

CI 45 SC 45.2.1.4.b P 29 L 20 # 4184
Hajduczenia, Marek Bright House Networks

Comment Type E Comment Status D ez

>>Insert 45.2.1.4.b before 45.2.1.4.a (as inserted by IEEE Std 802.3by-201x) as follows:"<< - extra " at the end of editorial instructions

SuggestedRemedy

Remove extra "
Similar change on page 29, line 25

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 45 SC 45.2.1.6 P 30 L 14 # 4185
Hajduczenia, Marek Bright House Networks

Comment Type E Comment Status D ez

No RO in Table 45-7

SuggestedRemedy

No need to include in the draft amendment

Proposed Response Response Status W

PROPOSED REJECT.
You only see part of the table, see Section 4 of Std

CI 45 SC 45.2.1.141.1 P 40 L 4 # 4186
Hajduczenia, Marek Bright House Networks

Comment Type E Comment Status D ez

"When set to zero the associated CNU_ID has not been assigned." - when what is set to zero?

SuggestedRemedy

Change "When set to zero the associated CNU_ID has not been assigned." to "When bit 1.1915.15 is set to zero the associated CNU_ID has not been assigned."

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
use "When this bits is set to zero ..."

CI 45 SC 45.2.1.142.3 P 40 L 52 # 4187
Hajduczenia, Marek Bright House Networks

Comment Type TR Comment Status D Discussed, Reserved registers

There is NO reason to indicate why something is reserved. There can be hundreds of reasons why these bits might be used and it is not the role of the TF to restrict how future amendments are done (or not)

SuggestedRemedy

remove 45.2.1.142.3

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
Change these from Reserved to "MAC Add Expansion" in Table 45-98I
in 45.2.1.142.3 change to:
"Bits 1.1920.15:0 are intended to be used for bits [63:48] of the MAC address in the event the MAC address is expanded to 64 bits. Until this expansion occurs these bits are always zero and ignored on receipt."

CI 45 SC 45.2.1.147 P 42 L 37 # 4188
Hajduczenia, Marek Bright House Networks

Comment Type E Comment Status D ez formatted

"UQ34.3 formatted number" - I believe it is "formatted" and not "formatted"

SuggestedRemedy

Change all instances of "formated" to "formatted"

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 45 SC 45.2.1.149 P 43 L 45 # 4189
Hajduczenia, Marek Bright House Networks

Comment Type E Comment Status D ez

"NMW = Multi-word" - only MW is used in the table

SuggestedRemedy

Change "NMW" to "MW" - scrub the rest of the draft

Proposed Response Response Status W

PROPOSED ACCEPT.
only one instance in draft

Cl 45 **SC 45.2.1.162.1** **P 48** **L 28** # **4190**
Hajduczenia, Marek Bright House Networks

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

"Bits 1.1949.15:0 through 1950.7:0 form a 24 bit value" - I believe "24 bit" is used as an adjective and should be hyphenated

SuggestedRemedy
Change "24 bit" to "24-bit". Also, scrub the rest of the draft for similar use cases and insert hyphens as needed

Proposed Response **Response Status** **W**
PROPOSED ACCEPT IN PRINCIPLE.
fix this instance and any others noticed

Cl 45 **SC 45.2.1.163.2** **P 49** **L 10** # **4191**
Hajduczenia, Marek Bright House Networks

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

"Response in units of 0.25 dBmV/1.6MHz." - missing space between numeric value and units in "1.6MHz"

SuggestedRemedy
Insert the missing space. Make sure all values in the draf have a following space before unit. There are multiple instances in the draft (quick search shows at least 10 hits for problems with MHz)

Proposed Response **Response Status** **W**
PROPOSED ACCEPT IN PRINCIPLE.
See comment 4303

Cl 45 **SC 45.2.1.165** **P 50** **L 1** # **4192**
Hajduczenia, Marek Bright House Networks

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

Footnote separated from the table

SuggestedRemedy
Please make sure footnotes do not get separated from the tables

Proposed Response **Response Status** **W**
PROPOSED REJECT.
Tables will continue to shift until very close to final draft, and maybe not even then. I know of no easy way to fix this (I tried several), especially without causing excessive white space which the commenter has objected to before. Consider resubmitting this comment near the end of Sponsor Ballot.

Cl 45 **SC 45.2.1.166.3** **P 51** **L 23** # **4193**
Hajduczenia, Marek Bright House Networks

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

"Bits 1.1959.14:0 indicate which CNU the CLT is to measure the received power on." - there is no information on how these CNUs are identified, i.e., what value is inserted into this register

SuggestedRemedy
Provide information on how the CNU is beign identified.

Proposed Response **Response Status** **W**
PROPOSED ACCEPT IN PRINCIPLE.
Change to:
"When set to a CNU_ID bits 1.1959.14:0 indicate ..."

Change xRef to 100.3.3.1.

Update RxPwr_CINU_ID pg 109 line 16 from
"This variable indicate ..." to
"When set to a CNU_ID this variable indicates ..." and eliminate dup entry for this variable.

Cl 45 **SC 45.2.7a.5.3** **P 56** **L 22** # **4194**
Hajduczenia, Marek Bright House Networks

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

This does not read right: "Bits 12.10241.14:0 indicate which CNU on which to measure the MER and report in registers 12.10242 through 12.12287"

SuggestedRemedy
Change to "Bits 12.10241.14:0 indicate the CNU on which to measure the MER and report in registers 12.10242 through 12.12287."
Add also information on how this CNU is identified - there is no information on this right now.

Proposed Response **Response Status** **W**
PROPOSED ACCEPT IN PRINCIPLE.
Change to:
"Bits 12.10241.14:0 indicate the CNU_ID of the CNU on which to measure the MER and report in registers 12.10242 through 12.12287."

Cl 100 SC 100.1.3 P 71 L 46 # 4195
 Hajduczenia, Marek Bright House Networks

Comment Type E Comment Status D *discussed*

"mode, is defined in clause, with downstream data rate calculation in 100.2.6.1" - which Clause is it defined in?

SuggestedRemedy
 Provide information on which clause the said PMD is defined in (likely, Clause 100)

Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 The next sentence on upstream is more clear and says "in this clause". Looks like the "this" is missing from the downstream.

For line 46, change "in clause" to "in this clause".

Cl 100 SC 100.2.6.3 P 80 L 8 # 4198
 Hajduczenia, Marek Bright House Networks

Comment Type E Comment Status D *EZ*

"This variable is set to TRUE if the CNU calculation of DS_DataRate differs from the DS_DataRate calculation communicated from the CLT by more than 10 b/s otherwise the variable is set to FALSE" - it seems that there should be "," or ";" before the word "otherwise" to separate two independent portions of the sentence

SuggestedRemedy
 Insert ";" in indicated location in the description of DS_RateMatchFail and US_RateMatchFail variables

Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 100 SC 100.1.4 P 73 L 3 # 4196
 Hajduczenia, Marek Bright House Networks

Comment Type E Comment Status D *discussed*

Dead link: "numbered register for Clause 45 registers." - no way to check all of them in PDF

SuggestedRemedy
 Please scrub the draft and make sure all links are live / active.

Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 1. Add cross reference to Clause 45 on Page 73, Line 3.
 2. Do a sanity check on xrefs in the clause.

Cl 100 SC 100.2.7 P 80 L 19 # 4199
 Hajduczenia, Marek Bright House Networks

Comment Type T Comment Status D *EZ*

"Equipment conforming to this standard shall clearly mark ." - equipment is typically labelled, not marked

SuggestedRemedy
 Change "Equipment conforming to this standard shall clearly mark" to "Equipment conforming to this standard shall be clearly labelled with information about the"

Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 100 SC 100.2.1.3 P 76 L 33 # 4197
 Hajduczenia, Marek Bright House Networks

Comment Type TR Comment Status D *EZ*

Heading "100.2.1.3 PMD_UNITDATA.indication" indicates that PMD_UNITDATA.indication primitive is to be described, yet the text speaks of PMD_SIGNAL.request primitive. Which is it? It seems (based on CMP version) that in D2.0 the text was correct, but it was modified incorrectly in D2.0

SuggestedRemedy
 Please revert text from D2.0 - it was correct. Current text is NOT. Current text seems to be repetition of text from 100.2.1.4 PMD_SIGNAL.request

Proposed Response Response Status W
 PROPOSED ACCEPT.
 Draft 2.1: Page 76, paragraph from lines 32 to 35. Replace entire paragraph with the paragraph from Draft 2.0, Page 86, Lines 36 through 38.

Cl 00 SC 100.2.8.2 P 82 L 15 # 4200
 Hajduczenia, Marek Bright House Networks

Comment Type E Comment Status D *Discussed*

Wrong format for a NOTE

SuggestedRemedy
 Please use the proper style of text that is intended to be marked as an informative NOTE
 Multiple instances in the document

Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Change to note format. Other instances in the draft will be correct if noticed.

CI 100 SC 100.2.9.3 P 90 L 21 # 4201
 Hajduczenia, Marek Bright House Networks

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

The CLT can only ensure it once: "The CLT ensures ensure the following"

SuggestedRemedy
 Change to "The CLT ensures the following"

Proposed Response Response Status **W**
 PROPOSED ACCEPT.

CI 100 SC 100.2.9.3.1 P 90 L 42 # 4202
 Hajduczenia, Marek Bright House Networks

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

It is not clear what the purpose of Variables is here - there are no SDs to describe this function.

