be changed to "packet" in this clause.

The IEEE specification is not consistent in its use of "frame". In the MAC section, it is consistently used to refer to "MAC frame" (not packet). In later PHY specs, the term "frame" is used to refer to "packet" (not MAC frame). As this section is inbetween the MAC & PHY layers, I suggest we use "packet" instead of "frame" in this clause.

SuggestedRemedy

Change all instances of "MAC frame" to "packet"

Consider changing all other instances of "frame" to packet (this would make this clause more consistent in my opinion)

Proposed Response Response Status O

Cl 99 SC 99.4.4 P 36 L 31 # 276

Regev, Alon

Ixia

Comment Type TR Comment Status X

We no longer have an 8 byte alignment requirement.

SuggestedRemedy

remove "and a multiple of eight octets of the frame has been sent"

Proposed Response Response Status O

Cl 30 SC 30.14.1.11 P 23 L 2 # 277

Regev, Alon

Ixia

Comment Type TR Comment Status X

in a previous draft, mFrame was renamed to mPacket, but there are still references to mFrame

SuggestedRemedy

On page 23 line 2, page 23 line 11, and page 34, line 9 change "mFrame" to "mPacket"

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC 99.4.7.7 P 44 L 40 # 278

Regev, Alon

Ixia

Comment Type TR Comment Status X

Now that SMD_DECODE can return V or R, that case needs to be handled by the CHECK_FOR_RESUME state.

Note that both of these cases are valid (not errors). Due to timing differences (and interfering frames), it is valid to receive an "R" when already in preemption mode (this will be an "R" to the second or third "V" request, where the first "V" got a timeout but we still got a delayed response). And as preemption is enabled in each direction separately, we could get a "V" request at any time.

In the case of receiving an "R", as preemption is already enabled, we can just ignore the mPacket and transition back to the WAIT_FOR_DV_FALSE state.

In the case of receiving a "V", we need to process it by verifying the mPacket and if its valid setting rcv_v to TRUE. In either the valid or invalid "V" mPacket, we then need to transition to WAIT_FOR_RESUME state.

SuggestedRemedy

change the transition from CHECK_FOR_RESUME to WAIT_FOR_DV_FALSE from "E + ERR" to "E + R + ERR"

Add a new state titled "RCV_V_BETW_FRAGS" under and to the left of "CHECK_FOR_RESUME".

Add a new state titled "V_MCRC_OK_BETW_FRAGS" under the "RCV_V_BETW_FRAGS" state.

Add a transition from CHECK_FOR_RESUME to RCV_V_BETW_FRAGS with the condition of "V"

Add a transition from RCV_V_BETW_FRAGS to WAIT_FOR_RESUME with the condition of "mRxDv=FALSE"

Add a transition from RCV_V_BETW_FRAMS to V_MCRC_OK_BETW_FRAGS with the condition of "RX_MCRC_CK=TRUE"

Add a transition from V_MCRC_OK_BETW_FRAGS to WAIT_FOR_RESUME with the condition of "mRxDv=FALSE"

Proposed Response Response Status O

CI 99 SC 99.4.7.7 P 45 L 19 # 279

Regev, Alon

Ixia

Comment Type TR Comment Status X

now that SMD_DECODE can return R or V, the transition from CHECK_FOR_EXPRESS to NOT_EXPRESS needs to handle this case.

SuggestedRemedy

change the transition from CHECK_FOR_EXPRESS to NOT_EXPRESS from "S + C + ERR" to "S + C + R + V + ERR"

Proposed Response Response Status O

CI 79 SC 79.3 P 24 L 14 # 280

Slavick, Jeff

Avago Technologies

Comment Type TR Comment Status X

In Table 79-1 the IEEE 802.3 subtype is TBD

SuggestedRemedy

Change to TBD to a value that is currently Reserved and change the Reserved list to remove the chosen value from the list of Reserved settings.

Proposed Response Response Status O

CI 99 SC 99.4.7.7 P 43 L 13 # 281

Slavick, Jeff

Avago Technologies

Comment Type TR Comment Status X

Figure 99-4 ipg_timer_done is variable, so all instances of ipg_timer=done, ipg_timer=dne, ipg_imer=done should be change to just ipg_timer_done

SuggestedRemedy

See comment

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC 99.4.7.7 P 43 L # 282
 Slavick, Jeff Avago Technologies

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

Figure 99-4 : The IDLE_TX_PROC -> TX_VERIFY transition has an extra * after eTX=FALSE implying there might be more conditions on that transition that aren't visible. Same applies to the IDLE_TX_PROC -> TX_RESPOND transition.

SuggestedRemedy

Remove the * or enlarge the space to show all conditions necessary for those transition.

Proposed Response Response Status **O**

CI 99 SC 99.4.7.7 P 44 L 30 # 285
 Slavick, Jeff Avago Technologies

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

Figure 99-5: Exit from P_RECEIVE_DATA needs priority resolution when RX_MCRC_CK=TRUE and mRxDv=TRUE, do you go to WAIT_FOR_DV_FALSE or FRAME_COMPLETE?

SuggestedRemedy

Add appropriate priority resolution to state transitions

Proposed Response Response Status **O**

CI 99 SC 99.4.7.7 P 43 L 12 # 283
 Slavick, Jeff Avago Technologies

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

Figure 99-4: Many variables in the state transitions are defined as booleans. Remove the comparisons for these to TRUE/FLASE aren't necessary.

SuggestedRemedy

Remove the "=TRUE" and replace the "<variable>=FALSE" with "!<variable>" for all state transitions, provided the variable that has been defined as boolean, in Figures 99-4,5,6,7

Proposed Response Response Status **O**

CI 99 SC 99.4.7.7 P 44 L 42 # 286
 Slavick, Jeff Avago Technologies

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

Figure 99-5: Exit from CHECK_FOR_RESUME doesn't have conditions when a V or R are decoded.

