Cl **00** *SC* **0** *P* *L* # 9
Hajduczenia, Marek ZTE Corp.

Comment Type **E** *Comment Status* **D** *True/FALSE*

[Submitted on behalf of Duane Remein]
Inconsistent use of boolean "false" (sometimes "FALSE")

SuggestedRemedy

globally replace (whole word) "false" with "FALSE"

Proposed Response *Response Status* **Z**

REJECT.

This comment was WITHDRAWN by the commenter.

Cl **00** *SC* **0** *P* **0** *L* **0** # 12
Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Duane Remein]
Revision Tables (Editors' Note cl-2)

SuggestedRemedy

Remove Revision Tables from individual clauses and add to frontmatter just after existing Editor's Note. Use table from 3av_0905_remein_1.pdf

Response *Response Status* **C**

ACCEPT.

Cl **00** *SC* **0** *P* **98** *L* **15** # 54
Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
In RINxOMA, shouldn't the x be subscript? If it messes up the contents, leave it to staff editor.

SuggestedRemedy

Proposed Response *Response Status* **Z**

REJECT.

This comment was WITHDRAWN by the commenter.

Cl **01** *SC* **1.3** *P* **21** *L* **4** # 2
Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Pete Anslow]
This says "Insert after ITU-T Recommendation G.9752" but G.9752 does not exist in the base document.

SuggestedRemedy

Change "G.9752" to "G.975"

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.4.95** *P* **21** *L* **42** # 1
Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Pete Anslow]
The base document text starts "As used in IEEE 802.3 Clause 38 for fiber optic links,". Hence, "Clause 38" should be shown in strikethrough font.

SuggestedRemedy

Change "IEEE 802.3" to "IEEE 802.3 Clause 38" with "Clause 38" shown in strikethrough font

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.5** *P* **22** *L* **11** # 18
Hajduczenia, Marek ZTE Corp.

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

Definition of EOB is plain old strange. END_BURST_DELIMITER without reference to proper definition means nothing. Remove it together with brackets.

SuggestedRemedy

Change definition of EOB to read "EOB<tab>end of burst delimiter"

Response *Response Status* **C**

ACCEPT.

Cl **01** *SC* **1.5** *P* **22** *L* **12** # 19
Hajduczenia, Marek ZTE Corp.

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

EPON = Ethernet Passive Optical Network. Strike "s" at the end of the acronym expansion.

SuggestedRemedy

Per comment.

Response *Response Status* **C**

ACCEPT.

See resolution to comment #38

Cl **01** *SC* **1.5** *P* **22** *L* **13** # 38
Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
OUI can be singular

SuggestedRemedy

Identifiers should be Identifier. Not sure about Networks.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change "Identifiers" to "Identifier" and "Networks" to "Network"

Cl **01** *SC* **1.5** *P* **22** *L* **13** # 20
Hajduczenia, Marek ZTE Corp.

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

OUI = Organizationally Unique Identifier. Strike "s" at the end of the acronym expansion

SuggestedRemedy

Per comment.

Response *Response Status* **C**

ACCEPT.

See resolution to comment #38

Cl **01** *SC* **1.5** *P* **22** *L* **14** # 3
Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Pete Anslow]
The abbreviation "SCB single copy broadcast" is already in the 802.3 2008 standard

SuggestedRemedy

Remove the abbreviation "SCB single copy broadcast" from 1.4 of the .3av draft

Response *Response Status* **C**

ACCEPT.

Cl **30** *SC* **30.3.7.1.5** *P* **27** *L* **18** # 5
Hajduczenia, Marek ZTE Corp.

Comment Type **T** *Comment Status* **A** *Pg 27 ln 18*

[Submitted on behalf of Duane Remein]
Definition of aGoodLLID says "A count of frames received that contain a valid SLD field, as defined in 65.1.3.3.1 or 76.2.6.1.3.1, as appropriate, but passes the CRC--8 check as defined in 65.1.3.3.3 or 76.2.6.1.3.3, as appropriate.;" which is does not match the current standard "A count of frames received that contain a valid SLD field in an OLT, as defined in 65.1.3.3.1, and
pass the CRC-8 check, as defined in 65.1.3.3.3.;"

SuggestedRemedy

Change to "A count of frames received that contain a valid SLD field in an OLT, as defined in 65.1.3.3.1 or 76.2.6.1.3.1, as appropriate, and pass the CRC-8 check, as defined in 65.1.3.3.3.;" underline the phrase " or 76.2.6.1.3.1, as appropriate" to indicate changed text.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change:
"A count of frames received that contain a valid SLD field, as defined in 65.1.3.3.1 or 76.2.6.1.3.1, as appropriate, but passes the CRC–8 check as defined in 65.1.3.3.3 or 76.2.6.1.3.3, as appropriate.;"

To:
"A count of frames received that contain a valid SLD field, as defined in 65.1.3.3.1 or 76.2.6.1.3.1, as appropriate, and pass the CRC–8 check as defined in 65.1.3.3.3 or 76.2.6.1.3.3, as appropriate.;"

Markup based on existing standard:
"A count of frames received that contain a valid SLD field in an OLT, as defined in 65.1.3.3.1, and pass the CRC-8 check, as defined in 65.1.3.3.3.;"

Cl **30** *SC* **30.3.7.1.5** *P* **27** *L* **19** # 39
Hajduczenia, Marek ZTE Corp.

Comment Type **T** *Comment Status* **A** *Pg 27 ln 18*

[Submitted on behalf of Piers Dawe]
In the following: A count of frames received that contain a valid SLD field, as defined in 65.1.3.3.1 or 76.2.6.1.3.1, as appropriate, but passes the CRC-8 check as defined in....

SuggestedRemedy

Should that be _and_ passes?

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
See response to comment #5

Cl **30** *SC* **30.3.7.1.5** *P* **27** *L* **19** # 14
Hajduczenia, Marek ZTE Corp.

Comment Type **TR** *Comment Status* **A** *Pg 27 ln 18*

Badly implemented comment #63. The text says "but passes the CRC--8" while it should say "and passes the CRC--8". See 3av_0903_comments_d3_0_accepted.pdf from March meeting in Vancouver

SuggestedRemedy

Fix it accordingly

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
See response to comment #5

Cl **30** *SC* **30.3.7.1.7** *P* **27** *L* **38** # 29
Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Seiji Kozaki]
Typo

SuggestedRemedy

Change "65.1.3.3.2 pr 76.2.6.1.3.2" to "65.1.3.3.2 or 76.2.6.1.3.2"

Response *Response Status* **C**

ACCEPT.

Cl **30** *SC* **30.5.1.1.2** *P* **28** *L* **34** # 102
Kimura, Mitsunobu Hitachi Communicatio

Comment Type **G** *Comment Status* **A**

In the text, words "D1", "D2", "D3", "U1", "U2", "U3" are attached to their next words without space.

SuggestedRemedy

Add a space after the words.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
In the scource material there is actually a tab character. The style for the 6 paragraphs will be changed to ensure there is reasonable space between these words.

Cl **45** *SC* **45.2.1** *P* **37** *L* **45** # 41
Hajduczenia, Marek ZTE Corp.

