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

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

>>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* **O**

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

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

No RO in Table 45-7

SuggestedRemedy

No need to include in the draft amendment

Proposed Response *Response Status* **O**

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

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

"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* **O**

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

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

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* **O**

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

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

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

SuggestedRemedy

Change all instances of "formated" to "formatted"

Proposed Response *Response Status* **O**

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

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

"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* **O**

Cl **45** *SC* **45.2.1.162.1** *P* **48** *L* **28** # 4190

Hajduczenia, Marek Bright House Networks

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

"Bits 1.1949.15:0 through 1950.7:0 form a 24 bit value" - I believe "24 bit" is used as an edjective 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* **O**

Cl **45** *SC* **45.2.1.163.2** *P* **49** *L* **10** # 4191

Hajduczenia, Marek Bright House Networks

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

"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* **O**

Cl **45** *SC* **45.2.1.165** *P* **50** *L* **1** # 4192

Hajduczenia, Marek Bright House Networks

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

Footnote separated from the table

SuggestedRemedy

Please make sure footnotes do not get separated from the tables

Proposed Response *Response Status* **O**

Cl **45** *SC* **45.2.1.166.3** *P* **51** *L* **23** # 4193

Hajduczenia, Marek Bright House Networks

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

"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* **O**

Cl **45** *SC* **45.2.7a.5.3** *P* **56** *L* **22** # 4194

Hajduczenia, Marek Bright House Networks

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

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* **O**

Cl **100** *SC* **100.1.3** *P* **71** *L* **46** # 4195

Hajduczenia, Marek Bright House Networks

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

"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* **O**

Cl **100** *SC* **100.1.4** *P* **73** *L* **3** # 4196

Hajduczenia, Marek Bright House Networks

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

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* **O**

Cl **100** *SC* **100.2.1.3** *P* **76** *L* **33** # 4197

Hajduczenia, Marek Bright House Networks

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

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 mofified 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* **O**

Cl **100** *SC* **100.2.6.3** *P* **80** *L* **8** # 4198

Hajduczenia, Marek Bright House Networks

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

"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* **O**

Cl **100** *SC* **100.2.7** *P* **80** *L* **19** # 4199

Hajduczenia, Marek Bright House Networks

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

"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* **O**

Cl **100** *SC* **100.2.8.2** *P* **82** *L* **15** # 4200

Hajduczenia, Marek Bright House Networks

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

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* **O**

Cl **100** *SC* **100.2.9.3** *P* **90** *L* **21** # 4201

Hajduczenia, Marek Bright House Networks

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

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* **O**

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

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

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* **O**

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

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

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* **O**

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

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

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* **O**

Cl **100** *SC* **100.2.9.4.3** *P* **94** *L* **22** # 4205
Hajduczenia, Marek Bright House Networks

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

"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* **O**

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

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

Fancy shady background in Figure 100–4 in individual function blocks

SuggestedRemedy

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

Proposed Response *Response Status* **O**

Cl **101** *SC* **101.1.4** *P* **122** *L* **34** # 4207
Hajduczenia, Marek Bright House Networks

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

Looking at Figure 101–1, there is only one instance of PMD_UNITDATA.request(tx_unit), which seems to be the same for eacj CPW talking to PMD FUNCTIONS block.
PMD_UNITDATA does not have any individation 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* **O**

Cl **101** *SC* **101.1.4** *P* **122** *L* **34** # 4208

Hajduczenia, Marek Bright House Networks

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

Looking at Figure 101–1, 4 out of 5 instances of CPW are marked as "CPW5" - I believe the numbers on individual CPW instances should match numbers on IDFT i.e., 2, 3, 4, and 5.
The same observation applies to INTERLEAVING & PILOT INSERTION blocks, 4 out of 5 of which are also labelled as "5".

SuggestedRemedy

Fix numbers for CPW and INTERLEAVING & PILOT INSERTION blocks
Similar numbering problems exist in Figure 101-3 for FFT and DE-INTERLEAVING blocks

Proposed Response *Response Status* **O**

Cl **101** *SC* **101.1.4** *P* **125** *L* **45** # 4209

Hajduczenia, Marek Bright House Networks

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

Extra "\" character in "\FFT = FAST FOURIER TRANSFORM"

SuggestedRemedy

remove the extra "\"

Proposed Response *Response Status* **O**

Cl **101** *SC* **101.2** *P* **126** *L* **3** # 4210

Hajduczenia, Marek Bright House Networks

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

Unnecessary wordiness "The Reconciliation sublayer used for 10GPASS-XR is identical to that described in 76.2."