SuggestedRemedy
 Remove, ReportedPwr is used only in this definition anyway.
 Similar observation for 100.2.11.1 - these variables are not used in any SDs and are referenced just once outside of 100.2.11. 100.3.3.1 is another example of self-serving variables with no explicit need.

Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 ReportedPwr is communicated across the PHY Link from each CNU to the CLT.

Pg 90 line 20 add:
 "The CNU shall report its transmit power using the variable ReportedPwr when requested by the CLT."
 Update PICS

CI 100 SC 100.2.9.4.2 P 93 L 34 # 4203
 Hajduczenia, Marek Bright House Networks

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

Is it log<sub>10 or log10?

SuggestedRemedy
 Line 30 uses log<sub>10 and here it is just log 10 - are they intended to be the same?

Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 See comment #4314

CI 100 SC 100.2.9.4.3 P 95 L 29 # 4204
 Hajduczenia, Marek Bright House Networks

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

Three issues here:
 (1) equation number seems to be part of the equation itself
 (2) different multiplication characters used - note "x(0.4" where "x" is used and not a proper multiplication character
 (3) is the Round operand rounding up or down or in some other way? Use floor / ceil functions which are already defined

SuggestedRemedy
 Per comment

Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 1) AIP: remove " MHz" from the equation to see if it fits better. Consider other options for dealing long equations.
 2) Accept: change multiplication symbols to be consistent
 3) AIP: Floor/ceiling are down/up to the nearest integer, use of Round{} in this equation is to round to the nearest 0.1. Add sentence following EQ 100-18: "The notation Round(x) as used in Equation 100-18, represents a rounding function which returns the value of its argument x rounded to the nearest tenth of an integer." Change from "(" and ")" in EQ 100-18 to parenthesis, remove the ",0.1" from the equation.

CI 100 SC 100.2.9.4.3 P 95 L 22 # 4205
 Hajduczenia, Marek Bright House Networks

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

"P1scaled = P1 × (0.4 MHz)/(Measurement Bandwidth (MHz) used in Table 100-7)" - this is incomprehensible. If this is equation, what is the purpose of MHz in it? If it is expected to be descriptive, then these all items should be bulleted and formatted accordingly

SuggestedRemedy
 Per comment

Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 Page number changed to 95.
 Line 22, change "(0.4 MHz)" to "0.4", remove "(MHz)".

CI 100 SC 100.2.12.3 P 106 L 1 # 4206
 Hajduczenia, Marek Bright House Networks

Comment Type E Comment Status D
 Fancy shady background in Figure 100-4 in individual function blocks

SuggestedRemedy

Redraw with no colour in individual boxes and addition symbols, at best in Frame (seems like it is external drawing right now)

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
 See comment #4310

CI 00 SC 101.1.4 P 122 L 34 # 4207
 Hajduczenia, Marek Bright House Networks

Comment Type TR Comment Status D Discussed OR

Looking at Figure 101-1, there is only one instance of PMD_UNITDATA.request(tx_unit), which seems to be the same for each CPW talking to PMD FUNCTIONS block. PMD_UNITDATA does not have any indication which of the individual functional blocks is delivering data - how can them PMD FUNCTIONS make any sense of it?

SuggestedRemedy

Consider labelling individual instances of PMD_UNITDATA, e.g., by changing "PMD_UNITDATA.request(tx_unit)" to "PMD_UNITDATA.request(tx_unit, lane_nbr)" and using CPW instance number as parameter - these are just descriptive primitives. Similar issue exists in Figure 101-3 but this time with PMD_UNITDATA.indication(tx_unit) primitive

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Was CI 101

In CI 100 Pg 76 line 20 change

"The semantics of the service primitive are PMD_UNITDATA.request(I_value, Q_value). The data conveyed by PMD_UNITDATA.request is a continuous stream of I / Q value pairs. Both I_value and Q_value are encoded as 32-bit signed integers." to

"The semantics of the service primitive are PMD_UNITDATA.request(I_value, Q_value, ChNum). The data conveyed by PMD_UNITDATA.request is a continuous stream of I / Q value pairs. Both I_value and Q_value are encoded as 32-bit signed integers. ChNum indicates which one of five channels the PMD_UNITDATA.request is for."

Pg 77 line 4 change

PMD_UNITDATA.request(I_value, Q_value) to
 PMD_UNITDATA.request(I_value, Q_value, ChNum).

In Figure 101-1 change

PMD_UNITDATA.request(tx_unit) to
 PMD_UNITDATA.request

Make similar changes for PMD_UNITDATA.indication

CI 101 SC 101.3.2.5.7 P 142 L 50 # 4214
Hajduczenia, Marek Bright House Networks

Comment Type E Comment Status D ez

Missing "=" symbol in "bits<1:32> the current PHY Link timestamp" - for consistency with the surrounding text

SuggestedRemedy

Change "bits<1:32> the current PHY Link timestamp" to "bits<1:32> = the current PHY Link timestamp"

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 101 SC 101.3.2.5.7 P 142 L 50 # 4215
Hajduczenia, Marek Bright House Networks

Comment Type ER Comment Status D

The text of the PDF when copied into clipboard contains a lot of unprintable characters:
BurstTimeHeader()□
The BurstTimeHeader() function returns a 65-bit vector with the following values: □
bit <0> = binary 1 □
bits<1:32> the current PHY Link timestamp□
bits<33:64> = a fixed value of 0xD858E4AB.□
This 65-bit vector is transmitted as the first 65-bit block of an upstream burst.

SuggestedRemedy

This is the only draft currently in circulation that has this issue - it was not present in D2.0.
Please fix it!
Having to remove such garbage from text every time anything is copied from the document is annoying and time consuming.

Proposed Response Response Status W

PROPOSED REJECT.

The text in question uses Paragraph Tag "DefinitionList" per the current template. Copying and pasting from the template example includes the same "unprintable character" (which is a manual line break). This is consistent with the current template. The commenter is invited to discuss this with the TF/WG editors if this is indeed an issue which is considered blocking for publication.

CI 101 SC 101.3.2.5.7 P 144 L 47 # 4216
Hajduczenia, Marek Bright House Networks

Comment Type T Comment Status D ez

"ARRAY_IN[]" to the PMA using" - since you do not expect ARRAY_IN to be empty, it should be referenced by name without empty []

SuggestedRemedy

Change "ARRAY_IN[]" to the PMA using" to "ARRAY_IN to the PMA using"

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 101 SC 101.3.2.5.7 P 145 L 16 # 4217
Hajduczenia, Marek Bright House Networks

Comment Type E Comment Status D ez

Incorrect format for NOTE: "Note: in the CLT the lastcodeword argument to this function is always TRUE (see Figure 101-12)." - please apply a correct style

SuggestedRemedy

Per comment
Also, three locations in 101.4.2.1.2

Proposed Response Response Status W

PROPOSED REJECT.

The text is using Paragraph Tag "Note" as are the two notes in 101.4.2.1.2 (the editor cannot find a third note in 101.4.2.1.2). This is consistent with the WG template.

Cl 101 **SC 101.3.2.5.8** **P 146** **L 17** # **4218**
Hajduczenia, Marek Bright House Networks

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

ELSE, Else, or else?

SuggestedRemedy
Please use consistent capitalization. The same applies to UTC, TRUE, FALSE, which just makes it harder for a reader to figure out whether true and TRUE when used on the same SD are the same or not ...

Proposed Response **Response Status** **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change 2 instances of
"true" to "TRUE" (pg 146 lin 16 & 155 ln 7)
and 1 instance of
"false" to "FALSE" (pg 142 line 27)
as the TF agree to use these exclusively some time ago.
UTC only appear as such.
ELSE, Else, & else are all used in the standard as was noted in rejected "E" comment # 3839
against draft 2.0 and will not be changed.

Cl 101 **SC 101.3.3.1.6** **P 153** **L 30** # **4219**
Hajduczenia, Marek Bright House Networks

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

Missing "is" in "This variable used for counting bits in the Transfer from PMA process."

SuggestedRemedy
Change to "This variable is used for counting bits in the Transfer from PMA process."

Proposed Response **Response Status** **W**

PROPOSED ACCEPT.

Cl 101 **SC 101.3.3.1.8** **P 154** **L 19** # **4220**
Hajduczenia, Marek Bright House Networks

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

Two exit conditions from PMA_CLIENT not needed, especially that they end up in the same state anyway

SuggestedRemedy
Remove one of transitions and change condition on the other one to "PMA_CLK * (burstEnd = TRUE + burstEdn = FALSE)"

Proposed Response **Response Status** **W**

PROPOSED ACCEPT IN PRINCIPLE.
The path from PMA_CLK * burstEnd = FALSE should return to state PMA_CLIENT not WAIT_FOR_CALL.

Cl 101 **SC 101.3.3.1.8** **P 155** **L 36** # **4221**
Hajduczenia, Marek Bright House Networks

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

If you use the if/else statement within state diagram states, it would be helpful to identify the end/start of a multi-line block with {}

SuggestedRemedy
In state DECODE_FAIL, surround
tx_code<0> □□!dataOut<loc>□
tx_code<1> □□dataOut<loc>□
with {}

Proposed Response **Response Status** **W**

PROPOSED ACCEPT IN PRINCIPLE.
In order to maintain consistency with other SD's indent these more (6 non breaking spaces).