Comment Type **T** *Comment Status* **A** *ability/abilities*

[Submitted on behalf of Piers Dawe]
P2MP ability register should be 10G-EPON abilities register to match 45.2.1.11

SuggestedRemedy

Also should the reference be regular coloured not green?

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
There are 10 occurrences of "ability register" and only 5 occurrances of "abilities register" (outside TOC and discounting captitalization). Change 5 instances of "abilities register" to "ability register" using care to follow IEEE Style guide wrt captitalization (Pg 40 ln 45, 47, 48 & 49, Pg 41 Ln 1).
Remove forest green font as this is a live link.

Cl **45** *SC* **45.2.1.10** *P* **40** *L* **4** # 42
Hajduczenia, Marek ZTE Corp.

Comment Type **E** *Comment Status* **A** *ability/abilities*

[Submitted on behalf of Piers Dawe]
Registers in 45 have minimal capitals.

SuggestedRemedy

This should be "PMA/PMD extended ability register" (as it is twice in the base document just above) - bug in base document

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.1.11** *P* **40** *L* **45** # 43

Hajduczenia, Marek ZTE Corp.

Comment Type **E** *Comment Status* **A** *ability/abilities*

[Submitted on behalf of Piers Dawe]
10G-EPON PMA/PMD Abilities Register should be 10G-EPON PMA/PMD abilities register (several occurrences)

SuggestedRemedy

Per comment

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
See resolution to comment #41

Cl **45** *SC* **45.2.1.6.1** *P* **39** *L* **40** # 4

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Pete Anslow]
Clause 45.2.1.6.1 has the number in the clause title twice

SuggestedRemedy

Delete one occurrence of 45.2.1.6.1

Response *Response Status* **C**

ACCEPT.
See resolution to comment #15

Cl **45** *SC* **45.2.1.6.1** *P* **39** *L* **40** # 15

Hajduczenia, Marek ZTE Corp.

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

Two times "45.2.1.6.1"

SuggestedRemedy

Remove one of them

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.3.29** *P* **43** *L* **42** # 44

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Was eliminating the FEC error indication ability bit a good idea? I see you want to make the FEC sync bit marking a mandatory feature. But isn't it usual to have an ability bit for a feature that has a control bit?

SuggestedRemedy

Consider reinstating the FEC error indication ability bit but always set to one, like the 10 Gb/s FEC ability bit.
I would have expected to see:
In the table: This bit indicates that the 10 Gb/s FEC decoder component of the PCS is able to indicate decoding errors to higher layers (mandatory for 10/1GBASE-PRX or 10GBASE-PR). In a 10/1GBASE-PRX OLT, this bit is undefined. and in 45.2.3.29.1 This bit indicates that the 10 Gb/s FEC decoder component of the 10GBASE-PR or 10/1GBASE-PRX PCS is able to indicate decoding errors to the higher layers (see 76.3.3.3). The bit always reads as one for 10/1GBASE-PRX or 10GBASE-PR. FEC error indication is controlled by a bit in the 10GBASE-PR and 10/1GBASE-PRX FEC control register (see 45.2.3.30.1).

Response *Response Status* **C**

REJECT.
The task force consider this question in the Vancouver 09 meeting and it was agreed to remove the FEC error indication ability bit.
Please see comment #119 against Draft 3.0.

Cl **45** *SC* **45.2.3.30** *P* **44** *L* **10** # 50

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]Writes should be writes

SuggestedRemedy

Per comment

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.3.30** *P* **44** *L* **12** # 40

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
"enable FEC error indication" should be

SuggestedRemedy

Enable FEC error indication

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.3.30** *P* **44** *L* **18** # 45

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
RO Read only, R/W Read Write should be RO = Read only, R/W = Read/Write

SuggestedRemedy

Insert the equals signs

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.3.31** *P* **44** *L* **43** # 103

Kimura, Mitsunobu Hitachi Communicatio

Comment Type **G** *Comment Status* **A**

Index text of 45.2.3.31 shows 10GBASE-PR first and 10/1GBASE-PRX second. But main text shows 10/1GBASE-PRX first and10GBASE -PR second.

SuggestedRemedy

Match the order of "10GBASE-PR" and "10/1GBASE-PRX" between index and body.

Response *Response Status* **C**

ACCEPT.
Change "45.2.3.31 10GBASE-PR and 10/1GBASE-PRX corrected FEC codewords counter (Register 3.76, 3.77)"
To: "45.2.3.31 10/1GBASE-PRX and 10GBASE-PR corrected FEC codewords counter (Register 3.76, 3.77)"

Cl **45** *SC* **45.2.3.32** *P* **45** *L* **16** # 104

Kimura, Mitsunobu Hitachi Communicatio

Comment Type **G** *Comment Status* **A**

Index of 45.2.3.32 shows "10GBASE-PR FEC and 10/1GBASE-PRX uncorrected FEC codewords", but body text shows "10/1GBASE-PRX and 10GBASE-PR FEC uncorrected codewords".

SuggestedRemedy

Change the index to "10/1GBASE-PRX and 10GBASE-PR FEC uncorrected codewords".

Response *Response Status* **C**

ACCEPT.
Change in title

Cl **45** *SC* **45.2.3.33** *P* **45** *L* **35** # 46

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
"BER Monitor Control register" should be "BER Monitor control register" (3 times)

SuggestedRemedy

Per comment

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change:
"BER Monitor Control register" should be

To:
"BER monitor control register"
(3 times Pg 45 Ln 35, 37 & 42)

Cl **45** *SC* **45.2.3.33** *P* **45** *L* **38** # 49

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Registers are always there, whether the features are supported or not. Placement of only.

SuggestedRemedy

Change "This register is only required when 10GBASE-PR or 10/1GBASE-PRX ONU capability is supported" to "This register is defined only if 10GBASE-PR or 10/1GBASE-PRX ONU capability is supported.." Similarly in 45.2.3.34

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change "required" to "defined"

Cl **45** *SC* **45.2.3.33** *P* **45** *L* **48** # 47

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Too much text in the table

SuggestedRemedy

The explanation "A value of 0 indicates that the BER monitor function is disabled." and the default values should be given in the text at line 40, not in the table.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
The Task Force respectfully disagrees and believes that, as written, the readability is better than as proposed.
Editor to add missing period last sentence of row starting "3.80.0:7"

Cl **45** *SC* **45.2.3.33** *P* **45** *L* **51** # 48

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
microseconds should be us (with Greek omicron)

SuggestedRemedy

twice

Response *Response Status* **C**

REJECT.
Use of the full word is equally clear, if not more so. The Style Guide allows both full word or Greek letter mu.

Cl **45** *SC* **45.2.3.34** *P* **46** *L* **4** # 51

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Table 45-111's title has "bit definitions" while Table 45-112 doesn't. Capitals. Missing a "Monitor".