SuggestedRemedy

Add appropriate path when a V or R is decoded from CHECK_FOR_RESUME state

Proposed Response Response Status **O**

CI 99 SC 99.4.7.7 P 43 L 35 # 284
 Slavick, Jeff Avago Technologies

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

Figure 99-4: On the exit of PREMPTABLE_TX what is the priority between the transition to TX_MCRC and P_TX_COMPLETE. When both preempt and pTxCplt are TRUE there is no resolution of which path to take.

SuggestedRemedy

Add the appropriate priority resolution.

Proposed Response Response Status **O**

CI 99 SC 99.4.7.7 P 45 L 19 # 287
 Slavick, Jeff Avago Technologies

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

Figure 99-6: There is no transition when SMD_DECODE provides a V on where to transition to from the CHECK_FOR_EXPRESS state.

SuggestedRemedy

Add a transition for when a SMD-V is received out of the CHECK_FOR_EXPRESS state

Proposed Response Response Status **O**

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC 99.4.7.7 P 46 L 5 # 288
 Slavick, Jeff Avago Technologies

Comment Type TR Comment Status X

Figure 99-7: Have 2 distinct machines here, but one machine sets variables that are also set/used by the other.

SuggestedRemedy

Remove the rcv_v and send_r assignments from the INIT_VERIFICATION
 In the RESPOND_IDLE state add rcv_v <= FALSE and send_r <= FALSE
 Change the exit condition from SEND_RESPOND to UCT
 Remove the rcv_v <= FALSE from SEND_RESPOND (will be done in RESPOND_IDLE now)

Proposed Response Response Status O

CI 99 SC Fig 99-4 P 43 L 48 # 289
 Thaler, Pat Broadcom

Comment Type TR Comment Status X

PREEMPT_WAIT should set preambleCnt <= 0 so that REUSME_PREMABLE produces the correct amount of preamble.

Note that once this is done, PREEMPT_WAIT and RESUME_WAIT have the same exit conditions and the same actions except that PREEMPT_WAIT sets resumeTx <= TRUE. Since resumeTx <= TRUE in order to enter RESUME_WAIT and it is only set FALSE in IDLE_TX, setting it again in RESUME_WAIT shouldn't hurt anything. Therefore, RESUME_WAIT and PREEMPT_WAIT could be combined.

SuggestedRemedy

Add preambleCnt <= 0 to the PREEMPT_WAIT actions.

Consider eliminating PREEMPT_WAIT moving the transition into it into RESUME_WAIT and adding resumeTx <= TRUE to RESUME_WAIT actions.

Proposed Response Response Status O

CI 30 SC 30.12.1.1.1 P 18 L 36 # 290
 Tretter, Albert Siemens

Comment Type E Comment Status X

The 6 bits in the sentence "read-write string of 6 bits indicating, for each.." match not with the 7 bits that are described in the list of the TLV bits.

SuggestedRemedy

Change to 7 bits

Proposed Response Response Status O

CI 30 SC 30.14.1.3 P 21 L 13 # 291
 Tretter, Albert Siemens

Comment Type E Comment Status X

The attribute aMACMergeStatusTx contains the direction "Tx". Should the attribute aMACMergeStatusEnable not also have the extension "Tx".

Because preemption is only enabled at Tx side and also in the description it is mentioned that it is only relevant for the transmit direction (...given device in the transmit direction)

SuggestedRemedy

Change the name of the attribute to aMACMergeStatusEnableTx

Proposed Response Response Status O

CI 00 SC P L # 292
 Tretter, Albert Siemens

Comment Type E Comment Status X

The attribute aMACMergeStatusTx contains the direction "Tx". Should the attribute aMACMergeVerifyDisable not also have the extension "Tx". Because preemption is only enabled at Tx side and also in the description it is mentioned that it is only relevant for the transmit direction (...given device in the transmit direction)

SuggestedRemedy

Change the name of the attribute to aMACMergeVerifyDisableTx

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 79 SC 79.5.3 P 26 L 12 # 293
 Tretter, Albert Siemens
 Comment Type E Comment Status X
 *AE => Additional Ethernet Capabilities TLV
 Meaning of "*" at "*AE" in column Item not clear.
 There is no explanation?
 SuggestedRemedy
 Specify the meaning or delete the "*"
 Proposed Response Response Status O

Cl 99 SC 99.1 P 29 L 19 # 294
 Tretter, Albert Siemens
 Comment Type E Comment Status X
transmission of preemptable frames can be held before express traffic is scheduled to be transmitted.
 We still have a mixture of the terms "hold" and "suspend" for the same meaning.
 We should use always the same term.
 In the actual draft the term "hold" (>5 times) is more often used than "suspend" (2 times)
 SuggestedRemedy
 Make the draft consistent
 Proposed Response Response Status O

Cl 99 SC 99.1 P 29 L 39 # 295
 Tretter, Albert Siemens
 Comment Type E Comment Status X
 "Preemption is only enabled after it has been determined that the link partner supports it."
 => As preemption at Rx side is always enabled we should add the info that preemption has to be enabled at Tx side
 SuggestedRemedy
 Add "at TX side"
 Proposal
 "Preemption at Tx side is only enabled after it has been determined that the link partner supports it."

Proposed Response Response Status O

Cl 99 SC 99.2.1 P 31 L 49 # 296
 Tretter, Albert Siemens
 Comment Type E Comment Status X
 "...to request to a hold or release on"
 => should be changed to
 "...to request a hold or release on"
 SuggestedRemedy
 please correct
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 99 SC 99.2.2 P 32 L 5 # 297
Tretter, Albert Siemens

Comment Type E Comment Status X

"...model used in this service specification is identical to that used in 1.2.2."

=> The references to "1.2.2" is not within the draft

=> As mentioned at page 13: Cross references that refer to clauses, tables, equations, or figures not covered by this amendment are highlighted in green.

=> But to which standard refers this reference?