Cl 101 **SC 101.4.3.2** **P 162** **L 54** # **4222**
Hajduczenia, Marek Bright House Networks

Comment Type **TR** **Comment Status** **D** *Discussed, Tab101-7 note b*

Footnote b) is completely pointless. If sub-30 second acquisition time is expected, make it a requirement. Otherwise, it is meaningless - the requirement is for up to 60 seconds. There are no shades of gray here.

SuggestedRemedy
Strike footnote b)

Proposed Response **Response Status** **W**

PROPOSED ACCEPT.

Cl 101 **SC 101.4.3.4.5** **P 165** **L 44** # **4223**
Hajduczenia, Marek Bright House Networks

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

We do avoid the use of "will" apart from some very specific cases - this is not it: "the PHY will treat the subcarrier as null"

SuggestedRemedy
Change "the PHY will treat the subcarrier as null" to "the PHY treats the subcarrier as null"

Proposed Response **Response Status** **W**

PROPOSED ACCEPT.

CI 101 SC 101.4.3.6.5 P 171 L 36 # 4224
 Hajduczenia, Marek Bright House Networks

Comment Type **ER** Comment Status **D** *discussed, variable def location*

CntPitSF is only used in equation 101-9 and should be defined under the equation and not in a separate subclause.

SuggestedRemedy

Move definition of CntPitSF variable under equation 101-9 and extend the already existign text "CntPitSF is the continuous pilot scaling factor" to include all necessary details. Update all cross references in the text (2 locations total) to point to 101.4.3.6.4

Proposed Response Response Status **W**

PROPOSED REJECT.
 CntPitSF is communicated across the PHY Link from each CNU to the CLT and is a managed variable.
 Our convention is that all managed variables are formally defined in a separate subclause as is the case here.

CI 101 SC 101.4.3.9.2 P 177 L 1 # 4225
 Hajduczenia, Marek Bright House Networks

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

Designations in the figure would be clearer to read if there was a multiplication symbol between J and numeric value

SuggestedRemedy

Insert "x" (proper multiplication symbol) between J and preceding numeric value.

Proposed Response Response Status **W**

PROPOSED ACCEPT IN PRINCIPLE.
 Use Ctrl-q 0

CI 101 SC 101.4.3.12.1 P 188 L 8 # 4226
 Hajduczenia, Marek Bright House Networks

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

Unnecessary redirection: values are expressed in "samples" which are later one explained to be "samples refers to OFDM Clock periods (1/204.8 MHz)"

SuggestedRemedy

Change "samples" to "OFDM Clock periods (1/204.8 MHz)" since this is what they are. Apply consistently in the whole draft (another prime example is in 101.4.4.10.1)

Proposed Response Response Status **W**

PROPOSED ACCEPT IN PRINCIPLE.
 There are 41 instances of the word "samples" in the draft, many of which are not objectionable. Change per suggestion in the definition of DSNcp, DSNrp (in 101.4.3.12.1), USNcp & USNrp (in 101.4.4.10.1), while also removing the note "samples refers to OFDM Clock periods (1/204.8 MHz)"

CI 101 SC 101.4.3.13 P 188 L 46 # 4227
 Hajduczenia, Marek Bright House Networks

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

Missing full stop after "downstream Frequency Band as per Table 100–3" in Table 101-12

SuggestedRemedy

Add missing "."

Proposed Response Response Status **W**

PROPOSED ACCEPT.

CI 101 SC 101.4.4.3.6 P 193 L 1 # 4228
 Hajduczenia, Marek Bright House Networks

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

Figure 101–31 seems to contain a lot of "squeezed" text, where transition condition text is very close to the edge of the state block. Transitions out of COUNT_RB_SYMBOLS state are very good examples

SuggestedRemedy

Please move the text of transition conditions lower, so that it does not "touch" the edge of any of states or other transition lines. There is plenty of space, no need to squeeze in

Proposed Response Response Status **W**

PROPOSED ACCEPT IN PRINCIPLE.
 For state transitions beginning with "SCLK" try to enter the text between the state and the transition line being very careful not to merge the underscred with the transition line.

CI 101 SC 101.4.4.5.1 P 195 L 37 # 4229
Hajduczenia, Marek Bright House Networks

Comment Type TR Comment Status D

Despite various attempts, I could not locate what "FILLWORD<>" is and what it represents. It is a very odd notation. What is even more confusing is that there seem to be two notations: FILLWORD and FillWord used and it's not clear whether they are one and the same or not.

SuggestedRemedy

Use consistent notation if FILLWORD and FillWord are intended to be the same.
Also, when referencing array, you could just say "array FillWord" or just "FillWord" with proper formatting and that will point to it being a variable, and cause reader to look for its definition.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
Use "FillWord" in all instances (9x) without "<>" unless referring to specific bits.

CI 101 SC 101.4.4.5.1 P 195 L 44 # 4230
Hajduczenia, Marek Bright House Networks

Comment Type T Comment Status D Discussed

Is there any specific reason why values for END enumeration are shown in ""? In all other locations, values are not marked in any specific way

SuggestedRemedy

Remove "" from END variable definition

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 00 SC 0 P 0 L 0 # 4231
Hajduczenia, Marek Bright House Networks

Comment Type TR Comment Status D

Resource Block and Resource Element are used in the document in multiple locations, yet there is NO definition of what these are, and how they are related to channel parameters.

SuggestedRemedy

Please add definitions of Resource Block and Resource Element, at best early on, to avoid having to back and forth on what these really are
Once it is done, it would be nice to use consistent naming for these (capitalization) as well as decide whether you want to use acronyms or not - they are used sometimes right now, but not consistently.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
On pg 79 line 28 in SCI 100.2.6.2 add:
Note: a Resource Element is a single subcarrier over the duration of a single symbol. A Resource Block is a group of 8 or 16 Resource Elements as defined by the variable Rbsize.

Change "Resource Element" to "resource element" on pg 79 line 17 (note "resource element" occurs 52x)

Note Resource Block occurs 141x while resource block occurs 15x

CI 101 SC 101.4.5.2 P 214 L 5 # 4232
Hajduczenia, Marek Bright House Networks

Comment Type E Comment Status D ez, Black Sq

Figure 101-40, Figure 101-41, Figure 101-42, and others have black squares, which I believe were intended to be dots.

SuggestedRemedy

Please redraw in Frame to make squares look like proper dots

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
See remain_3bn_10_1115 and Comments #4276 and #4311.

CI 101 SC 101.4.5.3 P 214 L 23 # 4233
 Hajduczenia, Marek Bright House Networks

Comment Type ER Comment Status D
 Microprint in equations

SuggestedRemedy
 Some of the symbols are 6-point and very hard to read. Please increase the font size!
 The problem persists in multiple equations in the draft, especially at the end of Clause 101

Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 101 SC 101.5 P 218 L 1 # 4234
 Hajduczenia, Marek Bright House Networks

Comment Type ER Comment Status D
 Title of 101.5 is incorrect - an 802.3 project cannot create extensions to 802.1AS standard

SuggestedRemedy
 Change title of 101.5 to "Applicability of IEEE Std 802.1AS, Clause 13 for EPoC time transport"

Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 101 SC 101.5 P 218 L 1 # 4235
 Hajduczenia, Marek Bright House Networks

Comment Type ER Comment Status D
 IEEE Std 802.1AS is not included in normative references for latest IEEE Std 802.3 and this amendment

SuggestedRemedy
 Add reference to IEEE Std 802.1AS

Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Change EditingInstruction pg 20 line 5 from "Insert the following reference in alphabetical order (after "ATIS-0900105.2008" and before "CISPR 22)": "" to "Insert the following reference in alphabetical order:"
 Add "IEEE Std 802.1ASTM-2011 IEEE Standard for Local and metropolitan area networks—Timing and Synchronization for Time-Sensitive Applications in Bridged Local Area Networks." after entry for CFR 76

CI 101 SC 101.5 P 218 L 11 # 4236
 Hajduczenia, Marek Bright House Networks

Comment Type ER Comment Status D
 Incorrect reference to IEEE Std 802.1AS

SuggestedRemedy
 Change "In 13.1.4 of IEEE STD 802.1AS 2011 "Time synchronization in EPON"," to "In IEEE Std 802.1AS, 13.1.4,"
 Change "defined in 802.1as, clause 13.1.4" to "defined in IEEE Std 802.1AS, 13.1.4"

Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 101 SC 101.5.1 P 218 L 11 # 4237
 Hajduczenia, Marek Bright House Networks

Comment Type ER Comment Status D Disussed, Bill
 Optional requirements??? "for EPoC the following future time at the future MPCP frame should be substituted for ToDX,i:" and "each CNUi should correct the xxx future time value received from the CLT for its own CNU PHY time delay asymmetry as follows"

SuggestedRemedy
 Consider whether these two optional requirements are really required. My personal suggestion is to have them removed (changed to Present Simple tense statement instead)

Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Add to the end of the para in 101.5:
 "Devices intended to be used for time synchronization should use the variables and methods described in this 101.5.1, 101.5.2 and 101.5.3."
 (Note comment #4239 moved 101.5.4 to 101.5.3)

Add PICs statement:
 G8 | Time synchronization supoprt | 101.5.3 | Variables and methods described in 101.5.4.1, 101.5.4.2, and 101.5.4.3 supported.

