

IEEE P802.3df D2.1 1st Working Group recirculation ballot comments

Cl FM SC FM P5 L21 # 4

Dawe, Piers Nvidia
 Comment Type E Comment Status X

Bad use of "may not", and contradictory to the meaning two paragraphs later. "The word may is used to indicate a course of action permissible within the limits of the standard (may equals is permitted to)."

SuggestedRemedy

Encourage IEEE staff to follow their own rules. "Statements made by volunteers may not represent..." should be changed to "Statements made by volunteers do not necessarily represent...". See another comment for another instance.

Proposed Response Response Status

PROPOSED REJECT.

The draft is consistent with the front matter in the latest 802.3 draft template, therefore no changes are required to the draft at this time. This comment will be forwarded to IEEE editorial staff for consideration.

Cl FM SC FM P6 L39 # 5

Dawe, Piers Nvidia
 Comment Type E Comment Status X

Superscript 3 for footnote with URL for IEEE Xplore is in the wrong place

SuggestedRemedy

Have the staff move it from "contact IEEE." to "IEEE Xplore".

Proposed Response Response Status

PROPOSED REJECT.

This comment does not apply to the substantive changes between IEEE P802.3df D2.0 and D2.1 or the unsatisfied negative comments from previous drafts. Hence it is not within the scope of the recirculation ballot. The draft is consistent with the front matter in the latest 802.3 draft template, therefore no changes are required. This comment will be forwarded to IEEE editorial staff for consideration.

Cl 1 SC 1.1.3.2 P31 L13 # 7

Dawe, Piers Nvidia
 Comment Type T Comment Status X

This says about the 800GMII: "While conformance with implementation of this interface is not necessary to ensure communication, it allows flexibility in intermixing PHYs and DTEs at 800 Gb/s speeds. The 800GMII is a logical interconnection intended for use as an intra-chip interface. No mechanical connector is specified for use with the 800GMII. The 800GMII is optional." which is much the same as item d, GMII. As the current interfaces of choice for "allowing flexibility in intermixing PHYs and DTEs at 800 Gb/s speeds" are AUIs not MIIs, the first sentence quoted is misleading old cruft.

SuggestedRemedy

Delete the sentence "While conformance with implementation of this interface is not necessary to ensure communication, it allows flexibility in intermixing PHYs and DTEs at 800 Gb/s speeds."

Proposed Response Response Status

PROPOSED REJECT.

This comment does not apply to the substantive changes between IEEE P802.3df D2.0 and D2.1 or the unsatisfied negative comments from previous drafts. Hence it is not within the scope of the recirculation ballot.

Cl 1 SC 1.1.3.2 P31 L17 # 27

Dawe, Piers Nvidia
 Comment Type E Comment Status X

This says "only an 8-lane version of 800GAUI-n (800GAUI-8) is defined" while actually, two versions of 800GAUI-8 are defined.

SuggestedRemedy

Change "For the P802.3df project only an 8-lane version of 800GAUI-n (800GAUI-8) is defined. However, it is anticipated that in subsequent 800GbE projects other widths, e.g., a four-lane version (800GAUI-4), will be defined." to "For the P802.3df project only 8-lane versions of 800GAUI-n (800GAUI-8) are defined. However, it is anticipated that in subsequent 800GbE projects other widths, e.g., four-lane versions (800GAUI-4), will be defined."

Proposed Response Response Status

PROPOSED REJECT.

This comment does not apply to the substantive changes between IEEE P802.3df D2.0 and D2.1 or the unsatisfied negative comments from previous drafts. Hence it is not within the scope of the recirculation ballot.

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Cl 1 SC 1.1.3.2 P31 L17 # 8

Dawe, Piers Nvidia
 Comment Type T Comment Status X

This text "The 800GAUI-n is a physical instantiation of the PMA service interface... While conformance with implementation of this interface... The 800GAUI-n is intended... For chip-to-chip interfaces and for chip-to-module interfaces, one width of 800GAUI-n is defined: an eight-lane version (800GAUI-8) in Annex 120F and Annex 120G. No mechanical connector is specified for use with the 800GAUI-n. The 800GAUI-n is optional." reads as if there is only one kind of 800GAUI-n, and its specification is spread over two annexes. This is wrong; 800GAUI-n C2M and 800GAUI-n C2C are distinct, not interchangeable, and not intended to interoperate with each other. There is not "a version". Also, "the PMA service interface" is inaccurate; there can be more than one PMA service interface per MAC. Note the definition 1.4.184h uses "A" not "The".