SuggestedRemedy

Change to:
45.2.3.34 10GBASE-PR and 10/1GBASE-PRX BER Monitor status register (Register 3.81)
The assignments of bits in the 10GBASE-PR and 10/1GBASE-PRX BER Monitor status register is shown in Table 45-112. Table 45-112-10GBASE-PR and 10/1GBASE-PRX BER Monitor status register bit definitions

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
[The comment is against unchanged text, therefore is outside the scope of this recirculation ballot]
Change from:
"45.2.3.34 10GBASE-PR and 10/1GBASE-PRX BER Monitor Status (Register 3.81)"
"The assignments of bits in the 10GBASE-PR and 10/1GBASE-PRX BER Status Register is shown in Table 45–112. This register …"
"Table 45–112—10GBASE-PR and 10/1GBASE-PRX BER Monitor Status Register"

To:
"45.2.3.34 10GBASE-PR and 10/1GBASE-PRX BER monitor status (Register 3.81)"
"The assignments of bits in the 10GBASE-PR and 10/1GBASE-PRX BER monitor status register is shown in Table 45–112. This register …"
"Table 45–112—10GBASE-PR and 10/1GBASE-PRX BER monitor status register"

Cl **66** *SC* **66.4.2.1** *P* **59** *L* **13** # 21

Hajduczenia, Marek ZTE Corp.

Comment Type **TR** *Comment Status* **D** *True/FALSE*

I am confused with the use of "false" (37 references) and "FALSE" (29 references). Seems like it is not consistent within the clauses we modify / add. Pick one version and use it consistently in all clauses. The same is true for "true" and "TRUE". If there is any technical difference between lower caps and upper caps version of these words, state it. Otherwise align.

SuggestedRemedy

Per comment.

Proposed Response *Response Status* **Z**

REJECT.

This comment was WITHDRAWN by the commenter.

Cl **66** *SC* **66.5.3** *P* **60** *L* **12** # 52

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
66.5.3 Put a space between [and] several times

SuggestedRemedy

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Global Change "[]" to "[ ]".

Cl **75** *SC* **75.10.4.13** *P* **97** *L* **43** # 58

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Don't need "measurements": the "shall" is in "The TDP limit shall be met." It's optional for OM2 Wavelength and spectral width; would save space to remove.

SuggestedRemedy

Delete "measurements" in OM8, consider same for OM2

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Delete "measurements" in OM8 and OM2

Cl **75** *SC* **75.10.4.15** *P* **98** *L* **45** # 59

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Operating temperature range labeling is mandatory

SuggestedRemedy

Delete "N/A[ ]"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
No changes to PICS as some components may not be field-pluggable (i.e. not required).

Add to the end of sub-clause 75.8.5 PMD labeling:
"Each field-pluggable component shall be clearly labeled with its operating temperature range over which compliance is ensured."

Cl **75** *SC* **75.4.1** *P* **74** *L* **34** # 13

Hajduczenia, Marek ZTE Corp.

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

In Table 75-5, Table 75--6, there is extra "and" between names of individual PMDs associated with the given columns; in Table 75--11 there is no such surrious "and" even though more than 1 PMD is associated with the particular columns; decide either way but make is consistent in Clause 75

SuggestedRemedy

Suggest to remove "and" from Table 75-5 and 75-6 (will not mark the whole table as changed)

Response *Response Status* **C**

ACCEPT.
[For Editor: remember to include commas in proper locations]

Cl **75** *SC* **75.5.1** *P* **77** *L* **37** # 53

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Paragraph split over two pages

SuggestedRemedy

Set Table 75-9 to float

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
[The comment is against unchanged text, therefore is outside the scope of this recirculation ballot]
Editors will try to accomodate the suggestion from the commenter. If not feasible without marking entire tables as changed, the matter will be referred to IEEE Publication Editor.

Cl **75** *SC* **75.7.14** *P* **86** *L* **6** # 56

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Why is there a section for receiver 3 dB electrical upper cutoff frequency when there is no spec or even recommendation for it?

SuggestedRemedy

Either add specs or recommendations, or delete 75.7.14, row of Table 75-13 and PICS OM12

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Delete 75.7.14, appropriate row in Table 75-13 and PICS OM12.

The comment resolution commitee concluded that the 3db electrical upper cutoff frequency specification is not needed. This parameter has not been defined for 1G-EPON and its definition for 10GBASE-E in clause 52 is very loose. A tigther bound is assured by design anyway.

Cl **75** *SC* **75.7.9** *P* **84** *L* **42** # 55

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Don't use * for multiply. More technically, "bitRate" is not defined, and the filter used for 10G is not 0.75 * signalling rate, but 7.5 GHz. Do you think you can hold the 10G filter to STM-16 (2.5Bd) tolerances? Clause 52 couldn't.

SuggestedRemedy

Change:
Bessel-Thomson receiver response with fr = 0.75 * bitRate, and where the relative response vs. relative frequency is defined in ITU-T G.957, Table B.2 (STM-16 values), along with the allowed tolerances for its physical implementation.
to
Bessel-Thomson receiver response as defined in 60.7.8 for 1 Gb/s PMD transmitters and 52.9.7 for 10 Gb/s PMD transmitters.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
[The comment is against unchanged text, therefore is outside the scope of this recirculation ballot]

Change the block of text under Figure 75-7 to read as follows:

"The measurement procedure is described in 58.7.8 for 1 Gb/s PHYs and 52.9.7 for 10 Gb/s PHYs and references therein. The eye shall comply to the mask of the eye using a fourth–order Bessel–Thomson receiver response as defined in 60.7.8 for 1 Gb/s PMD transmitters and 52.9.7 for 10 Gb/s PMD transmitters."

Make links live.

Remove Note1 and Note2 on page 84 (they are included in the references).

Cl **75** *SC* **75.9.3** *P* **89** *L* **35** # 57

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Layout of table notes

SuggestedRemedy

Make Table 75-14 full width for the sake of the footnotes (and one column header).

Response *Response Status* **C**

ACCEPT.

Cl **75C** *SC* **75C.1** *P* **105** *L* **32** # 60
Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Dj Rj Tj should be DJ RJ TJ. They may be 2-sided (early to late) but they aren't p-p. They are terrible metrics for 64B/66B anyway, it's a good thing this annex is informative!

SuggestedRemedy

Change "Dj (UI p--p) Rj (UI p--p) Tj (UI p--p)" to
DJ (UI) RJ (UI) TJ (UI)

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change "Dj (UI p-p) Rj (UI p-p) Tj (UI p-p)" to DJ (UI p-p) RJ (UI p-p) TJ (UI p-p) in Table 75C-1/2.

NOTE: In 802.3-2008, there are 10 occurences when "p-p" is used to refer to "peak to peak".

Cl **75C** *SC* **75C.1** *P* **107** *L* **10** # 61
Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
downstream_baudrate should be downstream_signaling_rate line

SuggestedRemedy

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change "downstream_baudrate" to "downstream_line_rate"
Change "upstream_baudrate" to "upstream_line_rate"

Cl **76** *SC* **76.1.2** *P* **108** *L* **50** # 62
Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
What mechanism?

SuggestedRemedy

Change to "this protocol"?

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change:
"so as to comply with this mechanism"
to"
"so as not to interfere with the MPCP timing"

Cl **76** *SC* **76.2.1** *P* **109** *L* **5** # 63
Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Should "data link layers to interface with a single physical layer" be:

SuggestedRemedy

"Data Link Layers to interface with a single Physical Layer" ? See 802.3 editor's style guide.