CI 101 SC 101.5.3 P 218 L 38 # 4238
Hajduczenia, Marek Bright House Networks

Comment Type ER Comment Status D Discussed

Standard do not need to explain how specific values / formulas were obtained. If the material was presented and it is publicly available, it is sufficient to have the specific calculations available there for future references

SuggestedRemedy

Remove 101.5.3

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Add at the beginning of 101.5.3

"The following material is provided to assist IEEE Std 802.1AS users in understanding changes to IEEE Std 802.3AS, 13.1.4 needed for effective time synchronization within the EPoC environment. This subsection illustrates the intended use of the time variables defined in 101.5.3 and the derivation of this time synchronization methodology for EPoC."
(Note comment #4239 moved 101.5.4 to 101.5.3)

CI 101 SC 101.5.4 P 219 L 24 # 4239
Hajduczenia, Marek Bright House Networks

Comment Type ER Comment Status D Discussed, variable def location

Variables should be defined in equations and not create separate subclause for them, and then cross reference them from within definitions under equations

SuggestedRemedy

Move definitions of individual variables to where they are first defined under equations 101-38 and 101-39

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Our convention is that all managed variables are formally defined in a separate subclause as is the case here.

Move Clause 101.5.4 above current 101.5.3 Derivation of Methodology so it is close to the equations where it is used.

CI 101 SC 101.5.2 P 218 L 26 # 4240
Hajduczenia, Marek Bright House Networks

Comment Type T Comment Status D Discussed

What is "xxx" in "each CNUi should correct the xxx" ???

SuggestedRemedy

Seems that "xxx" can be removed without any loss of information

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 101 SC 101.5.1 P 218 L 8 # 4241
Hajduczenia, Marek Bright House Networks

Comment Type TR Comment Status D Discussed, Bill

The technical aspect of text in 101.5.1 is described in an unclear manner. 802.1AS does not know anything about ToD_EPOCH_CLTXi and rather than define new variables, a simple addition should be simpler

SuggestedRemedy

Change equation 101-38 to read: $ToDX_i += T_CORR_CLT$.

Remove definitions of ToD_EPOCH_CLTXi and DiffDelay_CLT

Change definition of T_CORR_CLT to read: "is equal to $0.5 \times DiffDelay$ (see 101.5.4)"

Change the text preceding the equation to read: "The CLT using the timing and synchronization mechanism defined in IEEE Std 802.1AS, Clause 13 shall recalculate the value of ToDXi (see IEEE Std 802.1AS, 13.1.4) using Equation (101-38)."

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change the definition of ToD_EPOCH_CLTXi from:

"is the time of day at the future MPCP counter value i being sent to CNUi, ..."

"is the time of day at the future MPCP counter value X being sent from the CLT to CNUi, ..."

CI 101 SC 101.5.2 P 218 L 24 # 4242
Hajduczenia, Marek Bright House Networks

Comment Type TR Comment Status D Discussed, Bill

There is something wrong with equation 101-39. If the left side is substituted with 101-38 we have then:

$ToDX_i + T_CORR_CLT = ToD_EPOCH_CNUX_i + T_CORR_CLT_i$

Given that correction factor for CLT side is constant for the given CLT, we have

$ToDX_i = ToD_EPOCH_CNUX_i$

which is not correct

SuggestedRemedy

I believe in equation 101-39, term "T_CORR_CLTi" should be "T_CORR_CNUi", which would be also consistent with definitions under the equation

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change Eq 101-39 from:

"ToD_EPOCH_CLTXi = ToD_EPOCH_CNUX,i + T_CORR_CLTi" to:

"ToD_EPOCH_CNUX,i = ToD_EPOCH_CLTX,i + T_CORR_CNUi"

Original 101-39 is incorrect new eq is equivalent to

CNU time = CNUi future time sent by CLT + CNUi correction factor

Cl 101 SC 101.5.2 P 218 L 24 # 4243
Hajduczenia, Marek Bright House Networks

Comment Type TR Comment Status D Discussed, Bill

Based on the existign text in 101.5.2 and also equation 101-39, it is not clear what time reference value the CNU should be correcting: ToD_EPOC_CLTXi received from the CLT? Local time from the CNU? The way the equation is structured right now, it seems that the CNU calculates the value of ToD_EPOC_CLTXi, which is also calculated in 101-38.

SuggestedRemedy

The utility of equation 101-39 is unclear.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
See Response to comment #4242

Cl 00 SC 0 P 0 L 0 # 4244
Hajduczenia, Marek Bright House Networks

Comment Type ER Comment Status D

CMP version of the draft is useless - most of figures are not marked correctly (hard to figure out which figure was added and which was removed). Also, there is no clear indication of what was modified in PICS

SuggestedRemedy

Given the the scope of recirculation is limited to changed text only, without clear CMP file it is hard to judge what was modified and what was NOT

Proposed Response Response Status W

PROPOSED REJECT.
(no possible change to draft).
The CMP file is generated by FrameMaker and is provided for convenience only.

Cl 103 SC 103.2.2.1 P 297 L 5 # 4245
Hajduczenia, Marek Bright House Networks

Comment Type T Comment Status D

Can DS_FEC_CW_Sz be negative? Similarly, DS_FEC_PrtY_Sz, DS_FEC_Pld_Sz, and other variables which clearly have only positive values

SuggestedRemedy

Change type to "unsigned integer"

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
Change the listed variables to unsigned integer

Cl 103 SC 103.2.2.1 P 297 L 11 # 4246
Hajduczenia, Marek Bright House Networks

Comment Type E Comment Status D ez

Incorrect multiplication symbol in DS_FEC_CW_Sz_FRAC□

SuggestedRemedy

Change "*" to proper "x" multiplication symbol

Proposed Response Response Status W

PROPOSED ACCEPT.
(Ctrl Q 0)

Cl 103 SC 103.2.2.1 P 297 L 6 # 4247
Hajduczenia, Marek Bright House Networks

Comment Type T Comment Status D

What is the purpose of "(DS_FEC_Pld_Sz + DS_FEC_PrtY_Sz)" statement?

SuggestedRemedy

Remove, FEC codeword is defined elsewhere (not in Clause 103)

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
Change "(DS_FEC_Pld_Sz + DS_FEC_PrtY_Sz)" to "and is equal to the sum of DS_FEC_Pld_Sz and DS_FEC_PrtY_Sz.

Cl 103 SC 103.2.2.1 P 297 L 47 # 4248
Hajduczenia, Marek Bright House Networks

Comment Type TR Comment Status D Discussed

No changes to time_quantum as defined in 64.2.2.1

SuggestedRemedy

Change "This constant is defined in 64.2.2.1 and is 16 ns." to "See 64.2.2.1."
Similarly, for other variables which are taken over from Clause 64/77, do not copy the text over into this clause - it is a mayhem later on for maintenance) but only reference them. If you're trying to do a completely independent clause, then do not reference back to Clause 64/77

Proposed Response Response Status W

PROPOSED REJECT.
This was discussed in the TF and it was agreed that, for variables defined in Cl 64/77 we would reference the normative definition and provide an informative (no "shall") explanation to avoid making the reader swap back and forth between sections of the standard (something the commenter has indicated is an egregious behavior).
The TF can certainly reconsider this position during this comment round (even though this comment is clearly out of scope for this comment round).

Cl 103 **SC 103.2.2.1** **P 297** **L 50** # 4249
 Hajduczenia, Marek Bright House Networks

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

Type "TYPE:Unsigned integer" should be "TYPE: unsigned integer"

SuggestedRemedy
 Per comment

Proposed Response **Response Status** **W**
 PROPOSED ACCEPT.

Cl 103 **SC 103.2.2.3** **P 298** **L 23** # 4250
 Hajduczenia, Marek Bright House Networks

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

Why do we need an alias to a constant?

SuggestedRemedy
 rather than create a reference mayhem, consider shortening the name of constant and use it directly and not create two redirection levels. That is harder to read.
 Remove fecCwSz and fecPldSz, consider shortening names of respective constants and making them more user friendly

Proposed Response **Response Status** **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 Now that DS_FEC_CW_Sz_FRAC's alias, fecCwSz, is only use in pseudo code we can remove this alias and replace all instances of it with DS_FEC_CW_Sz_FRAC.

Cl 103 **SC 103.2.2.7** **P 303** **L 1** # 4251
 Hajduczenia, Marek Bright House Networks

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

Different fonts (Times and Arial) in the same SD

SuggestedRemedy
 Compare states ADVANCE_BY_1 and START_DERATING_TIMER - I understand that either is allowed, but let's not mix them on the same SD. They just look odd.

Proposed Response **Response Status** **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 Use Arial

Cl 103 **SC 103.3.3.1** **P 311** **L 26** # 4252
 Hajduczenia, Marek Bright House Networks

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

"8 bit" in "8 bit unsigned integer" is an adjective and should be hyphentated

SuggestedRemedy
 Change "8 bit unsigned integer" to "8-bit unsigned integer" globally

Proposed Response **Response Status** **W**
 PROPOSED ACCEPT.