SuggestedRemedy

Add the relevant standard

Proposed Response Response Status

Cl 99 SC 99.3.3 P 33 L 52 # 298
Tretter, Albert Siemens

Comment Type E Comment Status X

... frame also indicates the frame number.

There ist a mixture of the terms "frame number" and "frame count" for as I assume, the same meaning.

In Table 99-1—SMD values shows the relation between the SMD values and the frame count.

Maybe due to a search and replace action that the term "frame count" was unintentionally changed to "frame number"

SuggestedRemedy

Please check

Proposed Response Response Status

Cl 99 SC 99.3.6 P 35 L 23 # 299
Tretter, Albert Siemens

Comment Type E Comment Status X

"... performing steps a) through d) in 3.2.9."

=> The references to "3.2.9" is not within the draft

=> As mentioned at page 13: Cross references that refer to clauses, tables, equations, or figures not covered by this amendment are highlighted in green.

=> But to which standard refers this reference?

SuggestedRemedy

Add the relevant standard

Proposed Response Response Status

Cl 99 SC 99.4.2 P 36 L 1 # 300
Tretter, Albert Siemens

Comment Type E Comment Status X

The preemption capability shall be enabled only if the link partner announces its support for the preemption capability via an Additional Ethernet Capabilities TLV.

The new draft describes the verification process in front of enabling preemption. Should the sentence not also contain this mechanism?

SuggestedRemedy

Proposal:

The preemption capability shall be enabled only if the link partner announces its support for the preemption capability via an Additional Ethernet Capabilities TLV and if the verification was successful.

Proposed Response Response Status

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC 99.4.3 P 36 L 12 # 301
Tretter, Albert Siemens

Comment Type E Comment Status X

Verification checks that the the link can support preemption capability.

There is one "the" too much.

SuggestedRemedy

Please correct

Proposed Response Response Status O

CI 99 SC 99.4.3 P 36 L 21 # 302
Tretter, Albert Siemens

Comment Type E Comment Status X

Different notation MRCRC and mCRC.

Is there a special meening if the MCRC is in capital letters?

SuggestedRemedy

If no, please use always the same notation.

If yes, please describe the differences.

Proposed Response Response Status O

CI 99 SC 99.4.4 P 36 L 35 # 303
Tretter, Albert Siemens

Comment Type E Comment Status X

"A link partner can indicate in the Additional Capabilities TLV that the ..."

In clause 79 this TLV is called "Additional Ethernet Capabilities TLV"

SuggestedRemedy

Please correct

Proposed Response Response Status O

CI 99 SC 99.4.5 P 37 L 26 # 304
Tretter, Albert Siemens

Comment Type E Comment Status X

An SMD containing an SMD-C an mPacket that continues the data for a preempted frame.

=> Something is missing here: "... SMD-C indicates an mPacket ..."

SuggestedRemedy

An SMD containing an SMD-C indicates an mPacket that continues the data for a preempted frame.

Please correct

Proposed Response Response Status O

CI 99 SC 99.4.7.4 P 39 L 53 # 305
Tretter, Albert Siemens

Comment Type E Comment Status X

"Invokes an implementation dependent process to ensure that a pMAC detectsa CRC error in a preemptable"

=> "detectsa" should be changed to "detects a"

SuggestedRemedy

Please correct

Proposed Response Response Status O

CI 99 SC 99.4.7.4 P 40 L 50 # 306
Tretter, Albert Siemens

Comment Type E Comment Status X

"It is false otherwise."

The value of a boolean is normally written in capital letter "FALSE"?

SuggestedRemedy

Please check

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC 99.4.7.7 P 43 L 17 # 307
 Tretter, Albert Siemens
 Comment Type E Comment Status X
 Figure 99-4—Transmit Processing State Diagram
 "ipg_timer=dne"
 => change "dne" to "done"
 SuggestedRemedy
 please correct
 Proposed Response Response Status O

CI 99 SC 99.4.7.7 P 44 L 44 # 310
 Tretter, Albert Siemens
 Comment Type E Comment Status X
 Figure 99-5—Receive Processing State Diagram
 "cFameCnt" at condition "C * cFameCnt=rxFrameCnt" at the state change from
 CHECK_FOR_RESUME to state CHECK_FRAG_CNT should be correct to "cFrameCnt"
 SuggestedRemedy
 please correct
 Proposed Response Response Status O

CI 99 SC 99.4.7.7 P 43 L 41 # 308
 Tretter, Albert Siemens
 Comment Type E Comment Status X
 Figure 99-4—Transmit Processing State Diagram
 Variable "pTxCpt" in the state P_TX_COMPLETE should be "pTxCpt".
 SuggestedRemedy
 please correct
 Proposed Response Response Status O

CI 99 SC 99.4.7.7 P 46 L 46 # 311
 Tretter, Albert Siemens
 Comment Type E Comment Status X
 "... RS delay for an preemptable frames when preemptable traffic is released ..."
 I assume "an preemptable frames" should be "an preemptable frame"
 SuggestedRemedy
 please correct
 Proposed Response Response Status O

CI 99 SC 99.4.7.7 P 43 L 42 # 309
 Tretter, Albert Siemens
 Comment Type E Comment Status X
 Figure 99-4—Transmit Processing State Diagram
 Variable "txFrameCnt" in the state P_TX_COMPLETE should be "txFrame".
 SuggestedRemedy
 please correct
 Proposed Response Response Status O

CI 99 SC 99.5.1 P 47 L 6 # 312
 Tretter, Albert Siemens
 Comment Type E Comment Status X
 The supplier of a protocol implementation that is claimed to conform to Clause 99, clause
 title, shall complete the following protocol implementation conformance statement (PICS)
 proforma.
 What is meant with "clause title"??
 Is this a reference or a copy paste problem?
 SuggestedRemedy
 please correct
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 99 SC 99.5.3.2 P 47 L 50 # 313
Tretter, Albert Siemens

Comment Type E Comment Status X

Head line "99.5.3.2 Delay constraints"

Should this head line not be shifted between the two tables at page 48?