Response *Response Status* **C**

REJECT.
[The comment is against unchanged text, therefore is outside the scope of this recirculation ballot]
An examination of the 2009 Style Guide shows no preference regarding Data Link Layers vs data link layers.

Cl **76** *SC* **76.2.1** *P* **109** *L* **6** # 64
Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
"data links which transmit" should be "data links that transmit". Anyway, the link doesn't unambiguously "transmit" and "receive" because it has two ends.

SuggestedRemedy

Should be something like "links with one data rate (e.g. 10 Gb/s) in one direction but another (e.g. 1 Gb/s) in the opposite direction"

Response *Response Status* **C**

ACCEPT.

Cl **76** *SC* **76.2.2.4** *P* **113** *L* **50** # 65

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
What does "binding" mean? Later on the same word is used in a different context "binding of an ONU to
an OLT port". There's a mix of "mapping" and "binding" here and in 76.2.6; should use same word for same thing, each time.

SuggestedRemedy

Change "binding" to "mapping", three times

Response *Response Status* **C**

ACCEPT.
Change "binding" to "mapping" in 3 places (pg 113 ln 50, pg 115 ln 7 & 22).

Cl **76** *SC* **76.3.1.1** *P* **117** *L* **52** # 67

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
"no explicit specification"?

SuggestedRemedy

"no further explicit specification"?

Response *Response Status* **C**

ACCEPT.

Cl **76** *SC* **76.3.1.1** *P* **118** *L* **11** # 72

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Something masking top of "PCS"; also in line 30

SuggestedRemedy

Per comment

Response *Response Status* **C**

ACCEPT.
Editor will work on Figures 76-5/6. (select all in figure and look for extra text box)

Cl **76** *SC* **76.3.1.1** *P* **118** *L* **3** # 68

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
RECONCILIATION should be Reconciliation, Transmit Function should be Transmit function, Receive Function should be Receive function, Conceptual Diagram of 10/1GBASE-PRX PCS, OLT Side should be Conceptual diagram of 10/1GBASE-PRX PCS, OLT side

SuggestedRemedy

Per comment

Response *Response Status* **C**

REJECT.
[The comment is against unchanged text, therefore is outside the scope of this recirculation ballot]
1) all layering diagrams consistently show layers in full caps.
2) Changing "Function" to "function" will mark entire figure as changed and is not warrented at this stage of the draft.
3) Section 13.7 in the Style Guide does not address captions in figures specifically. IEEE staff editor can make capitalization changes as required prior to publication.

Cl **76** *SC* **76.3.2** *P* **118** *L* **48** # 73

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
PCS transmit function should be PCS Transmit function; also in line 49

SuggestedRemedy

Per comment

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change title of 76.3.2 from "PCS Transmit function" to "PCS transmit function"
Change title of 76.3.3. from "PCS Receive Function" to "PCS receive function"

Cl **76** *SC* **76.3.2** *P* **119** *L* **11** # 69
Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe] IDLE DELETION should be Idle Deletion, and so on

SuggestedRemedy

Per comment

Response *Response Status* **C**

REJECT.
In the current draft all layering diagrams consistently show layers in full caps.

Cl **76** *SC* **76.3.2.1** *P* **119** *L* **40** # 27
Mandin, Jeffrey PMC-Sierra

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

Draft 3.2 changed "Idle detection" to "Idle deletion", but did not do so in each place necessary.

SuggestedRemedy

Change "Idle Detection" to "Idle Deletion" on page 119, line 40.
Also on page 156, line 28.

Response *Response Status* **C**

ACCEPT.

Cl **76** *SC* **76.3.2.4** *P* **124** *L* **7** # 74
Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Document uses a mix of "FEC F/frame" and "FEC block". Need to pick one: KR uses "FEC block" almost exclusively. Make 9 changes.

SuggestedRemedy

Per comment

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
pg 124 ln 8, pg 158 ln 6 & 30:
change: "FEC Frame Encoding" to "FEC Encoding"

, pg 127 ln 35, pg 128 ln 4, pg 140 ln 34, pg 158 ln 31:
change "FEC frame" to "FEC codeword"

FEC codeword - 54
FEC F/frame - 7
FEC block - 8

Pg 29 Ln 8, Pg 21, Pg 140 ln 41, pg 144 ln 4, 45, 47, 52 pg 145 ln 1 change:
"FEC block" to "FEC codeword"

Pg 29 ln 13 change:
"FEC corrected blocks" to "FEC corrected codewords"

Pg 29 ln 27 change:
"FEC uncorrectable blocks" to "FEC uncorrectable codewords"

Editors to review all other instances of "block(s)" and "frame(s)" and take necessary action where these terms refer to FEC codewords. In some cases no action wil lbe required.

Cl **76** *SC* **76.3.2.4.1** *P* **124** *L* **27** # 75

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
How does x8+x4+x3+x2+1 equal 0x02? I thought we had established that 0x02 just means 2, or 00000011 in binary. Needs better explanation (again!)

SuggestedRemedy

Per comment

Response *Response Status* **C**

REJECT.
RS encoding is a complex topic. An exposition is given in http://www.informit.com/content/images/art_sklar7_reed-solomon/elementLinks/art_sklar7_reed-solomon.pdf

Some main points:

* A "primitive polynomial" is used to formally specify the sequence of elements in a "Galois Field". See page 13 in the reference above for further explanation.

* The "root" of the primitive polynomial f() is an element "alpha" of the Galois Field for which f(alpha) = 0.

* These definitions are used to create the addition and multiplication tables necessary to make the Reed-solomon encoder (see Tables 2 and 3 on page 17 of the reference)

* Elements of a Galois field aren't representable as conventional numbers. Since the addition and multiplication functions of Galois elements correspond to the behaviour of polynomials, the Galois elements are sometimes represented as polynomials.

* The "alpha" element is then represented by the simple polynomial "x".

The 10G-EPON draft text makes 2 statements:

1) The "primitive polynomial" for the formal definition of the Galois Field used by the 10G-EPON RS implementation is x8+x4+x3+x2+1.

2) There are different conventions regarding how to represent "alpha" (ie. polynomial "x") in binary. The 10G-EPON implementation shall follow the convention in which the lowest powers of the polynomial are written on the right - so that alpha is written as 0000 0010 ie. 0x2.

Cl **76** *SC* **76.3.2.5** *P* **128** *L* **16** # 76

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
"one packet of a maximum length (forty 66-bit blocks)." 320 bytes? The maximum 802.3 MAC frame is 2000 bytes so the maximum packet is similar: about 250 66-bit blocks. This isn't right.

SuggestedRemedy

Explain / Correct the statement included in D3.2

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change "(forty 66-bit blocks)" to "(i.e., at most forty 66-bit blocks of parity data)"

Note to commenter: the buffer never is required to hold a maximum sized frame, only the amount of data that must be delayed while the parity for a maximum sized frame is being transmitted.

Cl **76** *SC* **76.3.2.5.1** *P* **128** *L* **10** # 23

Hajduczenia, Marek ZTE Corp.