Cl 103 **SC 103.3.3.1** **P 312** **L 17** # 4253
 Hajduczenia, Marek Bright House Networks

Comment Type **E** **Comment Status** **D** Eq 101-32

Dead link: "see Equation 101-31"

SuggestedRemedy
 Per comment

Proposed Response **Response Status** **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 AIP see 4254

Cl 103 **SC 103.3.3.1** **P 312** **L 17** # 4254
 Hajduczenia, Marek Bright House Networks

Comment Type **TR** **Comment Status** **D** Eq 101-32

RB_time_quanta is NOT defined in Equation 101-31

SuggestedRemedy
 Please provide correct reference where the said variable is defined

Proposed Response **Response Status** **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 s/b Eq 101-32

Cl 103 SC 103.3.5.1 P 320 L 41 # 4255
Hajduczenia, Marek Bright House Networks

Comment Type E Comment Status D ez

"VALUE: 0x03B9ACA0 (1 s)" - division of a value into 8 bit groups with - helps with readability

SuggestedRemedy

Consider changing larger hex values to 0xaa-bb-cc-dd format.
Here, change "VALUE: 0x03B9ACA0 (1 s)" to "VALUE: 0x03-B9-AC-A0 (1 s)"

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
Here and also pg 252 line 11 and pg 321 line 37

Cl 103 SC 103.3.6.1 P 328 L 10 # 4256
Hajduczenia, Marek Bright House Networks

Comment Type TR Comment Status D

"The Sync Time and Discovery Information fields described in 77.3.6.1 are not used in EPoC and are always set to zero on transmit and ignored on reception." - if that is always set to zero, this should be either a requirement (if setting it to another value breaks anything) or not (then convert it just to statement, without the use of -always-)

SuggestedRemedy

Depending on implementation, setting these fields into non-zero values might imply something to CLT, suggest to convert "are always set" to "shall be set"
Similar change in 103.3.6.3 for REGISTER_REQ description

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
Per comment add PICS statement.

Cl 103 SC 103.3.6 P 328 L 1 # 4257
Hajduczenia, Marek Bright House Networks

Comment Type TR Comment Status D

If there are no changes, all text in lines 3 and 4 is irrelevant.

SuggestedRemedy

Replace "MPCPDU structure and encoding in EPoC is as described in 77.3.6 with the exceptions noted below. The MPCPDU structure shall be as shown in Figure 77-31." with "See 77.3.6."

Proposed Response Response Status W

PROPOSED REJECT.
There are changes as described in 103.3.6.1 which falls under the "with the exceptions noted below" clause.

Cl 103 SC 103.3.6.2 P 328 L 12 # 4258
Hajduczenia, Marek Bright House Networks

Comment Type TR Comment Status D

If there are no changes, all text in lines 14/15 is irrelevant. Also, is there any reason to reference Clause 64 here???

SuggestedRemedy

Change "The REPORT MPCPDU used in EPoC is the same as that described in 77.3.6.2 (see 64.3.6.1)." to "See 77.3.6.2."
Similar changes also to 103.3.6.5

Proposed Response Response Status W

PROPOSED REJECT.
We are not so short of bits (or ink) that we are technically prohibited from being kind to the reader.

Cl 103 SC 103.3.6.3 P 329 L 1 # 4259
Hajduczenia, Marek Bright House Networks

Comment Type T Comment Status D discussed, Fig 103-26

Unnecessary Figure 103-26 - it is not referenced in the text anyway.

SuggestedRemedy

Remove Figure 103-26

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
On pg 328 line 19 change
"The REGISTER_REQ MPCPDU used in EPoC ..." to
"The REGISTER_REQ MPCPDU used in EPoC and illustrated in Figure 103-26 ..."

See comment #4312

CI 103 SC 103.3.6.4 P 329 L 40 # 4260
Hajduczenia, Marek Bright House Networks

Comment Type TR Comment Status D discussed, OOS

Irrelevant information as far as the MPCPDU structure is concerned: "In EPoC the Sync Time field is calculated using rOnTime, rOffTime rather than the laserOnTime and laserOffTime used in 77.3.6.4" - this should be clear from calculations in individual SDs, based on which content of individual MPCPDU is filled in.

SuggestedRemedy

Replace text in lines 41-43 with "See 77.3.6.4."
Remove Figure 103-27

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

An unqualified reference to CI 77 would result in a technical error (use of laserOn/Off time instead of RFON/OFF time). Change "The REGISTER_REQ MPCPDU used in EPoC ..." to "The REGISTER_REQ MPCPDU used in EPoC and illustrated in Figure 103-27 ..."

CI 45 SC 45.2.1.4 P 29 L 20 # 4261
Marris, Arthur Cadence Design Syste

Comment Type E Comment Status D ez

45.2.1.4.b should be inserted after 45.2.1.4.a

SuggestedRemedy

Make editing instruction on line 20:
"Insert 45.2.1.4.b after 45.2.1.4.a (as inserted by IEEE Std 802.3by-201x) as follows:"

Delete the "Reserved for future speeds" row from Table 45-6 so only the "10GPASS-XR capable" row remains.

Make editing instruction on line 3:
"Insert a new row in Table 45-6 below the row for 1.4.11 as inserted by IEEE Std 802.3by-201x as follows (unchanged rows not shown):"

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 30 SC 30.5.1.1.2 P 33 L 48 # 4262
Laubach, Mark Broadcom

Comment Type E Comment Status D Discussed

Verify clause 30 changes with experts

SuggestedRemedy

Need to talk with 802.3 Clause 30 experts for sanity check. Make this an AIP if any changes need to be made.

Proposed Response Response Status W

PROPOSED REJECT.
Unless useful info appears at the F2F

CI 100 SC 100.2.11 P 102 L 24 # 4263
Laubach, Mark Broadcom

Comment Type T Comment Status D Discussed

Look at RX_MER vs RX_MER_SC(n) and see if these can be made the same.

SuggestedRemedy

Replace RX_MER with *<ital>RX_MER(n)</ital>* where appropriate.

Proposed Response Response Status W

PROPOSED REJECT.
Commenter may withdraw during comment resolution

CI 00 SC 100.3.4 P 110 L 29 # 4264
Laubach, Mark Broadcom

Comment Type T Comment Status D Discussed

There are 10 occurrences of "OFDM Symbol Clock" in the draft. Can these now be safely changed to "OFDM Clock"?

SuggestedRemedy

Page 110, Line 29: change
Page 110, Line 51: change
Page 161, Line 47: change
Page 162, Line 24: change
Page 162, Line 26: change and add "frequency"
Page 162, Line 29: change
Page 162, Line 32: change
Page 162, Line 42: change
Page 162, Line 52: change and add "frequency"
Page 190, Line 11: change

Proposed Response Response Status W

PROPOSED ACCEPT.
Changed to CI 00

CI 100A SC 100A.2 P 340 L 9 # 4265
Laubach, Mark Broadcom

Comment Type ER Comment Status D EZ

Fix case and TLA problems in table notes for Table 100A-1.

SuggestedRemedy

Line 9, NOTE 4: lower case "Frequency"
Line 12, NOTE 7: lower case words "Reference, Live Video" and "Interference"
Line 14, NOTE 8: lower case words "Worst Case Frequency; Good" and "Analog", expand "PAR" to "peak-to-average ratio (PAR)"
Line 17 and 18, NOTE 10: lower case "Bandwidth" and "Levels"
Line 18, NOTE 10: "ReDesign" comes up in searching for "ReDesign channel model" on the web suggesting this is referencing something. AIP this comment to add an appropriate reference and/or change. (Have to check with experts to find what this means.)
Line 20, NOTE 11: lower case "Clipping"
Line 21, NOTE 12: lower case "Minimum"
Line 22, NOTE 13: lower case "Single Dominant" and "Does"
Line 23, NOTE 14: lower case "Definition, Echo"
Line 24, NOTE 15: lower case "Basis"

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 100A SC 100A.3 P 342 L 10 # 4266
Laubach, Mark Broadcom

Comment Type ER Comment Status D EZ

Fix case and TLA problems in table notes for Table 100A-2.

SuggestedRemedy

Line 10, NOTE 1: lower case "Loss"
Line 12, NOTE 3: change "DS" to "downstream"
Line 14, NOTE 4: lower case "Report"
Line 17, NOTE 6: lower case "Upstream"
Line 18, NOTE 7: lower case "Single Dominant"
Line 19, NOTE 8: lower case "Definition, Echo"

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 100 SC 100.2.9.5.1 P 97 L 9 # 4267
Laubach, Mark Broadcom

Comment Type T Comment Status D Discussed

Geoff explained to me that we need to be clear with using "MDI connector" when we mean the connector versus just "MDI". In reviewing, I noticed that Table 100-11 CNU RF output requirements needs a minor adjustment and there is no MDI connector entry in table 100-3 CLT RF output requirements. I believe that fixing the two tables builds the necessary association allowing the EPoC to use "F connector" elsewhere in the text.

SuggestedRemedy

Page 99, Line 21: change "Connector" to "MDI connector" in first column of table. Duplicate this last row of Table 100-11 in Table 100-3 and insert as the last row on Page 83, Line 47.

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 100A SC 100A.1 P 351 L 11 # 4268
Laubach, Mark Broadcom

Comment Type T Comment Status D EZ

Strengthen the relationship of the topology to the baseline channel conditions.

SuggestedRemedy

Change: "The normative EPoC OFDM channel parameters are based on the topology shown in Figure 100A-1" to
"The normative EPoC baseline channel conditions and OFDM channel parameters are referenced to the topology shown in Figure 100A-1"

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 100 SC 100.3.3 P 118 L 28 # 4269
Laubach, Mark Broadcom

Comment Type T Comment Status D EZ

Reword as only one upstream OFDMA channel

SuggestedRemedy

Delete "in a specified OFDMA channel "

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Mistype, comment is regarding Page 108, Line 42. Otherwise, as per comment.

CI 30 SC 30.3.5.1.2 P 1 L 1 # 4270
Laubach, Mark Broadcom

Comment Type ER Comment Status D EZ

Add cross references for Clause 103 to two places in Clause 30.