SuggestedRemedy

please check

Proposed Response Response Status O

Cl 99 SC 99.5.3 P 48 L 40 # 314
Tretter, Albert Siemens

Comment Type E Comment Status X

PICS proforma: DC3

Delay to transmit express fram when preemptable traffic is not held by MM_CTL.request

=> "fame" should be changed to "frame"

SuggestedRemedy

please correct

Proposed Response Response Status O

Cl 30 SC 30.14.1.13 P 23 L 20 # 315
Tretter, Albert Siemens

Comment Type T Comment Status X

A count of times MM_CTL.request(HOLD) primitive assertion caused preemption of a preemptable MAC frame.

=> Is it really the intention that this counter is only incremented in cases if the MM_CTL.req primitive causes a preemption. If the primitive is activated and no preemption occurs than the counter shall not count??

Do we need an additional counter if an implementation uses the MACMerge Layer but not using the MM_CTL.request?

SuggestedRemedy

Clarification needed

Proposed Response Response Status O

Cl 79 SC 79.3.6 P 24 L 27 # 316
Tretter, Albert Siemens

Comment Type T Comment Status X

802.3 subtype = TBD

=> "TBD" should be resolved

SuggestedRemedy

=> "TBD" should be resolved

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 99 SC 99.1.1 P 30 L 8 # 317

Tretter, Albert Siemens

Comment Type T Comment Status X

Figure 99–1: MMSI Interface (optional)

In clause 9.2.2 this interface is defined as mandatory => "MACMerge shall support the MM_CTL.request primitive described in this subclause."

Here the MMSI is defined as optional

SuggestedRemedy

Specification should be consistent.

Therefore the MMSI Interface in this figure should also be mandatory.

Proposed Response Response Status O

Cl 99 SC 99.2.2 P 32 L 11 # 318

Tretter, Albert Siemens

Comment Type T Comment Status X

MACMerge shall support the MM_CTL.request primitive described in this subclause.

In contrast to figure 99–1 here the "MM_CTL.request primitive" is mandatory

SuggestedRemedy

Specification should be consistent.

Proposed Response Response Status O

Cl 99 SC 99.3.5 P 35 L 11 # 319

Tretter, Albert Siemens

Comment Type T Comment Status X

Table 99–2—Frag_count values

I think that the Encoding (0x83) for the Frag_count "3" should be 0xB3

SuggestedRemedy

Please double-check

Proposed Response Response Status O

Cl 99 SC 99.4.2 P 36 L 2 # 320

Tretter, Albert Siemens

Comment Type T Comment Status X

The preemption capability should be disabled on link failure.

Should the preemption capability not also be disabled in case if verification fails?

SuggestedRemedy

Has to be discussed

Proposed Response Response Status O

Cl 99 SC 99.4.4 P 36 L 31 # 321

Tretter, Albert Siemens

Comment Type T Comment Status X

"... mPacket data field size and a multiple of eight octets of the frame has been sent."

=> I'm not sure but did we not decide to skip the definition of "a multiple of eight octets"?

SuggestedRemedy

Please check

Proposed Response Response Status O

Cl 99 SC 99.4.4 P 36 L 45 # 322

Tretter, Albert Siemens

Comment Type T Comment Status X

If a frame is preempted, transmit processing appends the mCRC to the mPacket.

This statement 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).

SuggestedRemedy

Please correct

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC 99.4.7.3 P 39 L 45 # 323
Tretter, Albert Siemens

Comment Type T Comment Status X

If the variable "verify_fail" is set I assume that the MAC Client has to know this in order to send all frame via the eMAC.

In the other case if the variable "verified" is set the MAC Client shall send the preemptable frames via the pMAC.

Is my interpretation correct?

If yes is this information already incorporated in 802.1 specifications?

SuggestedRemedy

Should be discussed with 802.1

Proposed Response Response Status O

CI 99 SC 99.4.7.7 P 43 L 35 # 324
Tretter, Albert Siemens

Comment Type T Comment Status X

Figure 99-4—Transmit Processing State Diagram

Check "pTxCplt=FALSE * preempt=FALSE" at state change from PREEMPTABLE_TX to PREEMPTABLE_TX.

The variable "preempt" contains the information of the variable "pActive". In case of pActive = FALSE (due to verify_failed) the Tx state machine sends a preemptable frame with a SMD-S even the link doesn't support this.

This is happen only if the upper layer doesn't take into account the failed verification process.

Is my interpretation correct?

SuggestedRemedy

Has to be discussed

Proposed Response Response Status O

CI 99 SC 99.4.7.7 P 44 L 42 # 325
Tretter, Albert Siemens

Comment Type T Comment Status X

Figure 99-5—Receive Processing State Diagram

Condition "E + ERR" at the state change from state CHECK_FOR_RESUME to WAIT_FOR_DV_FALSE.

Should the condition "E + ERR" not also contain the values "R" and "V". It could be happen that in error cases the receive statemachine should cope with the reception of verification frames

SuggestedRemedy

Should be discussed

Proposed Response Response Status O

CI 99 SC 99.4.7.7 P 45 L 19 # 326
Tretter, Albert Siemens

Comment Type T Comment Status X

Figure 99-6—Express Filter State Diagram

Condition "S + C + ERR" at the state change from state CHECK_FOR_EXPRESS to NOT_EXPRESS.

Should the condition "S + C + ERR" not also contain the values "R" and "V". It could be happen that in error cases the receive statemachine should cope with the reception of verification frames.