SuggestedRemedy

Change the paragraph to: x) 800 Gb/s Attachment Unit Interface (800GAUI-n). An 800GAUI-n is a physical instantiation of a PMA service interface to extend the connection between 800 Gb/s capable PMAs. While conformance with implementation of 800GAUI-n is not necessary to ensure communication, it is recommended, since it allows maximum flexibility in intermixing PHYs and DTEs at 800 Gb/s speeds. 800GAUI-n C2C is intended for use as a chip-to-chip and 800GAUI-n C2M is intended as a chip-to-module interface. One width of 800GAUI-n is defined for chip-to-chip interfaces and one for chip-to-module interfaces: eight-lane 800GAUI-8 C2C in Annex 120F and eight-lane 800GAUI-8 C2M in Annex 120G. No mechanical connector is specified for use with a 800GAUI-n. A 800GAUI-n is optional.

Proposed Response Response Status O

PROPOSED REJECT.
 This comment does not apply to the substantive changes between IEEE P802.3df D2.0 and D2.1 or the unsatisfied negative comments from previous drafts. Hence it is not within the scope of the recirculation ballot.

Cl 1 SC 1.4.184h P33 L37 # 10

Dawe, Piers Nvidia
 Comment Type T Comment Status X

This says that 800GAUI-n is used for chip-to-chip or chip-to-module electrical interfaces. It says that an eight-lane version when in fact, two versions are defined.

SuggestedRemedy

Change: 800 Gb/s Attachment Unit Interface (800GAUI-n): A physical instantiation of the PMA service interface to extend the connection between 800 Gb/s capable PMAs over n lanes, used for chip-to-chip or chip-to-module electrical interfaces. For chip-to-module interfaces and for chip-to-chip interfaces, one width of 800GAUI-n is defined: an eight-lane version (800GAUI-8). (See IEEE Std 802.3, Annex 120F and Annex 120G.)
 to: 800 Gb/s Attachment Unit Interface (800GAUI-n): A physical instantiation of the PMA service interface to extend the connection between 800 Gb/s capable PMAs over n lanes, used for chip-to-chip or chip-to-module electrical interfaces. One width of 800GAUI-n is defined for chip-to-chip interfaces and one for chip-to-module interfaces: eight-lane 800GAUI-8 C2C and eight-lane 800GAUI-8 C2M. (See IEEE Std 802.3, Annex 120F and Annex 120G.)

Proposed Response Response Status O

PROPOSED REJECT.
 This comment does not apply to the substantive changes between IEEE P802.3df D2.0 and D2.1 or the unsatisfied negative comments from previous drafts. Hence it is not within the scope of the recirculation ballot.

Cl 1 SC 1.4.184k P34 L2 # 11

Dawe, Piers Nvidia
 Comment Type E Comment Status X

Tautology: "PCS Sublayer" and "RS sublayer"

SuggestedRemedy

Delete Sublayer and sublayer, or spell out PCS and RS

Proposed Response Response Status O

PROPOSED REJECT.
 This comment does not apply to the substantive changes between IEEE P802.3df D2.0 and D2.1 or the unsatisfied negative comments from previous drafts. Hence it is not within the scope of the recirculation ballot.
 The definition text for 800GXS is consistent with the definitions for 200GXS and 400GXS.