SuggestedRemedy

Insert editing directives to IEEE editor(s) for "30.3.5.1.2 aMPCPAdminState" AND "30.3.5.1.3 aMPCPMode" to add Clause 103 to cross references: i.e. change "in Clause 64 or Clause 77" to "in Clause 64, Clause 77, or Clause 103".

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 101 SC 101.4.6.1 P 217 L 43 # 4271
Laubach, Mark Broadcom

Comment Type T Comment Status D

Change "upstream Subcarrier Clock" to "the upstream Subcarrier Clock frequency"
Page 217 Line 47 insert "frequency" after "Subcarrier Clock"

SuggestedRemedy

As per comment.

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 00 SC 100.3.4 P 110 L 29 # 4272
Laubach, Mark Broadcom

Comment Type E Comment Status D EZ

First uses of "OFDM Symbol Clock" in Clause 100 and 101 needs a cross reference to 101.4.3.2.

SuggestedRemedy

Page 110, Line 29: Add the cross reference "(see 100.3.4)" after "OFDM Symbol Clock"
Page 161, Line 47, do the same.

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 101 SC 101.3.2.5.4 P 140 L 16 # 4273
Remein, Duane Huawei Technologies

Comment Type E Comment Status D

Wording can be clarified on Steps 2 & 4

SuggestedRemedy

Change:

"2) If remaining B blocks in burst < BQ = 220 blocks and %>=% 101 blocks, create and encode a long codeword and shorten to remaining blocks and end the burst with this encoded codeword." to

"2) If remaining B blocks in burst < BQ = 220 blocks and %>=% 101 blocks, create and encode a long codeword, shortened to accommodate the remaining blocks and end the burst with this codeword."

and

"4) If remaining B blocks in burst < BQ = 76 blocks and %>=% 25 blocks, create and encode a medium codeword, shorten to remaining blocks and end the burst with this encoded codeword." to

"4) If remaining B blocks in burst < BQ = 76 blocks and %>=% 25 blocks, create and encode a medium codeword, shortened to accommodate the remaining blocks and end the burst with this codeword."

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 102 SC 102.2.3.1.4 P 247 L 18 # 4274
Remein, Duane Huawei Technologies

Comment Type E Comment Status D ez

Supurfelous period in figure title

SuggestedRemedy

removed.

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 101 SC 101.3.2.1.5 P 131 L 33 # 4275
 Remein, Duane Huawei Technologies

Comment Type E Comment Status D

Figure title should include "state diagram" in the following figures:

Figure 101-6
 Figure 101-7
 Figure 101-12
 Figure 101-13
 Figure 101-15
 Figure 101-16

SuggestedRemedy
 add per comment

Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 101 SC 101.3.3.1.8 P 156 L 21 # 4276
 Remein, Duane Huawei Technologies

Comment Type E Comment Status D Black Sq

Figures needing conversion to FM native format
 101-8 CRC40 generation
 101-17 FEC Decoder, output process state diagram (CNU)
 101-18 Idle control character insertion process state diagram
 101-32 Upstream symbol mapper idle loop state diagram
 101-33 Upstream symbol mapper fill process state diagram
 101-40 BPSK
 101-41 16-QAM
 101-42 8-QAM
 101-43 32-QAM

SuggestedRemedy
 Convert to native FrameMaker format.
 See remain_3bn_10_1115.pdf

Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 00 SC 0 P 47 L 8 # 4277
 Remein, Duane Huawei Technologies

Comment Type E Comment Status D

EPoC Message Block or EPoC message block? we use both.

SuggestedRemedy
 Use EPoC message block

Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 103 SC 103.2.2.7 P 304 L 22 # 4278
 Remein, Duane Huawei Technologies

Comment Type E Comment Status D

In Figure 103-9 transmitInProgress[j] = FALSE crosses a line

SuggestedRemedy
 nudged left

Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 01 SC 1.4 P 21 L 24 # 4279
 Remein, Duane Huawei Technologies

Comment Type E Comment Status D

From 802.3 2015
 "1.4.400 time_quantum: The unit of measurement for time related parameters specified in
 Multipoint MAC Control.
 NOTE—See Clause 64 and Clause 77. The value of time_quantum is defined in 64.2.2.1."

SuggestedRemedy
 Add Editing instruction for 1.4.400 using proper change markings follows
 "Change the note in 1.4.400 as follows
 NOTE—See Clause 64, and Clause 77, and Clause 103. The value of time_quantum is defined
 in 64.2.2.1."

Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 00 SC 0 P L # 4280
 Remein, Duane Huawei Technologies

Comment Type E Comment Status D

Update Template per V2.5
 Changes between Version 2.4 and Version 2.5
 - base_year variable changed from 201x to 2015
 - note regarding the number of levels in the table of contents added
 - "A full duplex MAC protocol was added in 1997." added to the Introduction section in front matter.

SuggestedRemedy

Per comment

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 45 SC 45.2.1.131 P 31 L 1 # 4281
 Remein, Duane Huawei Technologies

Comment Type E Comment Status D

Subclause numbering in Clause 45 will need to be adjusted depending on publication order of drafts in process.

SuggestedRemedy

Add the following Editor's note before Editing instruction for 45.2.1.131:
 "Editor's Note (to be removed prior to publication): The Clause numbering in Clause 45 will need to be updated once the publication order of the various amendments is determined."

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 103 SC 103.1 P 289 L 32 # 4282
 Remein, Duane Huawei Technologies

Comment Type E Comment Status D

missing space in "Clause 31and"

SuggestedRemedy

changed to "Clause 31 and"

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 00 SC 0 P 34 L 22 # 4283
 Remein, Duane Huawei Technologies

Comment Type ER Comment Status D

We refer to the variable here as "DS_FreqCh1" without parenthesis. However in 100.2.7.3 where it is defined it is "DS_FreqCh(n)"

SuggestedRemedy

Change all instances of "DS_FreqCh#" to "DS_FreqCh(#)" where "#" is any single character 1, 2, 3, 4, 5 or n.

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 103 SC 103.3.5.2 P 321 L 1 # 4284
 Remein, Duane Huawei Technologies

Comment Type T Comment Status D

In D2.1 we replaced "BurstTimeHeader()" with "BurstTimeHeaderC()" which was incorrect.

SuggestedRemedy

Replace "BurstTimeHeaderC()" with "BurstTimeHeader()" (see 101.3.2.5.7)"

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 103 SC 103.2.2.3 P 300 L 16 # 4285
 Remein, Duane Huawei Technologies

Comment Type T Comment Status D Discussed

What does this mean "This variable represents octet transmission times in 128 time_quantum."

SuggestedRemedy

From 64.2.2.1 tqSize
 This constant represents time_quantum in octet transmission times.
 VALUE: 2

From 77.2.2.1 tqSize
 This constant represents time_quantum in octet transmission times.
 VALUE: 20

Change definition to read:
 "This variable represents 128 time_quantum in octet transmission times."

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change to:

"This variable represents the number of octets that can be transmitted in 128
 <italic>time_quantum</italic> (2048 ns)."

CI 103 SC 103.3.5.2 P 321 L 28 # 4286
Remein, Duane Huawei Technologies

Comment Type T Comment Status D

Definition of effectiveLengthC is overly complex:

This variable is used for temporary storage of a normalized net time value. It holds the net effective length of a grant normalized for elapsed time, and compensated for the periods required to turn the RF on and off, and waiting for receiver lock."

Note that RF On/Off time is always 0 as is receiver lock time.

SuggestedRemedy

Change to:

"This variable is used for temporary storage of a normalized net time value. It holds the net effective length of a grant normalized for elapsed time."

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 45 SC 45.2.1.137.2 P 37 L 44 # 4287
Remein, Duane Huawei Technologies

Comment Type T Comment Status D

This wording

"When read as zero this bit indicates no copy is to be initiated."

should match the formal definition in 101.4.1.2

"This variable is set to FALSE by the PHY on or before completion of the profile copy."

Similar issue in 45.2.1.137.5

SuggestedRemedy

In 45.2.1.137.2 change:

"When read as zero this bit indicates no copy is to be initiated."

To:

"This bit is set to zero by the PMA/PMD on or before completion of the profile copy."

In 45.2.1.137.5 change:

"When read as zero this bit indicates no copy is to be initiated."

To:

"This bit is set to zero by the PMA/PMD on or before completion of the profile copy."

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 101 SC 101.4.1.2 P 159 L 40 # 4288
Remein, Duane Huawei Technologies

Comment Type T Comment Status D

Definition of DS_CpyInP & DS_CpyInP don't indicate when set to FALSE.

SuggestedRemedy

Add to each definition

"This variable is set to FALSE by the PMA/PMD when the copy is completed."

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 101 SC 101.4.4.2.1 P 189 L 50 # 4289
Remein, Duane Huawei Technologies

Comment Type T Comment Status D

Shouldn't 204 MHz be 204.8 MHz?

SuggestedRemedy

Change to 204.8 MHz

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 01 SC 1.4.134 P 20 L 21 # 4290
 Remein, Duane Huawei Technologies

Comment Type T Comment Status D

Align definition of channel with modifications being made in P802.3by (see <http://www.ieee802.org/3/by/public/comments/comment#104>)
 "With editorial licence to coordinate with other 802.3 editors...
 Change from 802.3by
 "1.4.134 channel: In 10BROAD36, a band of frequencies dedicated to a certain service transmitted on the broadband medium (see IEEE Std 802.3, Clause 11). Otherwise, a defined path along which data in the form of an electrical or optical signal passes."