SuggestedRemedy

Should be discussed

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 00 SC 0 P L # 331
Trowbridge, Steve Alcatel-Lucent

Comment Type TR Comment Status X

The terminology in the amendment does not match the agreed objectives for the project. The Call for Interest held in the March 2012 plenary for Frame Preemption was withdrawn after too much controversy over the characterization of the problem and solution. After a subsequent CFI, the first attempt to approve a PAR and objectives at the July 2013 plenary in Geneva failed due to inconsistency of the terminology with 802.3 (distinguished minimum latency traffic and "M-frames", "M-frames in the wild" were rejected. After rework in the York interim, a characterization as "interspersing express traffic" was developed, leading to the currently accepted objectives accepted in November 2013. The only place the accepted terminology appears in the draft is in the title and the name of the task force. The entire draft uses the terminology of the withdrawn CFI from March 2012.

SuggestedRemedy

Update the terminology globally in the draft per the agreed objectives. In particular:
1.4.3 - change "preemptable Media Access Control" to "non-express Media Access Control" with an appropriate acronym
1.4.4 - change "preemptable traffic" to "non-express traffic"
Add IET to the acronyms defined in clause 1.
Occurrences of "preemptable" in clause 30 change to "non-express", objects such as "PreemptSupported", "PreemptEnabled", "PreemptActive" change to "IETSupported", "IETEnabled", "IETActive", etc.
Change "preemption capability" to "IET capability" globally in clause 79.
pMAC and PMAC not consistent in clause 79, but should change globally to neMAC (or whatever acronym is chosen for the non-express MAC).
Clause 99: preemptable MAC should be non-express MAC globally.
"MAC client supporting preemption" becomes "MAC client supporting IET" globally.
pMAC becomes neMAC (or chosen acronym) globally
"preemption is active" becomes "IET is active" globally
"enable preemption" becomes "enable IET" globally
"link partner supports preemption" becomes "link partner supports IET"

Proposed Response Response Status O

Cl 99 SC 99.5.3 P 33 L 41 # 332
Trowbridge, Steve Alcatel-Lucent

Comment Type TR Comment Status X

Clarify reason for differing preamble lengths, and do not rely on this in receive. In CSMA-CD implementations, the preamble is a "wiggle" to wake up the link, without reliance on being able to receive the whole sequence of alternating 1s and 0s prior to the SFD.

SuggestedRemedy

If the reason for shortening the preamble for a non-initial fragment is space available, say so. On receive, clarify that the SMD or SFD received and not the length of the preamble determines the type of packet or mPacket received

Proposed Response Response Status O

Cl 99 SC 99.4.3 P 36 L 7 # 333
Trowbridge, Steve Alcatel-Lucent

Comment Type TR Comment Status X

There are many instances of proprietary implementations of Ethernet-like things which may not work properly when interconnected with IEEE 802.3 standard compliant implementations. It is not necessary or desirable to describe them in the standard

SuggestedRemedy

Delete the first paragraph of clause 99.4.3

Proposed Response Response Status O

Cl 00 SC 0 P 1 L 2 # 334
Zimmerman, George CME Consulting, Inc.

Comment Type E Comment Status X

Given the date of this amendment being only on its first working group ballot and the 802.3bx revision which is to be 802.3-2015 being already in sponsor ballot, it seems that this should be an amendment to 802.3-2015, not 802.3-2012.

SuggestedRemedy

Change header and front matter to reflect that this is an amendment to 802.3-2015. Editor to review draft for consistency with changes made in the 802.3bx revision project and to maintain consistency through sponsor ballot.

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC P 10 L 15 # 335
 Zimmerman, George CME Consulting, Inc.

Comment Type E Comment Status X

Table of contents:
 page 10, line 15: extraneous "]" on 30.2.5
 page 11, line 42: extraneous "[" on 90.4.4

SuggestedRemedy

Remove "]" and "[" - (looks like they're actually in the headers of 30.2.5 and 90.4.4)

Proposed Response Response Status O

CI 99 SC P L # 336
 Zimmerman, George CME Consulting, Inc.

Comment Type E Comment Status X

page header messed up starting with table of contents: "IEEE P802.3xx Task Force name Task Force" (it started out correct in the front matter, and returns to correct following the TOC)

SuggestedRemedy

Change header to read "IEEE 802.3br Interspersing Express Traffic Task Force"

Proposed Response Response Status O

CI 01 SC 1.4.5 P 14 L 27 # 337
 Zimmerman, George CME Consulting, Inc.

Comment Type E Comment Status X

hanging close paren without an open paren " See IEEE Std 802.3br, Clause 99.)"

SuggestedRemedy

insert "(" to read "(See IEEE Std 802.3br, Clause 99.)"

Proposed Response Response Status O

CI 30 SC 30.2.3 P 15 L 33 # 338
 Zimmerman, George CME Consulting, Inc.

Comment Type E Comment Status X

Editor's note has hanging "[", and close "]" ended up in title of 30.2.5

SuggestedRemedy

Delete "[" from editor's note and "]" from title of 30.2.5

Additionally, if possible, avoid dark (forest) green lines in figures to distinguish. 1 in 15 males are red-green colorblind. Blue or yellow are better choices.

Proposed Response Response Status O

CI 30 SC 30.2.3 P 16 L 23 # 339
 Zimmerman, George CME Consulting, Inc.

Comment Type E Comment Status X

Figure 30-3:
 Mixture of fonts in figure (most boxes are sans-serif, oEXTENSION, oPD, and oTimesync are in a Times font)
 Although highlighting the change is laudable, green insert line is difficult to distinguish from black for some (1 in 15 males are red-green colorblind to some degree, and I'm one).

SuggestedRemedy

Redraw figure with so boxes have same font in 802.3 style.
 Avoid green lines in figures to highlight - blue or yellow are a better choice.

Proposed Response Response Status O

CI 30 SC 30.2.5 P 17 L 1 # 340
 Zimmerman, George CME Consulting, Inc.

Comment Type E Comment Status X

New tables 30-8 and 30-9 have blank column at right edge

SuggestedRemedy

Remove blank column from tables 30-8 and 30-9

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 30 SC 30.14.1.2 P 21 L 10 # 341
 Zimmerman, George CME Consulting, Inc.