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Cl 1 SC 1.4.461 P34 L19 # 12
 Dawe, Piers Nvidia
 Comment Type E Comment Status X
 Difficult to parse "carried on a physical lane together at the..."
 SuggestedRemedy
 Change to "carried together on a physical lane at the..." or "carried on a single physical lane at the..." or "carried together on a different number of physical lanes at the..."
 Proposed Response Response Status O
 PROPOSED REJECT.
 This comment does not apply to the substantive changes between IEEE P802.3df D2.0 and D2.1 or the unsatisfied negative comments from previous drafts. Hence it is not within the scope of the recirculation ballot.
 !! double-check scope

Cl 124 SC 124.8.1 P117 L8 # 17
 Dawe, Piers Nvidia
 Comment Type T Comment Status X
 "or valid 400GBASE-R signal or 800GBASE-R signal": it doesn't make sense that the 400GBASE-R signal has to be valid and the 800GBASE-R one doesn't (even though we don't define a non-valid 400GBASE-R signal so the word isn't needed, but it is there in the base text). Compare Table 167-11 "3, 4, 5, 6, or valid 100GBASE-R, 200GBASE-R, 400GBASE-R, or 800GBASE-R signal".
 SuggestedRemedy
 Change "3, 4, 5, 6, or valid 400GBASE-R signal or 800GBASE-R signal" to "3, 4, 5, 6, or valid 400GBASE-R or 800GBASE-R signal" (i.e. put "or 800GBASE-R" before the first (pre-existing) "signal" and delete the second one).
 Proposed Response Response Status O
 PROPOSED REJECT.
 The text is technically correct as written.
 It might be improvement to align text with Table 167-11 as proposed.
 This is not critical to address at this time and can be addressed in SA Ballot.
 There is no consensus to make the proposed changes at this time.

Cl 124 SC 124.8.5b P119 L28 # 18
 Dawe, Piers Nvidia
 Comment Type T Comment Status X
 The definition of overshoot and undershoot in 140.7.7 was done in a hurry and the 1e-2 hit ratio allows a surprising amount of overshoot beyond the limit (because only a fraction of 1 UI in every 8 UI "takes part in the measurement")
 SuggestedRemedy
 Change to 3e-3 as in Clause 167. The limits can be adjusted to keep the effect of the spec the same. Similarly for 124.8.5c Transmitter power excursion.
 Proposed Response Response Status O
 PROPOSED REJECT.
 This comment does not apply to the substantive changes between IEEE P802.3df D2.0 and D2.1 or the unsatisfied negative comments from previous drafts.
 The comment provides insufficient justification for why overshoot/undershoot requirements should be the same for PMDs over SMF and MMF.
 The proposed change does not contain sufficient detail so that the CRG can understand the specific changes that satisfy the comment.

IEEE P802.3df D2.1 1st Working Group recirculation ballot comments

Cl 162 SC 162.1 P130 L20 # 6

Dawe, Piers Nvidia
 Comment Type E Comment Status X

Bad use of "may not", and contradictory to the meaning at Table 167-6. "The word may is used to indicate a course of action permissible within the limits of the standard (may equals is permitted to)." This issue is fixed in 162A.1. Missing word "associated". Also, see style guide 10.1.2 That and which.

SuggestedRemedy

Change "information on parameters with test points that may not be testable in an implemented system" to "parameters associated with test points which might not be testable in an implemented system", aligning with 162A.1.

Proposed Response Response Status O
 PROPOSED REJECT.

This comment does not apply to the substantive changes between IEEE P802.3df D2.0 and D2.1 or the unsatisfied negative comments from previous drafts. Hence it is not within the scope of the recirculation ballot.

The use of this phrase is well established, as it appears 10 times in the 802.3-2022 standard in similar contexts. The alternative phrase "which might not be testable" appears only twice, in Annex 136A and in Annex 162A.

Use of the phrase "which might not be testable" would be an improvement to the text. Also, the word "associated" is indeed missing and should be inserted.

This is not critical to address at this time, however the commenter is encouraged to resubmit this comment during SA Ballot.

Cl 162 SC 162.8.1 P137 L8 # 21

Dawe, Piers Nvidia
 Comment Type T Comment Status X

Ambiguous sentence "The PMDs on both ends of the link have connected ground references." The PMDs are connected to ground? to each other? the lanes in a PMD are connected together? What does "ground reference" (as opposed to "ground") mean? If this sentence means the PMDs are connected to each other, is it telling the implementer to arrange such a connection (through mains earth?) Are Signal shield and/or Link shield in Fig 162-2 involved?

SuggestedRemedy

This phrase appears four times in this draft. It is base text so it may have to go to maintenance, but this is the ideal group to advise what it is trying to say.

Proposed Response Response Status O
 PROPOSED REJECT.