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

Removal of Figure 76-14 was justified at the time, though in the long run, we lose some solid piece of explanation on how Data Detector works in graphical terms. I think it is worth considering bringing the Figure back but with modifications, as proposed in 3av_0905_hajduczenia_3.pdf. Changes to the text in 76.3.2.5.1 are also marked in the file.

SuggestedRemedy

Per comment.

Proposed Response *Response Status* **Z**

REJECT.

This comment was WITHDRAWN by the commenter.

Cl **76** *SC* **76.3.2.5.1** *P* **128** *L* **20** # 22

Hajduczenia, Marek ZTE Corp.

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

Unknown PCS - 10GBASE-PRU

SuggestedRemedy

Change to "10GBASE-PR-U"

Response *Response Status* **C**

ACCEPT.

Cl **76** *SC* **76.3.2.5.1** *P* **128** *L* **38** # 24
Hajduczenia, Marek ZTE Corp.

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

In text "(Treceiver_settling) and synchronize its receive clock (TCDR)." - "receiver_settling" and "CDR" should be subscripted.

SuggestedRemedy

Per comment.

Response *Response Status* **C**

ACCEPT.

Cl **76** *SC* **76.3.2.6** *P* **134** *L* **14** # 25
Hajduczenia, Marek ZTE Corp.

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

Logical condition between states FEC_IS_ON and TRANSMIT_PARITY in Figure 76-17 is broken without any reason. Put it into a single line.

SuggestedRemedy

Per comment.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Editor to decide how to fix under editorial license.

Cl **76** *SC* **76.3.3.1** *P* **136** *L* **18** # 77
Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
31*66 blocks? See style guide and editor's web page for proper multiplication sign. Should this be "31, 66-bit blocks"? Same in 76.3.3.2.

SuggestedRemedy

Per comment

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change "31*66-bit blocks" to "thirty-one 66-bit blocks" in two places (pg 136 ln 18, pg 139 ln 51).
This is consistent with other cases in the draft where we refer to a quantity of 66-bit blocks (for example see pg 121 ln 1, pg 128 ln 16 among others).

Cl **76** *SC* **76.3.3.1** *P* **136** *L* **19** # 8
Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Duane Remein]
Wordsmything Similar to comment 163 in D3.0)

SuggestedRemedy

Change:
"When in codeword lock, the state diagram accumulates the appropriate contents of the 31 blocks that constitute a codeword in an input buffer."
to:
"While in codeword lock, the synchronizer copies the FEC-protected bits from each data block and the parity bits of the codeword into an input buffer."

Response *Response Status* **C**

ACCEPT.

Cl **76** *SC* **76.3.3.1.1** *P* **136** *L* **52** # 78
Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Justify or remove [] in inbuffer[] Also 76.3.3.3.1 outbuffer[]

SuggestedRemedy

Per comment

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
[The comment is against unchanged text, therefore is outside the scope of this recirculation ballot]
The draft contains 13 variables declared as arrays. 7 use no subscripts in the declaration, 2 use "<>" and 4 use "[ ]". IEEE Style guide and Editors info WEB Pages do not address the issue.
The editors suggest rationalizing all array variable definitions.
See 3av_0905_remein_2.pdf for details on this proposal with the following exceptions:
1) inbuffer description to read: "An array of 2040 bits that holds the input to the FEC decoder."

2) outbuffer description to read: "An array of 2040 bits that holds the output of the FEC decoder."

3) transmitEnable, description to read: "This array contains one element per each Multipoint MAC Control instance. Elements of this array are used
to control the transmit path in the Multipoint MAC Control instance at the OLT. Setting an element to TRUE indicates that the selected instance is permitted to transmit a frame. Setting it to FALSE inhibits the transmission of frames in the selected instance. Only one element of transmitEnable should be set to TRUE at a time."

Cl **76** *SC* **76.3.3.1.3** *P* **138** *L* **1** # 79

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Justify or remove () in BlockFromPMA(). Note that () was almost never used before EFM. also on other pages.

SuggestedRemedy

Per comment

Response *Response Status* **C**

REJECT.
Parenthesis were added in D3.2 and approved by the task force (see D3.0 comment #158). Another comment to remove parenthesis from function names was rejected (see D3.0 comment #72).

Cl **76** *SC* **76.3.3.2** *P* **140** *L* **1** # 80

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Figure 76-19-PCS Receive bit ordering? Explain / clarify the caption

SuggestedRemedy

Per comment

Proposed Response *Response Status* **Z**

REJECT.

This comment was WITHDRAWN by the commenter.

Cl **76** *SC* **76.3.3.3** *P* **142** *L* **46** # 111

Lin, Rujian

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

detect uncorrectable codewords

SuggestedRemedy

detecting uncorrectable codewords

Response *Response Status* **C**

ACCEPT.

Cl **76** *SC* **76.3.3.3** *P* **143** *L* **8** # 81

Hajduczenia, Marek ZTE Corp.

Comment Type **T** *Comment Status* **R** *True/FALSE*

[Submitted on behalf of Piers Dawe]
false or FALSE?

SuggestedRemedy

Choose one and use consistenty in all clauses.

Response *Response Status* **C**

REJECT.
The TF acknowledges that the draft is inconsistent in using FALSE and false, as is the current 802.3 standard. However, we emphasize that the draft is technically correct and use of FALSE vs false does not create any ambiguity. Making a large number of changes to the draft at this stage to improve the consistency is ill advised.

Cl **76** *SC* **76.3.3.3** *P* **144** *L* **6** # 82

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Text says "then each sync header of the received payload blocks in the FEC codeword is set to a value of binary 00. However, the data blocks are nevertheless passed to the descrambler to maintain descrambling synchronization." There are 31, 66-bit blocks in a codeword, right? Per Fig 49-16, it takes 16 bad sync headers to trip out of block lock and start slipping again. Is this really what you want; a single uncorrectable FEC codeword pulls the link down (even if not for very long)?

SuggestedRemedy

Per comment

Response *Response Status* **C**

REJECT.
10G-EPON does not use the synchronizer shown in Fig 49-12. In 10G-EPON synchronization is maintaned according to the uncorrected headers as shown in Figure 76-20.

Cl **76** *SC* **76.3.3.3.1** *P* **144** *L* **28** # 70
Hajduczenia, Marek ZTE Corp.

Comment Type **E** *Comment Status* **A**
[Submitted on behalf of Piers Dawe]
What TYPE?

SuggestedRemedy
Change to "TYPE: array"

Response *Response Status* **C**
ACCEPT IN PRINCIPLE.
See resolution to comment #78.

Cl **76** *SC* **76.3.3.3.3** *P* **145** *L* **12** # 7
Hajduczenia, Marek ZTE Corp.

Comment Type **T** *Comment Status* **A**
[Submitted on behalf of Duane Remein]
BlockToDescrambler should be BlockToDescrambler()

SuggestedRemedy
replace BlockToDescrambler with BlockToDescrambler()

Response *Response Status* **C**
ACCEPT.

Cl **76** *SC* **76.3.3.3.4** *P* **145** *L* **46** # 83
Hajduczenia, Marek ZTE Corp.