Comment Type E Comment Status X

Editor's note seems superfluous. there is an attribute indicating verify disabled, and status already indicates as "unknown" only as prior to verifying.

SuggestedRemedy
 Delete editor's note

Proposed Response Response Status O

Cl 30 SC 30.2.5 P 15 L 54 # 342
 Zimmerman, George CME Consulting, Inc.

Comment Type E Comment Status X

Copyright jumped back to 2014. Copyright jumps around in the draft between 201x, 2015 and 2014

SuggestedRemedy
 Make all copyright 2015.

Proposed Response Response Status O

Cl 99 SC 99.3.3 P 33 L 49 # 343
 Zimmerman, George CME Consulting, Inc.

Comment Type E Comment Status X

Missing space "inTable 99-1"

SuggestedRemedy
 insert space between "in" and "Table 99-1"

Proposed Response Response Status O

Cl 99 SC 99.4.5 P 37 L 45 # 344
 Zimmerman, George CME Consulting, Inc.

Comment Type E Comment Status X

Is "Receive processing" a proper noun? inconsistent capitalization (see line 8 vs. line 45 - many other instances of "receive processing" appear in other sections, but those in this subclause are mostly at the start of sentences)
 See also pg 39 line 54 for "Receive processing".

SuggestedRemedy
 Editor to check and correct either line 8 or line 45 capitalization, and check & correct throughout the draft.

Proposed Response Response Status O

Cl 99 SC 99.4.8 P 46 L 22 # 345
 Zimmerman, George CME Consulting, Inc.

Comment Type E Comment Status X

Figure 99-7, state WAIT_FOR_RESPONSE has incorrect name of counter.
 appears to be typo in name of verifyCnt (see 99.4.7.5, page 41 and also below in Figure 99-7)

SuggestedRemedy
 Replace verifyCnt with verifyCnt

Proposed Response Response Status O

Cl 99 SC P 8 L 3 # 346
 Zimmerman, George CME Consulting, Inc.

Comment Type ER Comment Status X

"[to be provided]" is not a list of balloters, nor is it marked as an editor's note or something to be removed.
 Similarly for the IEEE-SA board on page 9.

SuggestedRemedy
 Provide list of balloting committee members, or mark "[to be provided]" as an editor's note to be removed prior to publication.
 Similarly for IEEE-SA board on page 9.

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 30 SC 30.2.3 P 15 L 30 # 347
 Zimmerman, George CME Consulting, Inc.

Comment Type ER Comment Status X

looks like replacement for 30-3 is missing, following editing instruction, "Replace Figure 30-3 with the following" - surely it wasn't meant to replace the figure with an editor's note. Figure appears to be on following page

SuggestedRemedy

Put replacement for Figure 30-3 immediately after editing instruction.

Proposed Response Response Status O

CI 30 SC 30.2.5 P 18 L 17 # 348
 Zimmerman, George CME Consulting, Inc.

Comment Type TR Comment Status X

Parameters with no packages selected in table 30-9 make no sense - what packages include these? why are they here? is this technically complete?
 aMACMergeVerifyTime
 aMACMergeAddFragSize
 aMACMergeHoldCount

SuggestedRemedy

Add a note explaining how these are offered, what is meant by blank rows or delete rows from table, and capabilities from draft.

Proposed Response Response Status O

CI 30 SC 30.12.1.1.1 P 18 L 36 # 349
 Zimmerman, George CME Consulting, Inc.

Comment Type TR Comment Status X

Unclear how many bits are in the string - text as written says 46. 802.3br D3.0 says 6, descriptive text below assigning bits shows 7.

SuggestedRemedy

Align text with revision draft 802.3br, and clarify how many bits.

Proposed Response Response Status O

CI 79 SC 79.3 P 24 L 14 # 350
 Zimmerman, George CME Consulting, Inc.

Comment Type TR Comment Status X

Table 79-1
 Subtype is missing.
 Improper editing instruction - specify where to insert the row.
 Subtype TBD? Subtype should be numeric
 Doesn't the Reserved row need to be modified as well

SuggestedRemedy

Change editing instruction to be consistent with 802.3br D3.0:
 "Insert row shown below Subtype 6, and change last row in table as shown"
 replace Subtype TBD with Subtype 7
 Show row for Reserved, with strikeout of 7, replaced by 8.

Proposed Response Response Status O

CI 79 SC 79.3.6 P 24 L 27 # 351
 Zimmerman, George CME Consulting, Inc.

Comment Type TR Comment Status X

Specify subtype

SuggestedRemedy

Replace Subtype = TBD with appropriate subtype consistent with 802.3br D3.0 (suggest Subtype 7).

Proposed Response Response Status O

CI 99 SC 99.4.7.7 P 43 L # 352
 Brandt, David Rockwell Automation

Comment Type E Comment Status X

Figure 99-4-Transmit Processing State Diagram

The variable 'ipg_timer_done' is defined and not used. Instead 'ipg_timer=done' is used. In a similar way, 'verify_timer_done' is used correctly in Fig. 99-7.

SuggestedRemedy

Substitute "ipg_timer_done" for "ipg_timer=done". There are 8 instances on transitions (2 are spelled wrong).