This comment does not apply to the substantive changes between IEEE P802.3df D2.0 and D2.1 or the unsatisfied negative comments from previous drafts. Hence it is not within the scope of the recirculation ballot.

This text is also out of scope for this project since it would result in a change to technical specification for 100GBASE-CR1, 200GBASE-CR2, and 400GBASE-CR4.

The proposed change does not contain sufficient detail so that the CRG can understand the specific changes that satisfy the comment.

Cl 169 SC 169.4 P182 L16 # 23

Dawe, Piers Nvidia
 Comment Type E Comment Status X

colocated (twice)

SuggestedRemedy

FWIW, 55B has co-located

Proposed Response Response Status O
 PROPOSED REJECT.

It is assumed the the comment is proposing to change "colocated" to "co-located". The word "colocated" without a hyphen is a proper spelling according to Merriam Webster. No change is required.

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Cl 169 SC 169.4 P182 L28 # 9

Dawe, Piers Nvidia
 Comment Type E Comment Status X

The delay allowance for a 8:8 PMA is too low, and the allowance for an optical PMD is too high and out of step with other optical PMDs. (The allowance for CR or KR PMD+AN may be wrong too, but it doesn't matter much as they are always combined with PMAs.)

SuggestedRemedy

Change "800GBASE-R PMA" to "32:8 or 8:32 800GBASE-R PMA". Add a row "8:8 800GBASE-R PMA,65,536 BT, 128 PQ, 81.92 ns. Revert the VR8, SR8, DR8 and DR8-2 PMD allowances to 16,384 BT, 32 PQ, 20.48 ns.

Proposed Response Response Status W

PROPOSED REJECT.
 See the response to comment #13 for background.
 This concern expressed in this comment might have some merit, but substantive additional rationale is required to make appropriate changes.
 The commenter is invited to resubmit this comment in SA Ballot.

Cl 169 SC 169.4 P182 L28 # 22

Dawe, Piers Nvidia
 Comment Type T Comment Status X

It's clear that in Clause 120, there is one "PMA sublayer" in a stack for a port, which is how "layers" are usually used, but it could contain up to four "PMA stages". In this draft, we have up to four "instances of the 800GBASE-R PMA", and according to 173.5.4, the numbers for the PMA row apply to an instance not a sublayer.

SuggestedRemedy

Write something like "Each instance of a PMA" in the Notes column. Change the heading of the left column to "Sublayer or instance".

Proposed Response Response Status O

PROPOSED REJECT.
 Contrary to the comment, Clause 120 does refer to multiple instances of a PMA as follows. In 120.1.4, in multiples sentences refers to multiple sublayers including the following:
 "An implementation may use one or more PMA sublayers to adapt the number and rate of the PCS lanes to the number and rate of the PMD lanes. The number of PMA sublayers required depends on the partitioning of functionality for a particular implementation."
 "More addressable instances of PMA sublayers, each one separated from lower addressable instances by chip-to-chip interfaces, may be implemented and addressed allocating MMD addresses to PMAs in increasing numerical order going from the PMD toward the MAC."
 However, for the 800GBASE-R PMA a footnote similar to footnote "d" would help to clarify that the specified delay relates to each instance of a PMA sublayer and there may be multiple instances of a PMA sublayer within a Physical Layer.
 This is not critical to address at this time, however the commenter is encouraged to resubmit this comment during SA Ballot.
 There is no consensus to make a change at this time.

IEEE P802.3df D2.1 1st Working Group recirculation ballot comments

Cl 170 SC 170.1.2 P188 L29 # 26

Dawe, Piers Nvidia
 Comment Type T Comment Status X

This says "This logical interface [the 800GMII] is used to provide media independence so that an identical media access controller may be used with supported PHY types". It's not really media independence; the common PCS and PMA provide that. It would allow an identical media access controller to be used with different PCSs, if the 800GXS were not used. This is unlikely.

SuggestedRemedy

As it is not needed, delete the sentence

Proposed Response Response Status O

PROPOSED REJECT.

This comment does not apply to the substantive changes between IEEE P802.3df D2.0 and D2.1 or the unsatisfied negative comments from previous drafts. Hence it is not within the scope of the recirculation ballot.