SuggestedRemedy

Change:
 "Change the definition of 1.4.134 as follows:
 1.4.134 channel: In 10BROAD36 and 10GPASS-XR, a band of frequencies dedicated to a certain service transmitted on the broadband medium. (See IEEE Std 802.3, Clause 11, Clause 100, and Clause 101.)"
 To:
 "Change the definition of 1.4.134 as modified by P802.3by as follows:
 1.4.134 channel: In 10BROAD36 >>_ and 10GPASS-XR,_<< a band of frequencies dedicated to a certain service transmitted on the broadband medium. Otherwise, a defined path along which data in the form of an electrical or optical signal passes. (For 10BROAD36 >>_ and 10GPASS-XR,_<< see IEEE Std 802.3, Clause 11>>_, Clause 100, and Clause 101).-<<.)"
 Where >>_xyz_<< indicates underlined text "xyz"

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
 Change to:
 "Change 1.4.134 as modified by P802.3by as follows:
 1.4.134 channel: In 10BROAD36 >_ and EPoC_< a band of frequencies dedicated to a certain service transmitted on the broadband medium. Otherwise, a defined path along which data in the form of an electrical or optical signal passes. (For 10BROAD36 >>_ and 10GPASS-XR,_<< see IEEE Std 802.3, Clause 11>>_, for EPoC see Clause 100, Clause 101, and Clause 102_<.)"
 Where >_xyz_< is underlined text.
 Editor is given license to coordinate with P802.3by editor for final text.

CI 102 SC 102.3.5.3 P 259 L 49 # 4291
 Remein, Duane Huawei Technologies

Comment Type T Comment Status D

US_PhylinkMod
 TYPE: 4 bit integer
 But this is not an integer but a 4-bit binary enumeration.

SuggestedRemedy

Change type to binary, Change 4 bit to 4-bit

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 00 SC 0 P 37 L 1 # 4292
 Remein, Duane Huawei Technologies

Comment Type TR Comment Status D

We need a variable and register to identify which OFDM channel profile is to be copied.

SuggestedRemedy

In Table 101-1 Add new row

"DS copy channel ID | Profile control | 1.1910.6:4 | DS_CpyCh10 | 6:4"

In 101.4.1.1. pg 159 line 24 change:

"This is controlled via the DS_PrflCpy and US_PrflCpy variables." to

"This is controlled via the DS_PrflCpy, DS_CpyCh and, US_PrflCpy variables.

Create variable in 101.4.1.1.2 as follows:

"DS_CpyCh

TYPE: 3-bit unsigned integer

This variable identifies which of the 5 downstream OFDM channel profiles (profile 1 to 5) is to be copied into the downstream profile variables."

Create new register entry as follows:

In Table 45-98g add:

"1.1910.6:4 | DS copy channel ID | Indicates which of the 5 downstream OFDM channel profiles is to be copied."

Change "1.1910.7:4" to "1.1910.7"

Add new section 45.2.1.137.3:

"45.2.1.137.4 DS copy channel ID (1.1910.6:4)

Bits 1.1910.6:4 indicate which one of the five downstream ODFM channel profiles is to be copied. These bits are a reflection of the >>DS_CpyCh<< variable defined in 101.4.1.1.1."

>><< indicate italics text

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 101 SC 101.4.4.5.1 P 196 L 17 # 4293
 Remein, Duane Huawei Technologies

Comment Type TR Comment Status D

"ICLK
 TYPE: clock"

What type of number is "clock"?

SuggestedRemedy

Change definition to read:

"ICLK

TYPE: Boolean"

This clear on read variable is set to TRUE on each positive transition of a clock running a the US_DataRate (see 100.2.6.2)."

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Per suggestion but use "at the US_DataRate" rather than "a the US_DataRate"

CI 101 SC 101.4.4.3.5 P 192 L 21 # 4294
 Remein, Duane Huawei Technologies

Comment Type TR Comment Status D Discussed

"This Boolean variable is used to reset the frame timing state"
 There is no such state.

"The variable is set to TRUE by the frame timing function and may be advanced or delayed
 when the CLT performs a write to the PhyTimingOffset variable."
 There is no such function.

SuggestedRemedy

Change
 "This Boolean variable is used to reset the frame timing state. A transition from FALSE to
 TRUE will cause the state diagram to reset to the beginning of the RB Superframe when SCLK
 goes TRUE."

to
 "This Boolean variable is used to reset the frame timing state diagram. A transition from
 FALSE to TRUE will cause the state diagram to reset to the beginning of the
 RB_SUPERFRAME_RESET when SCLK goes TRUE."

Not sure what to do about this:

"The variable is set to TRUE by the frame timing function and may be advanced or delayed
 when the CLT performs a write to the PhyTimingOffset variable."
 There is nothing in the draft about setting this variable to TRUE

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

As per comment plus change:

"The variable is set to TRUE by the frame timing function and may be advanced or delayed
 when the CLT performs a write to the PhyTimingOffset variable." to:

"The variable is set to TRUE by on any reset or any Link-down condition (as defined in Table
 102-14)."

CI 00 SC 0 P L # 4295
 Remein, Duane Huawei Technologies

Comment Type TR Comment Status D

Clause 31A Table 31A-1 lists Mac Control opcode assignments and clauses they are
 specific in. Clause 103 should be listed for GATE, REPORT, REGISTER_REQ, REGISTER,
 and REGISTER_ACK opcodes.

There are 9 cross references in the draft to Table 31A-1

SuggestedRemedy

Open CI 31a, Table 31A-1 and add listings for CI 103.

Make the 9 cross references to Table 31A-1 live.

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 101 SC 101.4.4.9.1 P 210 L 18 # 4296
 Remein, Duane Huawei Technologies

Comment Type E Comment Status D

"Where;" clauses are using an incorrect style.

pg In EQ
 210 18 101-35
 218 16 101-38
 218 31 101-39

SuggestedRemedy

Use paragraph tag VariableList per current template

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 01 SC 1.4.144a P 20 L 26 # 4297
 Anslow, Pete Ciena

Comment Type E Comment Status D ez

"comprising of" is poor english.
 Same issue in 1.4.294b

SuggestedRemedy

Change "comprising of" to "composed of" here and also in 1.4.294b

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 01 SC 1.4.294b P 21 L 1 # 4298
 Anslow, Pete Ciena
 Comment Type E Comment Status D ez
 "A optical" should be "An optical"
 "fiber optical" does not occur in 802.3 whereas "fiber optic" occurs 438 times
 SuggestedRemedy
 Change "A optical" to "An optical"
 Change "fiber optical" to "fiber optic"
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 01 SC 1.4.331 P 21 L 10 # 4299
 Anslow, Pete Ciena
 Comment Type E Comment Status D David Law
 Deleting the definition in 1.4.331 and re-numbering will change the definition numbering from that point onwards for all subsequent amendments as well as the numbering for this draft. Since P2MP occurs 132 times within 802.3 it seems reasonable to have some explanation of the term in addition to the simple expansion in 1.5.
 SuggestedRemedy
 If there is an issue with the definition of P2MP network, then change the definition to be just for P2MP.
 If the definition has to be deleted, then the numbering of subsequent definitions in the draft have to be changed.
 See IEEE Std 802.3bk-2013 (which deleted 1.4.27) for an example of this painful process.
 The editing instruction: "Insert the following definitions after 1.4.345 "Q" as follows:" would become: "Insert the following definitions after 1.4.344 "Q" (renumbered from 1.4.345 by the deletion of 1.4.331) as follows:" etc.
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Remove the removal of 1.4.331

CI 30 SC 30.3.2.1.2 P 23 L 15 # 4300
 Anslow, Pete Ciena
 Comment Type E Comment Status D EZ
 "Clause 101" should be a cross-reference here and on line 27
 SuggestedRemedy
 Make "Clause 101" a cross-reference here and on line 27
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 45 SC 45.2.1.4.b P 29 L 19 # 4301
 Anslow, Pete Ciena
 Comment Type E Comment Status D ez
 "Insert 45.2.1.4.b before 45.2.1.4.a" should be "Insert 45.2.1.4.b after 45.2.1.4.a"
 Also, there is a spurious " at the end of the editing instruction and also at the end of the subclause text.
 SuggestedRemedy
 Change "Insert 45.2.1.4.b before 45.2.1.4.a" to "Insert 45.2.1.4.b after 45.2.1.4.a"
 Delete the two spurious instances of "
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 45 SC 45.2.1.14a P 30 L 19 # 4302
 Anslow, Pete Ciena
 Comment Type E Comment Status D ez
 The P802.3bw draft (which has completed sponsor ballot) has inserted 45.2.1.14a for register 1.18. As register 1.17 is before this, 45.2.1.14a should be 45.2.1.14aa.
 Same issue for Table 45-17a which has to be Table 45-17aa
 SuggestedRemedy
 Renumber 45.2.1.14a to be 45.2.1.14aa and Table 45-17a to be Table 45-17aa
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 45 SC 45.2.1.163.2 P 49 L 10 # 4303
 Anslow, Pete Ciena
 Comment Type E Comment Status D ez
 "0.25 dBmV/1.6MHz"
 There should always be a (non-breaking) space between a number and its unit.
 Also, the draft is inconsistent as to whether there are spaces either side of the /
 SuggestedRemedy
 Change this instance from "0.25 dBmV/1.6MHz" to "0.25 dBmV / 1.6 MHz" using non-breaking spaces (Ctrl space) for all four spaces to ensure that it does not break across two lines.
 Go through the rest of the draft to make all other instances of similar text consistent.
 Proposed Response Response Status W
 PROPOSED ACCEPT.
 See comment 4191

Cl 100 **SC 100.2.12** **P 103** **L 9** # **4304**
 Dawe, Piers Mellanox

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

100.2.11 CLT upstream receive modulation error ratio requirements follows 100.2.10 CLT receiver requirements while 100.2.12.3 Receive modulation error ratio requirements comes under 100.2.12 CNU receiver requirements.