Comment Type **T** *Comment Status* **A** *pg 145 ln 46*
[Submitted on behalf of Piers Dawe]
"10GBASE-PR, 10GBASE-PR-U and 10/1GBASE-PRS-U" Should PRS be PRX? Isn't 10GBASE-PR-U a subset of 10GBASE-PR so why mention it? Also 76.3.3.7

SuggestedRemedy
Per comment

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

On pg 145 line 46 change "PRS" to "PRX" and "10GBASE-PR" to "10GBASE-PR-D"

Implement same fixes on pg 149 line 16.

Cl **76** *SC* **76.3.3.3.4** *P* **145** *L* **46** # 105
Kimura, Mitsunobu Hitachi Communicatio

Comment Type **G** *Comment Status* **A** *pg 145 ln 46*
"10/1GBASE-PRS-U" is shown.

SuggestedRemedy
Change "10/1GBASE-PRS-U" to "10/1GBASE-PRX-U".

Response *Response Status* **C**
ACCEPT.

Cl **76** *SC* **76.3.3.3.4** *P* **145** *L* **46** # 112
Lin, Rujian

Comment Type **T** *Comment Status* **A**
functions pertinent to the 10GBASE-PR, 10GBASE-PR-U and 10/1GBASE-PRS-U

SuggestedRemedy
functions pertinent to the 10GBASE-PR-D, 10GBASE-PR-U and 10/1GBASE-PRX-U

Response *Response Status* **C**
ACCEPT.
Fixed in another comment.

Cl **76** *SC* **76.3.3.3.4** *P* **145** *L* **47** # 26
Hajduczenia, Marek ZTE Corp.

Comment Type **TR** *Comment Status* **A** *pg 145 ln 46*
"10/1GBASE-PRS-U" does not exist - "10/1GBASE-PRX-U" does

SuggestedRemedy
Per comment

Response *Response Status* **C**
ACCEPT.

Cl **76** *SC* **76.3.3.3.4** *P* **145** *L* **51** # 84
Hajduczenia, Marek ZTE Corp.

Comment Type **T** *Comment Status* **A**
[Submitted on behalf of Piers Dawe]
The FEC decoding process function. Delete "function"?

SuggestedRemedy
Per comment

Response *Response Status* **C**
ACCEPT.

Cl **76** *SC* **76.3.3.3.7** *P* **149** *L* **16** # 113

Lin, Rujian

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

functions pertinent to the 10GBASE-PR, 10GBASE-PR-U and 10/1GBASE-PRS-U

SuggestedRemedy

functions pertinent to the 10GBASE-PR-D, 10GBASE-PR-U and 10/1GBASE-PRX-U

Response *Response Status* **C**

ACCEPT.
Fixed in another comment.

Cl **76** *SC* **76.3.3.4** *P* **146** *L* **35** # 85

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
The following objects apply to 10G-EPON PCS management. Should that be objectives? If you mean objects, there is no mention of "objects" except in Clause 30. Anyway, why is this paragraph under a heading "BER Monitor control"? If you want to talk about the link between Clause 76 and (optional) MDIO, that's usually done near the beginning of each sublayer's (sub)clause.

SuggestedRemedy

Per comment

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change "76.3.3.4 BER Monitor control" to "76.3.3.4 BER Monitor" and delete paragraph starting with "The following objects apply to 10G-EPON PCS management …"

Cl **76** *SC* **76.3.3.4.4** *P* **171** *L* **19** # 28

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Seiji Kozaki]
In Figure 76-22, the moving condition from BER_BAD_SH to BER_TEST_SH is wrong. To understand clearly, please see and compare with Figure 49-13.

SuggestedRemedy

Change "ber_test_sh * ber_cnt < ber_threshold * interval_timer_done" to "ber_test_sh * ber_cnt < ber_threshold * !interval_timer_done".

Response *Response Status* **C**

ACCEPT.
Note to editor: keep term "ber_cnt < ber_threshold" on first line

---

Cl **76** *SC* **76.3.3.7** *P* **149** *L* **16** # 106

Kimura, Mitsunobu Hitachi Communicatio

Comment Type **G** *Comment Status* **A**

"10/1GBASE-PRS-U" is shown.

SuggestedRemedy

Change "10/1GBASE-PRS-U" to "10/1GBASE-PRX-U".

Response *Response Status* **C**

ACCEPT.

Cl **76** *SC* **76.3.3.7.3** *P* **150** *L* **20** # 6

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Duane Remein]
T_TYPE defined twice, once in 76.3.2.1.3 "T_TYPE(tx_raw<71:0>)
This function is defined in 49.2.13.2.3." and again in 76.3.3.7.3. "T_TYPE(rx_raw)
This function is defined in 49.2.13.2.3."

SuggestedRemedy

In remove definition in 76.3.3.7.3 and refer back to definition in 76.3.2.1.3.

Proposed Response *Response Status* **Z**

REJECT.

This comment was WITHDRAWN by the commenter.

Cl **76** *SC* **76.99** *P* **159** *L* **4** # 11

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Duane Remein]
Subclause 76A.2, Table 76A-1 may be mis-interperated. Is it read in rows or in columns?

SuggestedRemedy

Add a footnote stating the table is to be read left to right, top to bottom.

Response *Response Status* **C**

ACCEPT.
[The comment is against unchanged text, therefore is outside the scope of this recirculation ballot]

Cl **76A** *SC* **76A** *P* **158** *L* **6** # 86
Hajduczenia, Marek ZTE Corp.

Comment Type **E** *Comment Status* **A**
[Submitted on behalf of Piers Dawe]
76A FEC Frame Encoding example should be FEC block encoding example,

SuggestedRemedy
Per comment

Response *Response Status* **C**
ACCEPT IN PRINCIPLE.
See resolution to comment #74.

Cl **76A** *SC* **76A.2** *P* **158** *L* **36** # 87
Hajduczenia, Marek ZTE Corp.

Comment Type **E** *Comment Status* **A**
[Submitted on behalf of Piers Dawe]
76A.2 64B/66B Block Input should be 64B/66B block input

SuggestedRemedy
Per comment

Response *Response Status* **C**
ACCEPT.

Cl **76A** *SC* **76A.2** *P* **159** *L* **5** # 16
Hajduczenia, Marek ZTE Corp.

Comment Type **T** *Comment Status* **A**
Table 76A-1 could be more readable if it was presented in two columns only - see 3av_0905_hajduczenia_1.pdf

SuggestedRemedy
Per comment.

Response *Response Status* **C**
ACCEPT.

Cl **76A** *SC* **76A.8** *P* **163** *L* **23** # 17
Hajduczenia, Marek ZTE Corp.

Comment Type **T** *Comment Status* **A**
Table 76A-7 could be more readable if it was presented in two columns only - see 3av_0905_hajduczenia_2.pdf

SuggestedRemedy
Per comment.

Response *Response Status* **C**
ACCEPT.

Cl **77** *SC* **77.1.3** *P* **169** *L* **41** # 88
Hajduczenia, Marek ZTE Corp.