The proposed wording change does not improve the technical clarity or accuracy of the text in the consideration of the CRG.

Cl 172 SC 172.2.4.1 P211 L11 # 36

Dawe, Piers Nvidia
 Comment Type T Comment Status X

Mixed parts of speech: Encode, State-diagram encoder, Stateless encoder, Rate matching, Block distribution, 64B/66B to 256B/257B transcoder and so on

SuggestedRemedy

Change Encode to Encoder or Encoding. Similarly in the title of 172.2.5.9, change Decode to Decoder or Decoding.

Proposed Response Response Status O

PROPOSED REJECT.

The proposed wording change does not improve the technical clarity or accuracy of the text in the consideration of the CRG.

Cl 172 SC 172.2.4.1 P216 L11 # 28

Dawe, Piers Nvidia
 Comment Type E Comment Status X

This wording causes confusion: "The portion of the figure above the "64B/66B to 256B/257B transcoder" is excluded." Which figure? How can they be excluded, it won't work!

SuggestedRemedy

Change to "The portion of Figure 119-11 above the "64B/66B to 256B/257B transcoder" is not used, as a similar process is done before distribution to the two flows (see Figure 172-4)."

Proposed Response Response Status O

PROPOSED REJECT.

This comment does not apply to the substantive changes between IEEE P802.3df D2.0 and D2.1 or the unsatisfied negative comments from previous drafts.

Cl 172 SC 172.2.4.1.1 P211 L19 # 35

Dawe, Piers Nvidia
 Comment Type E Comment Status X

"state-diagram decoder" (a tool to understand state diagrams) is something I would like to have. Would a "state-diagram encoder" turn a state diagram into code? That would be useful. If the alternative encoder needs to know the previous block as well as the one it is encoding, calling it "stateless" is borderline. So these names are not ideal.

SuggestedRemedy

Change to "Method A", "Method B" unless someone has a better suggestion.

Proposed Response Response Status O

PROPOSED REJECT.

The proposed wording change does not improve the technical clarity or accuracy of the text in the consideration of the CRG.

IEEE P802.3df D2.1 1st Working Group recirculation ballot comments

Cl 172 SC 172.2.4.6 P212 L35 # 31

Dawe, Piers Nvidia

Comment Type E Comment Status X

In "and finally a unique pad per PCS lane...", "finally" is unfortunate, as the UPs don't come last. As it is only rhetorical, it can be left out.

SuggestedRemedy
Delete "finally"

Proposed Response Response Status O

PROPOSED REJECT.
The referenced text is consistent with similar text in 119.2.4.4.
The proposed wording change does not improve the technical clarity or accuracy of the text in the consideration of the CRG.

Cl 172 SC 172.2.4.6 P212 L36 # 32

Dawe, Piers Nvidia

Comment Type T Comment Status X

172.2.4.6, Alignment marker mapping and insertion, incorporates 119.2.4.4, Alignment marker mapping and insertion, with exceptions. 119.2.4.4 is part of 119.2.4, Transmit. It says "The unique pad (UP0 to UP2) within the alignment markers and the PRBS9 pad at the end of the alignment maker group are ignored on receive."
172.2.5, Receive function > 172.2.5.1, Alignment lock and deskew, points to 119.2.5, Receive function. 119.2.5.1, Alignment lock and deskew, uninformatively says "It obtains lock to the alignment markers as specified by the alignment marker lock state diagram shown in Figure 119–12." 119.2.6.2.2, Variables, refers back to 119.2.4.4.
But I did not find anything more about the unique pads. What are they for?

SuggestedRemedy
Please add a few words here explaining why the unique pads are present. Please add a sentence in 172.2.5.1 saying which of CMs, UMs and UPs are used, for what: something like: "The state diagram in Figure 119-12

Proposed Response Response Status O

PROPOSED REJECT.
Subclause 172.2.4.6 specifies alignment markers according 119.2.4.4 with some listed exceptions. The information requested is provided in 119.2.4.4.
The proposed wording change does not improve the technical clarity or accuracy of the text in the consideration of the CRG.