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 99 SC 99.4.7.7 P 43 L 14 # 353
 Brandt, David Rockwell Automation
 Comment Type E Comment Status X
 Figure 99-4-Transmit Processing State Diagram
 The logical AND symbol '*' trails a 2 transition equations from state "IDLE_TX_PROC".
 SuggestedRemedy
 Remove 2 trailing '*' symbols.
 Proposed Response Response Status O

Cl 99 SC 99.4.7.7 P 43 L 46 # 356
 Brandt, David Rockwell Automation
 Comment Type E Comment Status X
 Figure 99-4-Transmit Processing State Diagram
 'PREMPT_WAIT' should be 'PREEMPT_WAIT'.
 SuggestedRemedy
 Add the 'E'.
 Proposed Response Response Status O

Cl 99 SC 99.4.7.7 P 43 L 17 # 354
 Brandt, David Rockwell Automation
 Comment Type E Comment Status X
 Figure 99-4-Transmit Processing State Diagram
 FALSE is spelled FALE in rightmost transition equation from state 'IDLE_TX_PROC'.
 SuggestedRemedy
 Change 'send_v=FASE' to 'send_v=FALSE'.
 Proposed Response Response Status O

Cl 99 SC 99.4.7.7 P 43 L 41 # 357
 Brandt, David Rockwell Automation
 Comment Type E Comment Status X
 Figure 99-4-Transmit Processing State Diagram
 Variable 'pTxCpt' should be 'pTxCpl' in state 'P_TX_COMPLETE'.
 SuggestedRemedy
 Add the 'l'.
 Proposed Response Response Status O

Cl 99 SC 99.4.7.7 P 43 L 31 # 355
 Brandt, David Rockwell Automation
 Comment Type E Comment Status X
 Figure 99-4-Transmit Processing State Diagram
 'PREMABLE_TX' should be 'PREEMPTABLE_TX'.
 SuggestedRemedy
 Add the 'E'.
 Proposed Response Response Status O

Cl 99 SC 99.4.7.7 P 43 L 42 # 358
 Brandt, David Rockwell Automation
 Comment Type E Comment Status X
 Figure 99-4-Transmit Processing State Diagram
 Variable 'txFrameCnt' should be 'txFrame' in state 'P_TX_COMPLETE'.
 SuggestedRemedy
 Remove the 'Cnt'.
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

CI 99 SC 99.4.7.7 P 43 L 39 # 359
 Brandt, David Rockwell Automation

Comment Type E Comment Status X
 Figure 99-4-Transmit Processing State Diagram

State 'P_TX_COMPLETE' is more complex to understand than necessary and forced to include an IF statement.

SuggestedRemedy

Separate into 2 states: 'P_TX_COMPLETE' and 'P_TX_FRAG_COMPLETE'.

Proposed Response Response Status O

CI 99 SC 99.4.7.7 P 43 L 48 # 360
 Brandt, David Rockwell Automation

Comment Type TR Comment Status X
 Figure 99-4-Transmit Processing State Diagram

State 'PREEMPT_WAIT' should have assignment 'preambleCnt <= 0' so that the preamble is processed correctly in state 'RESUME_PREAMBLE', where an express packet has not been previously received.

SuggestedRemedy

Add to state 'PREEMPT_WAIT' the assignment 'preambleCnt <= 0'.

Proposed Response Response Status O

CI 99 SC 99.4.7.7 P 43 L # 361
 Brandt, David Rockwell Automation

Comment Type TR Comment Status X
 Figure 99-4-Transmit Processing State Diagram

Only part of the transmit logic produces 'mPLS_DATA.request'. Portions of the logic use 'mTX_DATA()' for this purpose, but not: 'SEND_SMD-C' and 'SEND_FRAG_COUNT' and 'SEND_SMC-S'.

SuggestedRemedy

Change from 'SMDC_ENCODE(txFrame)' to 'mTX_DATA(SMDC_ENCODE(txFrame))' in 'SEND_SMD-C'
 Change from 'FRAG_ENCODE(txFrame)' to 'mTX_DATA(FRAG_ENCODE(txFrame))' in 'SEND_FRAG_COUNT'
 Change from 'SMDS_ENCODE(txFrame)' to 'mTX_DATA(SMDS_ENCODE(txFrame))' in 'SEND_SMC-S'

Proposed Response Response Status O

CI 99 SC 99.4.7.7 P 44 L 8 # 362
 Brandt, David Rockwell Automation

Comment Type E Comment Status X
 99-5-Receive Processing State Diagram

In 'IDLE_RX_PROC', 'ResumeRx' case is wrong.

SuggestedRemedy

Use 'resumeRx'.

Proposed Response Response Status O

CI 99 SC 99.4.7.7 P 44 L 19 # 363
 Brandt, David Rockwell Automation

Comment Type E Comment Status X
 Figure 99-5-Receive Processing State Diagram

In 'RX_PREAMBLE', 'PREMBLE' is spelled wrong.

SuggestedRemedy

Use 'PREAMBLE'.

Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 99 **SC 99.4.7.4** **P 39** **L 53** # **364**
 Brandt, David Rockwell Automation
Comment Type **E** *Comment Status* **X**
 Typo: 'detectsa'
SuggestedRemedy
 Substitute 'detects a'.
Proposed Response *Response Status* **O**

Cl 99 **SC 99.4.4** **P 36** **L 26** # **366**
 Remein, Duane FutureWei Technologi
Comment Type **E** *Comment Status* **X**
 Stray character in section title "[Transmit processing]"
SuggestedRemedy
 Strike
Proposed Response *Response Status* **O**

Cl 99 **SC** **P** **L** # **365**
 Dove, Dan Dove Networking Solut
Comment Type **T** *Comment Status* **X**
 The use of Start_of_Frame_Delimiter (SFD) to articulate state of a packet is a questionable practice as it exposes packets to a potential Hamming Distance failure. I don't have the time or specific expertise to analyze the approach being used, but want to express my concern about this approach with the hope that others within this project will carefully consider that concern.