Comment Type **E** *Comment Status* **A**
[Submitted on behalf of Piers Dawe]
Figure 77-4: White stuff over text? line 41

SuggestedRemedy
Remove the offending element

Response *Response Status* **C**
ACCEPT.

Cl **77** *SC* **77.2.2.1** *P* **175** *L* **31** # 97
Hajduczenia, Marek ZTE Corp.

Comment Type **T** *Comment Status* **D**
[Submitted on behalf of Duane Remein]
"FEC_CODEWORD_SIZE value appears to be in error."

SuggestedRemedy
Change from 148 to 223. Change line41 (FEC_PAYLOAD_SIZE) from 216 to 223.

Proposed Response *Response Status* **Z**
REJECT.

This comment was WITHDRAWN by the commenter.

Cl **77** *SC* **77.2.2.7** *P* **181** *L* **8** # 71

Hajduczenia, Marek ZTE Corp.

Comment Type **E** *Comment Status* **R** *Text size*

[Submitted on behalf of Piers Dawe]
Unnecessarily small font: 8 is minimum unless you are desperate for space (not here)

SuggestedRemedy

Change most or all 7 point (or smaller) to 8 point

Response *Response Status* **C**

REJECT.

(1) [The comment is against unchanged text, therefore is outside the scope of this recirculation ballot]

(2) Per requirements included in 16.1 Requirements for creating figures in 2009 Style Manual, font size should not be smaller than 6 points. 7 points is acceptable.

(3) Increasing font size will require rearrenging states and transitions.

Cl **77** *SC* **77.2.2.7** *P* **184** *L* **1** # 101

Mandin, Jeffrey PMC-Sierra

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

Draft 3.2 revises the ONU control multiplexer in a way which uses "magic numbers" and calculates overhead differently than is done in the OLT.
Instead, we should ensure that each new burst maintains the current column alignment.
The resulting solution is:
- simpler (no magic numbers)
- consistent with the approach in the OLT control mux
- more efficient (maximum of 3 bytes overhead per burst rather than 3 bytes per-FEC block)

SuggestedRemedy

Revise as in 3av_0509_mandin_1.pdf

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Revise as in 3av_0904_mandin_2.pdf

Cl **77** *SC* **77.3.2.1** *P* **186** *L* **5** # 107

Kimura, Mitsunobu Hitachi Communicatio

Comment Type **G** *Comment Status* **R** *Text size*

In Figure 77-13, font size of index of each state, e.g. ("INIT", "WAIT FOR TRANSMIT", "TRANSMIT READY" , "PARSE OPCODE", etc.) is bigger than Figure 77-12 and Figure 77-14.

SuggestedRemedy

Match the font size of index of each state in Figure 77-13 to the ones in Figure 77-12 and 77-14.

Response *Response Status* **C**

REJECT.
[The comment is against unchanged text, therefore is outside the scope of this recirculation ballot]

Cl **77** *SC* **77.3.3.2** *P* **191** *L* **49** # 100

Kramer, Glen Teknovus, Inc.

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

[Submitted on behalf of Eric Lynskey]
Text refers to sync pattern of 0x5555 and needs to be updated to reflect current sync pattern.

SuggestedRemedy

. . .ONU sends a synchronization pattern (see 76.3.2.5.2) followed by a burst delimiter . . .

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

"…ONU sends synchronization pattern (SP, see 76.3.2.5.2) followed by burst delimiter pattern (BURST_DELIMITER, see 76.3.2.5.2)."

Cl **77** *SC* **77.3.3.6** *P* **195** *L* **24** # 99

Kramer, Glen Teknovus, Inc.

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

The section contains multiple state diagrams

SuggestedRemedy

Change section title to State Diagrams
Same for 77.3.4.6

Response *Response Status* **C**

ACCEPT.

Cl **77** *SC* **77.3.5.5** *P* **208** *L* **35** # 89

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Is deactive a word? I don't think so. Maybe inactive? And what is "the status value"? This is the only section in 802.3av that uses either term, so suspect they are both wrong terms.

SuggestedRemedy

Per comment

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

"status value is deactive." > "parameter <italics>status</italics> value is equal to <italics>deactive</italics>" in lines 33, 35, 38, 41 on page 208.

The TF has decided to keep existing term "deactive" for message definition consistency with Clause 64 1G-EPON.

Cl **77** *SC* **77.3.5.6** *P* **210** *L* **41** # 98

Kramer, Glen Teknovus, Inc.

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

In Figure 77-29, in INCOMING GRANT state, in the condition (length[counter] > laserOnTime + syncTime + laserOffTime + tailGuard)) all variables and constants are expressed in TQ, except the tailGuard. The tailGuard is defined as 38 octets.
Also, using such condition in this clause doesn't make sense, because minimum grant should allow for at least one full FEC codeword.

SuggestedRemedy

Using the following condition instead of the specified:
(length[counter] >= laserOnTime + syncTime + laserOffTime + minGrantLength))
Where minGrantLength is defined as
minGrantLength
TYPE: 32 bit unsigned
This constant represents the minimum effective duration of ONU's transmission, which is equal to one FEC codeword (see FEC_CODEWORD_SIZE in 77.2.2.1) expressed in units of time_quanta.
VALUE: 13

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Use changes as presented in 3av_0904_kramer_1.pdf.

In addition do the following changes:
Pg 220 ln 16 and Pg 214 ln 37 and ln 42 - strike ", BURST_DELIMITER" from "Time, laserOffTime, BURST_DELIMITER and END_BURST_DELIMITER"

Cl **77** *SC* **77.3.6.1** *P* **215** *L* **10** # 90

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Bad filed name "OLT is 1G upstream capable"; should this be "OLT 1G upstream capability"?

SuggestedRemedy

Per comment

Response *Response Status* **C**

REJECT.
[The comment is against unchanged text, therefore is outside the scope of this recirculation ballot]
TF prefers to keep the text the way it is.

Cl **77** *SC* **77.3.6.3** *P* **218** *L* **22** # 66

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
8 bit should be 8-bit

SuggestedRemedy

Scrub the document.

Response *Response Status* **C**

ACCEPT.

Cl **77** *SC* **77.3.6.3** *P* **218** *L* **45** # 92

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
"when constructing a complying MPCP protocol implementation." Should apply in use, not just in constructing. We don't want to discuss non-complying implementations. Delete.

SuggestedRemedy

Per comment

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Delete all occurences of this text if offending (5 occurences in total)

Cl **77** *SC* **77.3.6.3** *P* **247** *L* **27** # 91

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
d) Discovery Information. This is a 16-bit flag register. Table 77-6 presents the internal structure of the Discovery Information flag field. Table 77-6-REGISTER_REQ MPCPDU Discovery Information Fields should be d) Discovery Information. This is a 16-bit flag register. Table 77-6 presents the structure of the Discovery Information field. Table 77-6-REGISTER_REQ MPCPDU Discovery Information field

SuggestedRemedy

Per comment

Response *Response Status* **C**

ACCEPT.