Cl 172 SC 172.2.4.6 P212 L38 # 30

Dawe, Piers Nvidia

Comment Type E Comment Status X

D2.0 comment 105 (accepted in principle): Add an informative NOTE saying what is common among these lanes, what is the same for the two flows, *and what is the same in 400G*.

SuggestedRemedy
To address the last point, please add something that gives the information in shrikhande_3df_01a_221004 slide 13:
CM0-CM5 and UP0-UP2 are unchanged from 400GbE CL119
UM0/UM3 for Flow lanes 0-15 are inverted from 400GbE
UM1/UM2/UM4/UM5 for Flow lanes 16-31 are inverted from 400GbE
e.g.:
The unique markers in flow 1 are bit-wise inversions of the ones in flow 0.
NOTE--CM0 to CM5 and UP0 to UP2 are the same as for 400GBASE-R (see Table 119–2). UM1, UM2, UM4, UM5 for flow 0 and UM0 and UM3 for flow 1 are the same as for 400GBASE-R.

Proposed Response Response Status O

PROPOSED REJECT.
This clause specifies 800GBASE-R PCS. There is no need to explain difference with any other PCS.
If necessary, the requested information can be derived by comparison of the alignment marker tables in the respective clauses.
The proposed wording change does not improve the technical clarity or accuracy of the text in the consideration of the CRG.

Cl 172 SC 172.2.4.6 P213 L8 # 41

Dawe, Piers Nvidia

Comment Type E Comment Status X

In the text above, CM0 to CM5, UM0, UP0 and so on are in regular text while in the tables, the numbers are subscripts. The subscripts are inconvenient.

SuggestedRemedy
Change the subscripts to regular text in these two figures

Proposed Response Response Status O

PROPOSED REJECT.
To be consistent with formatting in Clause 119 the subscript forms in the table should be retained.
However, for text in in the paragraph at page 212 line 33 in 172.2.4.6 the terms CM0, CM5, UM0, UM5, UP0, UP2 should use subscripts for the index number.
This is not critical to address at this time and can be addressed in SA Ballot.

IEEE P802.3df D2.1 1st Working Group recirculation ballot comments

Cl 172 SC 172.2.4.6 P213 L10 # 33
 Dawe, Piers Nvidia
 Comment Type E Comment Status X
 These table(s) of alignment markers could be put on the web in machine-readable format at <https://standards.ieee.org/downloads/>
SuggestedRemedy
 Please prepare a plain-text file with the alignment markers (without cell straddling) for convenient reading into a program. Post it on the project web site for review with future drafts.
Proposed Response Response Status O
 PROPOSED REJECT.
 This comment does not apply to the substantive changes between IEEE P802.3df D2.0 and D2.1 or the unsatisfied negative comments from previous drafts.
 The proposed change does not improve the technical clarity or accuracy of the text in the consideration of the CRG.

Cl 172 SC 172.2.5.2 P217 L3 # 44
 Dawe, Piers Nvidia
 Comment Type T Comment Status X
 "PCS lanes can be received on different lanes of the service interface from which they were originally transmitted." They aren't usually received on the service interface from which they were originally transmitted, that's loopback. Lanes on lanes??
SuggestedRemedy
 Signals can be received at the PCS with the lanes in a different arrangement to that at the service interface from which they were originally transmitted. ?
Proposed Response Response Status O
 PROPOSED REJECT.
 This comment does not apply to the substantive changes between IEEE P802.3df D2.0 and D2.1 or the unsatisfied negative comments from previous drafts.

Cl 172 SC 172.2.4.11 P216 L43 # 42
 Dawe, Piers Nvidia
 Comment Type E Comment Status X
 "is accessible through the register": which register?
SuggestedRemedy
 is accessible through the BASE-R PCS test-pattern control register ?
Proposed Response Response Status O
 PROPOSED REJECT.
 This comment does not apply to the substantive changes between IEEE P802.3df D2.0 and D2.1 or the unsatisfied negative comments from previous drafts.

Cl 172 SC 172.2.5.2 P217 L10 # 45
 Dawe, Piers Nvidia
 Comment Type T Comment Status X
 the original stream of two FEC codewords - surely not just two codewords?
SuggestedRemedy
 the original two streams of FEC codewords ?
Proposed Response Response Status O
 PROPOSED REJECT.
 This comment does not apply to the substantive changes between IEEE P802.3df D2.0 and D2.1 or the unsatisfied negative comments from previous drafts.