SuggestedRemedy
 Put 100.2.11 under 100.2.10.

Proposed Response **Response Status** **W**
 PROPOSED ACCEPT.

Cl 100 **SC 100.2.5** **P 77** **L 22** # **4305**
 Dawe, Piers Mellanox

Comment Type **T** **Comment Status** **D** **Discussed OR Mark**

There is much more stuff than usual in the "functional specification".

SuggestedRemedy
 Finish 100.2 PMD functional specification with 100.2.4 PMD transmit enable function then start a new subclause.

Proposed Response **Response Status** **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 Looking at Clause 76, electrical specifications are grouped by OLT PMD and ONU PMD, in Clause 100 we have grouped by downstream and upstream. Ask TF, if it accepts this AIP, how to re-organize subclauses.

Cl 101 **SC 101.4.1** **P 159** **L 9** # **4306**
 Dawe, Piers Mellanox

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

The new introductory text is welcome but it doesn't say what the PMA does.

SuggestedRemedy
 Please add another few sentences: something like "The PMA translates a serial stream of bits to scrambled, superheated, whitened OFDM/OFDMA time domain samples and vice versa. It also provides timing, whatever else."

Proposed Response **Response Status** **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 At pg line add:
 The transmit PMA sub-layer translates a serial data stream into a stream of IQ data pairs using the following functions; data scrambler, symbol mapper, interleaver, Pilot Insertion, Inverse Discrete Fourier Transform (IDFT), and Cyclic Prefix insertion. The receive PMA sub-layer translates a stream of IQ data pairs into a serial data stream using the following functions; Fast Fourier Transform (FFT), equalization, Pilot processing, de-interleaving, symbol de-mapper, and data de-scrambler.

At pg 161 line 45 replace Inverse Discrete Fourier Transform (IDFT) with IDFT

Cl 100 **SC 100.2.10.2** **P 101** **L 16** # **4307**
 Dawe, Piers Mellanox

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

Was resolution to TR comment 4171 implemented? I see that the resolution to T comment 3910 deletes the fix made by the resolution to 4171, which says change to "This section describes the conditions at which the PMD, PMA, PCS in conjunction are required to meet this error ratio".

SuggestedRemedy
 Insert "This section describes the conditions at which the PMD, PMA, PCS in conjunction are required to meet this error ratio", or better,
 "This section describes the conditions at which the CLT PMD when connected to a compliant PMA and PCS is required to meet this frame loss ratio", and change subclause title to "CLT receiver error ratio performance in AWGN channel". Similarly for CNU receiver.

Proposed Response **Response Status** **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 1) Select the "or better" and insert as the first sentence of paragraph on Page 101, Line 17. "This section describes the conditions at which the CLT PMD when connected to a compliant PMA and PCS is required to meet this frame loss ratio." Do similar for Page 104 Line 5.
 2) Comment 3883 against D2.0 changed the title of 100.2.12.2 to "CNU error performance in AWGN channel" to remove the word "rate". Suggest doing the same for title of 10.2.10.2 and removing "ratio" to be consistent.

Cl 100 **SC 100.2.10.2** **P 100** **L 21** # **4308**
 Dawe, Piers Mellanox

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

Was resolution to TR comment 4167 implemented? I see that the resolution to T comment 3910 deletes the fix made by the resolution to 4167.

SuggestedRemedy
 Change "post-FEC frame loss ratio of 10-6 with 1500 byte MAC packets" to "less than or equal to 10-6 frame loss ratio both with both 64-byte and 2000-byte Ethernet frames". Similarly in 100.2.12.2.
 Also, revise "Large bursts consisting of several 1500 byte MAC packets." in each list to agree - or put the "both 64-byte and 2000-byte Ethernet frames" in the lists only.
 Be consistent with base document: MAC packets or Ethernet frames?

Proposed Response **Response Status** **W**

PROPOSED ACCEPT IN PRINCIPLE.
 Thanks for catching this, it looks like 3910 interfered with the AIP from comment 4167.

Change: update draft as per remedy. Use "MAC packet".

Cl 100 **SC 100.2.10.2** **P 100** **L 25** # **4309**
 Dawe, Piers Mellanox

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

This is still very indirect as a requirement on the PMD. Compare:
 95.1.1 Bit error ratio
 The bit error ratio (BER) shall be less than 5×10^{-5} provided that the error statistics are sufficiently random that this results in a frame loss ratio (see 1.4.223) of less than 6.2×10^{-10} for 64-octet frames with minimum interpacket gap when processed according to Clause 91.
 If the error statistics are not sufficiently random to meet this requirement, then the BER shall be less than that required to give a frame loss ratio of less than 6.2×10^{-10} for 64-octet frames with minimum interpacket gap when processed according to Clause 91.

SuggestedRemedy
 Please add some guidance as to what the PMD itself is expected to do, e.g. an error ratio for the OFDM/OFDMA time domain samples at the PMA service interface. Even if this is qualified (e.g. "sufficiently random") as above it would still give the reader a starting point.

Proposed Response **Response Status** **W**

PROPOSED ACCEPT IN PRINCIPLE.
 Need to ask the PHY experts.

Maybe something like "a properly configured PMD delivers I/Q value pairs to the PMA such that the PHY meets the error requirements of xxxx."

Cl 100 **SC 100.2** **P 106** **L 1** # **4310**
 Carlson, Steve High Speed Design, Inc.

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

Figure 100-4 has some odd shading going on in the squares and circles.

SuggestedRemedy
 Redraw figure to remove shading. It looks like the drawing might be non-Frame; if so suggest redrawing it in Frame.

Proposed Response **Response Status** **W**

PROPOSED ACCEPT IN PRINCIPLE.
 Redraw the figure in Frame, remove shading.

Cl 101 **SC 101.4** **P 214** **L 11** # **4311**
 Carlson, Steve High Speed Design, Inc.

Comment Type **E** **Comment Status** **D** *ez, Black Sq*

Figure 101-40—BPSK has black squares—are these supposed to be dots? Same for 101-41, 101-42, 101-43.

SuggestedRemedy
 Suggest redrawing the figure in Frame to get the correct dots.

Proposed Response **Response Status** **W**

PROPOSED ACCEPT IN PRINCIPLE.
 See remain_3bn_10_1115 and comments #4232 and #4276

Cl 103 **SC 103.3** **P 329** **L 36** # **4312**
 Carlson, Steve High Speed Design, Inc.

Comment Type **E** **Comment Status** **D** *Fig 103-26*

Figure 103-26—REGISTER_REQ MPCPDU is not referenced in the test.

SuggestedRemedy
 Remove Figure 103-26 if it is not needed; otherwise provide a text reference.

Proposed Response **Response Status** **W**

PROPOSED ACCEPT IN PRINCIPLE.
 See comment #4259 (adding ref).

Cl 45 SC 45.2 P 43 L 13 # 4313
 Carlson, Steve High Speed Design, Inc.

Comment Type **E** Comment Status **D** ez, formatted
 In Table 45-98r— and Table 43-98q "formatted" is incorrect.

SuggestedRemedy

Change "formatted" to "formatted" in both tables.

Proposed Response Response Status **W**
 PROPOSED ACCEPT.

Cl 100 SC 100.2 P 93 L 34 # 4314
 Carlson, Steve High Speed Design, Inc.

Comment Type **ER** Comment Status **D** EZ
 Line 30 uses log (sub)10, yet line 42 uses log10. Are these supposed to be the same?

SuggestedRemedy

Please clarify if line 42 is intended to be log (sub) 10.

Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE.

Line 42 contains no math. Assumption is comparison of line 30 and line 34. On checking the DOCSIS PHY D3.1 spec, the "10" in "log10" should be subscript.

Change:

Line 30, insert a times symbol between the "10" and the "log10" as similar in Line 34.

Line 34, subscript the "10" in "log10".

Cl 45 SC 45.2 P 40 L 52 # 4315
 Carlson, Steve High Speed Design, Inc.

Comment Type **TR** Comment Status **D** Discussed, Reserved registers
 The text states:

"Bits 1.1920.15:0 are reserved in the event the MAC address is expanded to 64 bits in the future."

It is not appropriate to suggest a future use for register bits. They should simply be marked as "reserved."

SuggestedRemedy

Remove 45.2.1.142.3

Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 See response to 4187

Cl 101 SC 101.4 P 162 L 54 # 4316
 Carlson, Steve High Speed Design, Inc.

Comment Type **TR** Comment Status **D** Tab101-7 note b
 Footnote text states:

"b Nonetheless, it is expected that the CNU would be able to achieve downstream acquisition in less than 30 seconds."

SuggestedRemedy

The purpose of this footnote is unclear. The requirement from Table 101-7—Downstream time and frequency synchronization is shown as:
 Acquisition Time < 60 seconds b.

Which is it, 30 or 60 seconds? If the requirement is 60, but the note states that 30 seconds is the real number, why not say that? Otherwise, the note simply adds confusion.

Remedy: Delete footnote b, or change the value to 30 in Table 101-7.

Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 See Comment #4222