Is
d) Discovery Information. This is a 16-bit flag register. Table 77-6 presents the <delete>internal</delete> structure of the Discovery Information flag field. Table 77-6-REGISTER_REQ MPCPDU Discovery Information <change>Fields</change>

should be
d) Discovery Information. This is a 16-bit flag register. Table 77-6 presents the structure of the Discovery Information field. Table 77-6-REGISTER_REQ MPCPDU Discovery Information field

Cl **77** *SC* **77.3.6.4** *P* **219** *L* **49** # 93

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Split Table 77-7 REGISTER MPCPDU Flags field

SuggestedRemedy

Fix it

Response *Response Status* **C**

ACCEPT.

Cl **77** *SC* **77.3.6.4** *P* **220** *L* **10** # 94

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Strange term "higher-layer-entity" Use proper term, here and next page.

SuggestedRemedy

Per comment

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change "higher-layer-entity" to "MAC Control Client" on page 220 and 221

Cl **77** *SC* **77.3.6.4** *P* **221** *L* **24** # 110

Mandin, Jeff

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

stray text

SuggestedRemedy

Delete the sentence that begins "This field is a 16 bit..."
Attach "as presented in Table 77-8" to the previous sentence.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Delete text ".Echoed assigned port. This field holds a 16-bit unsigned value reflecting the LLID of the port assigned following registration" from point b) in 77.3.6.5.

Cl **77** *SC* **77.3.6.5** *P* **221** *L* **23** # 95

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
In the following: b) Flags. this is an 8-bit flag register that indicates special requirements for the registration. Echoed assigned port. This field holds a 16-bit unsigned value reflecting the LLID of the port assigned following registration, as presented in Table 77-8. Table 77-8-REGISTER_ACK MPCPDU Flags fields

SuggestedRemedy

this should be This. Space after registration. Should Echoed assigned port start a new bullet or be deleted as similar to bullet c? Text says Echoed assigned port. This field holds a 16-bit unsigned value reflecting the LLID of the port assigned following registration, as presented in Table 77-8. but Table 77-8-REGISTER_ACK MPCPDU Flags fields says values 0 to 255 (8 bits).

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
- "this" should be "This" in line 23 on page 221.
Also see comment #110.

Cl **77** *SC* **77.3.6.5** *P* **250** *L* **37** # 96

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Table width. Wasted space: set Figure 77-36-REGISTER_ACK MPCPDU to float?

SuggestedRemedy

Per comment

Response *Response Status* **C**

ACCEPT.
[s/b Pg 222]
[was Clause 222 Subclause 222, s/b Cl 77 SubCl 77.3.6.5, changed required to import into comment database tool]

Cl **77** *SC* **77.4.1** *P* **223** *L* **11** # 10

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Duane Remein]
Table 77-9 still using 1/1 Gb/s, 10/1 Gbps and 10/10 Gbps foro ONT types.

SuggestedRemedy

Change to 1G-EPO, 1/10G-EPON and 10/10G-EPON.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change 1/1 Gbit/s to 1G-EPON
Change 10/1 Gbit/s to 10/1G-EPON
Change 10/10 Gbit/s to 10/10G-EPON

remove "[DS./US transmission speed]" from heading for column 1.

Cl **77** *SC* **77.4.2** *P* **224** *L* **11** # 109

Mandin, Jeff

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

This subclause pedanticly describes the registration behaviour for a subset of the ONU types (ie. 1/1 ONU, 10/1 ONU, 10G ONU supporting both upstreams). However the symmetric 10/10 ONU is not described.

SuggestedRemedy

Insert the following paragraph after line 4: "A 10/10 Gb/s ONU is only capable of receiving discovery GATE MPCPDU transmitted by the OLT in the 10 Gb/s broadcast channel. These messages are parsed, and if a 10 Gb/s discovery window is opened, the ONU may attempt to register in the EPON."

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

In line 1 on page 224 replace "10/1 Gb/s" with "10/1G-EPON"

Add after line 4 on page 224.

"A 10/10G-EPON ONU is only capable of receiving discovery GATE MPCPDU transmitted by the OLT in the 10 Gb/s broadcast channel. These messages are parsed, and if a 10 Gb/s discovery window is opened, the ONU may attempt to register in the EPON."

Cl **77** *SC* **77.4.2** *P* **224** *L* **27** # 108

Mandin, Jeff

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

Change "LLID 0xffff" to "LLID 0x7fff"
Change "LLID 0xfffe" to "LLID 0x7ffe"

SuggestedRemedy

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change "LLID 0xFFFF" to "LLID 0x7FFF"
Change "LLID 0xFFFE" to "LLID 0x7FFE"

Cl **99** *SC* **99** *P* **14** *L* **23** # 37

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Over-aggressive hyphenation

SuggestedRemedy

Set hyphenated minimum to 3: Paragraph designer, Advanced, set shortest suffix to 3

Response *Response Status* **C**

REJECT.
Manual style changes (which is what would have to be done in this case unless we want to risk unintended changes throughout the draft) are inherently error prone and should be avoided.

The issue will be refered to the IEEE staff editor.

Cl **99** *SC* **99** *P* **2** *L* **2** # 30

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Missing spaces

SuggestedRemedy

10Gb/s should be 10 Gb/s 4 times, 1Gb/s should be 1 Gb/s (twice)

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Fix all occurrances:
5 instances of 10Gb/s (pg 2 ln 2 (three times), ln 3, pg 43 ln 27),
2 instances of 1Gb/s (pg 2 ln 18, 20).

Cl **99** *SC* **99** *P* **3** *L* **13** # 31

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
IEEE Std 802.3xx-200X

SuggestedRemedy

Should this be IEEE Std 802.3av-200X ? Also at line 40. If so, TM at p4 line 21 would appear earlier, not there.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change two instances of "IEEE Std 802.3xx-200X" to "IEEE Std 802.3-2008" (Pg 3 ln 13 & Ln 40). Change 1 instance of "P802.3xx to P802.3av" (Pg 6 ln 3).

Cl **99** *SC* **99** *P* **3** *L* **37** # 32

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
IEEE Std 802.3-200X

SuggestedRemedy

Should be IEEE Std 802.3-2008 Also at line 43

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99** *P* **3** *L* **40** # 33

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]

SuggestedRemedy

change "is comprises of" to "is composed of" or to "comprises"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

change "is comprised of" to "comprises".

Cl **99** *SC* **99** *P* **4** *L* **10** # 34

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
As in P802.3bc, please change "specify subscriber access physical layers and sublayers" to...

SuggestedRemedy

specify subscriber access and other physical layers and sublayers

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99** *P* **5** *L* **39** # 35

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Why is this URL not blue like the others? Also bottom of p33, p158

SuggestedRemedy

Response *Response Status* **C**

ACCEPT.

Cl **99** *SC* **99** *P* **6** *L* **18** # 36

Hajduczenia, Marek ZTE Corp.

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

[Submitted on behalf of Piers Dawe]
Ordinary members should appear here.

SuggestedRemedy

Using graphics tools, select graphical object (arrow symbol), stretch the bottom of the triple columns and the bottom of the anchored frame so it fits on p6. You will have to move a few names to the continuation frame (and maybe resize it also).

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Editors will also add listing of Sponsor Ballot membership.