Cl 172 SC 172.2.4.11 P216 L44 # 43
 Dawe, Piers Nvidia
 Comment Type E Comment Status X
 Table 172-5
SuggestedRemedy
 This is not a hotlink.
Proposed Response Response Status O
 PROPOSED REJECT.
 This comment does not apply to the substantive changes between IEEE P802.3df D2.0 and D2.1 or the unsatisfied negative comments from previous drafts.
 The reference to Table 172-5 should be an active cross-reference.
 This is not critical to address at this time and can be addressed in SA Ballot.
 The commenter is encouraged to resubmit this comment during SA ballot.

Cl 172 SC 172.2.5.9 P217 L49 # 46
 Dawe, Piers Nvidia
 Comment Type T Comment Status X
 The receive PCS shall use the decoding method defined in either 172.2.5.9.1 or 172.2.5.9.2.
SuggestedRemedy
 The receive PCS shall use one of two decoding methods, which are defined in 172.2.5.9.1 and 172.2.5.9.2.
Proposed Response Response Status O
 PROPOSED REJECT.
 The text is clear as written. The proposed wording change does not improve the technical clarity or accuracy of the text in the consideration of the CRG.

IEEE P802.3df D2.1 1st Working Group recirculation ballot comments

Cl 173 SC 173.2 P232 L 54 # 47

Dawe, Piers Nvidia
 Comment Type E Comment Status X

The new optional squelch feature should be mentioned here. And, the word "squelch" should be used so readers will recognise it.

SuggestedRemedy

Proposed Response Response Status O

PROPOSED REJECT.
 The proposed change does not contain sufficient detail so that the CRG can understand the specific changes that satisfy the comment.

Cl 173 SC 173.5.2.1 P238 L 20 # 48

Dawe, Piers Nvidia
 Comment Type E Comment Status X

"the function": what or which function? Compare lines 31, 39, 46

SuggestedRemedy

Add words such as "bit-level multiplexing" at least here, the first time. e.g. "8:32 bit-level multiplexing" would be better.

Proposed Response Response Status O

PROPOSED REJECT.
 This comment does not apply to the substantive changes between IEEE P802.3df D2.0 and D2.1 or the unsatisfied negative comments from previous drafts. Hence it is not within the scope of the recirculation ballot.

Cl 173 SC 173.5.3 P239 L 24 # 14

Dawe, Piers Nvidia
 Comment Type E Comment Status X

Delay should come before skew, as in 116 124, 162, 169 and so on, not after as in 120.

SuggestedRemedy

Move 173.5.4 Delay constraints to before 173.5.3 Skew and Skew Variation

Proposed Response Response Status O

PROPOSED REJECT.
 This comment does not apply to the substantive changes between IEEE P802.3df D2.0 and D2.1 or the unsatisfied negative comments from previous drafts. Hence it is not within the scope of the recirculation ballot.
 The order of these subclauses in Clause 173 is the same as similar clauses in Clause 83 and Clause 120 in the base standard.
 The proposed change does not improve the technical clarity or accuracy of the text in the consideration of the CRG.

Cl 173 SC 173.5.3.1 P239 L 39 # 39

Dawe, Piers Nvidia
 Comment Type T Comment Status X

In these subclauses, skew is generated, produced or delivered. It is not clear what these terms mean. I suspect that all limits are cumulative (unlike for delay) - but then how can an implementation of e.g. the 800GAUI-8 closest to the PCS "shall deliver no more than 145 ns of Skew" when it doesn't control its input Skew?

SuggestedRemedy

Define or clean up the terminology

Proposed Response Response Status O

PROPOSED REJECT.
 The proposed change does not contain sufficient detail so that the CRG can understand the specific changes that satisfy the comment.

Cl 173 SC 173.5.4 P240 L 35 # 50

Dawe, Piers Nvidia
 Comment Type E Comment Status X

It would avoid misinterpretation if the words to the effect of delay is the sum of transmit and receive delays at one end of the link, were reinstated.