 In addition, the approach appears to rely upon the byte-orientation of the receiver to clearly identify the state of the packet being received. Many PHYs in the industry use nibble-based alignment due to implementations like RGMII, etc. While one can rely upon Auto-Negotiation to ensure that an older PHY architected with RGMII does not go into IET mode of operation, the specification may not have considered the implications upon those who wish to retain RGMII implementation while incorporating IET into their designs. I don't have the detailed implementation knowledge required to address this, but suggest that PHY implementers who are involved in such designs carefully consider the impact to their designs.
SuggestedRemedy

Proposed Response *Response Status* **O**

Cl 99 **SC 99.4.5** **P 37** **L 26** # **367**
 Remein, Duane FutureWei Technologi
Comment Type **E** *Comment Status* **X**
 This sentence does not make sense: "An SMD containing an SMD-C an mPacket that continues the data for a preempted frame"
SuggestedRemedy
 Change to: "An SMD containing an SMD-C indicates the continuation of an mPacket that has been preempted."
Proposed Response *Response Status* **O**

Cl 79 **SC 79.3.6** **P 24** **L 18** # **368**
 Remein, Duane FutureWei Technologi
Comment Type **E** *Comment Status* **X**
 Per current 802.3 templace this shold be 79.3.5a not 79.3.6 (which exists in the standard already).
SuggestedRemedy
 Renumber 79.3.6 and all it's subclauses to 79.3.5a per template.
Proposed Response *Response Status* **O**

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 30 SC 30.12.3.1.24 P 19 L 53 # 375
 Scruton, Peter University of New Ham
 Comment Type E Comment Status X
 In Subclause 30.12.3.1.24 consider changing "preemption.capability;" to "preemption capability;"
 SuggestedRemedy
 Proposed Response Response Status O

Cl 99 SC 99.4.4 P 36 L 27 # 379
 Scruton, Peter University of New Ham
 Comment Type E Comment Status X
 Subclause 99.4.4 title has '[' in it.
 SuggestedRemedy
 Proposed Response Response Status O

Cl 30 SC 30.12.3.1.27 P 20 L 27 # 376
 Scruton, Peter University of New Ham
 Comment Type E Comment Status X
 consider adding a period before the '
 SuggestedRemedy
 Proposed Response Response Status O

Cl 00 SC P L # 380
 Peter Stassar Huawei Technologies
 Comment Type ER Comment Status X
 The draft is totally inconsistent between its title, referring to Interspersing Traffic and the actual text, where only 'Preempt ...' is being used.
 SuggestedRemedy
 Fix inconsistency.
 Proposed Response Response Status O

Cl 30 SC 30.14.1.6 P 22 L 8 # 377
 Scruton, Peter University of New Ham
 Comment Type E Comment Status X
 consider adding ';' to end of line.
 SuggestedRemedy
 Proposed Response Response Status O

Cl 01 SC 1.4.1 P 16 L 17 # 381
 Thompson, Geoff GraCaSI S.A.
 Comment Type TR Comment Status X
 The current text of the definition appears to require the definition of a "new MAC". My impression of this project was that it was supposed to accomplish its goals within the reconciliation sub-layer and use two instances of a normal full-duplex MAC.
 SuggestedRemedy
 Change text to read: "1.4.1 express Media Access Control (eMAC): The instance of the Media Access Control sublayer associated with an Interspersing Express Traffic port which is the client of a MAC Merge sublayer service interface that handles express frames."
 Proposed Response Response Status O

Cl 30 SC 30.14.1.7 P 22 L 17 # 378
 Scruton, Peter University of New Ham
 Comment Type E Comment Status X
 consider adding ';' to end of line.
 SuggestedRemedy
 Proposed Response Response Status O

IEEE P802.3br (D2.0) Interspersing Express Traffic Initial Working Group ballot comments

Cl 1 SC 1.4.3 P 16 L 22 # 382
Thompson, Geoff GraCaSI S.A.

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

The current text of the definition appears to require the definition of a "new MAC". My impression of this project was that it was supposed to accomplish its goals within the reconciliation sub-layer and use two instances of a normal full-duplex MAC.

SuggestedRemedy

Change text to read: "1.4.3 express Media Access Control (eMAC): The instance of the Media Access Control sublayer associated with an Interspersing Express Traffic port which is the client of a MAC Merge sublayer service interface that handles preemptable frames."

Proposed Response Response Status

Cl 99 SC 99.3.3 P 36 L 49 # 385
Thompson, Geoff GraCaSI S.A.

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

I am opposed to the extent to which the SMD breaks the architecture of the long-standing Ethernet frame format and architecture by loading data content into the start frame delimiter.

SuggestedRemedy

Have only one new value of start frame delimiter whose job is to signal that the frame is a pre-emptable frame and handle all of the data for managing broken frames within the data field. I would strongly prefer that all such management data appear behind an EtherType field so things are consistent with other varieties of VLAN frames.

Proposed Response Response Status

Cl 1 SC 1.4.5 P 16 L 28 # 383
Thompson, Geoff GraCaSI S.A.

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

The current text seems imprecise. I suggest a little tweaking.

SuggestedRemedy

Change text to read: "1.4.5 MAC Merge sublayer: An optional sublayer that supports interspersing express traffic with preemptable traffic by attaching an eMAC and a pMAC to a single Physical Signaling Sublayer (PLS) service. See IEEE Std 802.3br, Clause 99.)"

Proposed Response Response Status

Cl 99 SC 99.4.7.4 P 41 L 14 # 386
Tabatabaee, Vahid Broadcom

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

SMDS_ENCODE must check if preemption status is active. If preemption is not active the return value should be SFD.

SuggestedRemedy

Add condition for checking preemption status in SMDS_ENCODE.

Proposed Response Response Status

Cl 99 SC P 32 L # 384
Thompson, Geoff GraCaSI S.A.

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

This clause seems to (a) not precisely specify which configuration of the existing MAC is used for the eMAC and the pMAC and also seems to be respecifying the upper MAC service interface.

SuggestedRemedy

Respecify things so that the accommodation (and the accompanying implied buffering) take place in the MAC MERGE and RECONCILIATION sub-layers.

Proposed Response Response Status

Cl 99 SC 99.4.7.7 P 46 L 29 # 387
Tabatabaee, Vahid Broadcom

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

In Figure 99-7, if verification fails, then there is no way for SW to reinitiate the verify operation. Need a path back to INIT_VERIFICATION.

SuggestedRemedy

Add a condition that if preemption is disabled (pEnable = FALSE) return to INIT_VERIFICATION. In this way SW can deassert and re-assert preemption_enable to restart verification process.

Proposed Response Response Status