SuggestedRemedy

Per comment

Proposed Response Response Status O

PROPOSED REJECT.
 Change to the draft similar to that proposed by this comment would be an improvement to the draft.
 This subclause references subclause 169.4 which clarifies that the specified delay is for sum of transmit and receive at one end of the link.
 This is not critical to address at this time and can be addressed in SA Ballot.
 The commenter is encouraged to resubmit this comment during SA ballot.
 There is no consensus to implement the proposed change at this time.

IEEE P802.3df D2.1 1st Working Group recirculation ballot comments

Cl 173 SC 173.5.4 P240 L35 # 49
 Dawe, Piers Nvidia
 Comment Type E Comment Status X
 within a Physical Layer, which is composed of an 800GBASE-R PHY and an optional 800GMII Extender
 SuggestedRemedy
 within a Physical Layer, which is composed of an 800GBASE-R PHY and, optionally, an 800GMII Extender
 Proposed Response Response Status O
 PROPOSED REJECT.
 Change to the draft similar to that proposed by this comment would be an improvement to the draft.
 This is not critical to address at this time and can be addressed in SA Ballot.
 The commenter is encouraged to resubmit this comment during SA ballot.
 There is no consensus to implement the proposed change at this time.

Cl 173 SC 173.5.5 P241 L2 # 51
 Dawe, Piers Nvidia
 Comment Type T Comment Status X
 If an output lane's clock is derived from its corresponding input, it's not independent.
 SuggestedRemedy
 As this is only an example, changing "independent" to "separate" or "its own" would be enough to fix it
 Proposed Response Response Status O
 PROPOSED REJECT.
 This comment does not apply to the substantive changes between IEEE P802.3df D2.0 and D2.1 or the unsatisfied negative comments from previous drafts. Hence it is not within the scope of the recirculation ballot.

Cl 173 SC 173.5.8.2 P242 L13 # 52
 Dawe, Piers Nvidia
 Comment Type T Comment Status X
 It is hard work reverse engineering this: "In the *transmit* direction ... The SIGNAL_OK parameter is set to OK when data is being *received*..."
 SuggestedRemedy
 Change "when data is being received on all 8 input lanes (PMA:IS_UNITDATA_0:7.request)." to "when data is being received by this PMA from the PMA sublayer above on all 8 transmit lanes (PMA:IS_UNITDATA_0:7.request) ?"
 Proposed Response Response Status O
 PROPOSED REJECT.
 The definition of SIGNAL_OK is clear and accurate as written.
 The proposed change does not improve the technical clarity or accuracy of the text in the consideration of the CRG.

Cl 173 SC 173.5.8.3 P242 L18 # 53
 Dawe, Piers Nvidia
 Comment Type E Comment Status X
 Name this feature by its familiar name so readers can find it.
 SuggestedRemedy
 by disabling (squelching) one or more output lanes
 Same in next subclause
 Proposed Response Response Status O
 PROPOSED REJECT.
 The term "disabling" is sufficient to describe the behavior and is consistent with behaviour defined elsewhere in the base standard.
 The proposed wording change does not improve the technical clarity or accuracy of the text in the consideration of the CRG.

Cl 173 SC 173.5.8.3 P242 L19 # 54
 Dawe, Piers Nvidia
 Comment Type E Comment Status X
 Two dumb cross-references, and two more at line 29.
 SuggestedRemedy
 Make them hot links
 Proposed Response Response Status O
 PROPOSED REJECT.
 The references to 173.3 and Figure 173-4 should be a active cross-references.
 This is not critical to address at this time and can be addressed in SA Ballot.
 The commenter is encouraged to resubmit this comment during SA ballot."

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Cl 173 SC 173.7.7 P 248 L 37 # 55

Dawe, Piers Nvidia

Comment Type E Comment Status X

If the two loopback abilities aren't in the major options table, there is no point having separate PCS for "PMA local loopback" and "PMA local loopback implemented". Nothing else depends on "LBL".

SuggestedRemedy

Combine the two pairs

Proposed Response Response Status O

PROPOSED REJECT.

This comment does not apply to the substantive changes between IEEE P802.3df D2.0 and D2.1 or the unsatisfied negative comments from previous drafts. Hence it is not within the scope of the recirculation ballot.