SuggestedRemedy

Change to "See 76.2."

Proposed Response *Response Status* **O**

Cl **101** *SC* **101.3.2.1.3** *P* **130** *L* **6** # 4211

Hajduczenia, Marek Bright House Networks

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

Inconsistent formatting for "DS_PHY_OSize" vriable. I suspect it was intended to be all in italics.

SuggestedRemedy

Per comment

Proposed Response *Response Status* **O**

Cl **101** *SC* **101.3.2.1.5** *P* **131** *L* **1** # 4212

Hajduczenia, Marek Bright House Networks

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

It seems that from D2.0 to D2.1, font type was changed in Figure 101-6, causing problems with readability for += and -= symbols

SuggestedRemedy

Please use the proper font for SDs, per IEEE Style Manual, Table 1

Proposed Response *Response Status* **O**

Cl **101** *SC* **101.3.2.5.6** *P* **141** *L* **39** # 4213

Hajduczenia, Marek Bright House Networks

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

Is there any specific reason to use curly brackets with ceil function in this location: {(1800+40)/65}.

SuggestedRemedy

Change to ((1800+40)/65)

Proposed Response *Response Status* **O**

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

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

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* **O**

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

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

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 conusming.

Proposed Response *Response Status* **O**

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

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

"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* **O**

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

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

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* **O**

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

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

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* **O**

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

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

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* **O**

Cl **101** *SC* **101.3.3.1.8** *P* **154** *L* **19** # 4220

Hajduczenia, Marek Bright House Networks

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

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* **O**

Cl **101** *SC* **101.3.3.1.8** *P* **155** *L* **36** # 4221

Hajduczenia, Marek Bright House Networks

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

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* **O**

Cl **101** *SC* **101.4.3.2** *P* **162** *L* **54** # 4222

Hajduczenia, Marek Bright House Networks

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

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 foonote b)

Proposed Response *Response Status* **O**

Cl **101** *SC* **101.4.3.4.5** *P* **165** *L* **44** # 4223

Hajduczenia, Marek Bright House Networks

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

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* **O**

Cl **101** *SC* **101.4.3.6.5** *P* **171** *L* **36** # 4224

Hajduczenia, Marek Bright House Networks

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

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

SuggestedRemedy

Move definition of CntPltSF variable under equation 101-9 and extend the already existign text "CntPltSF 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* **O**

Cl **101** *SC* **101.4.3.9.2** *P* **177** *L* **1** # 4225

Hajduczenia, Marek Bright House Networks

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

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* **O**

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

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

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* **O**

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

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

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

SuggestedRemedy

Add missing "."

Proposed Response *Response Status* **O**

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

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

Figure 101–31 seems to contain a lot of "squeezed" text, where transittion 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* **O**

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

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

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 notitations: 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* **O**

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

Comment Type **T** *Comment Status* **X** *Call, Mark*

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* **O**

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

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

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* **O**

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

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

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* **O**

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

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

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,e specially at the end of Clause 101

Proposed Response *Response Status* **O**

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

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

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* **O**

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

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

IEEE Std 802.1AS is not included in normative references for latest IEEE Std 802.3 and this ammendment

SuggestedRemedy

Add reference to IEEE Std 802.1AS

Proposed Response *Response Status* **O**

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

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

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* **O**

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

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

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* **O**

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

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

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

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

Variables should be defined in equations and not create sepaarte 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* **O**

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

Comment Type **T** *Comment Status* **X** *Discussed, Bill*

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* **O**

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

Comment Type **TR** *Comment Status* **X** *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_EPOC_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_EPOC_CLTX,i and DiffDelay_CLT
Change definition of T_CORR_CLT to read: "is equal to 0.5 x 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, Clasue 13 shall recalculate the value of ToDX,I (see IEEE Std 802.1AS, 13.1.4) using Equation (101-38)."

Proposed Response *Response Status* **O**

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

Comment Type **TR** *Comment Status* **X** *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_EPOC_CNUX,I + T_CORR_CLTi
Given that correction factor for CLT side is constant for the given CLT, we have
ToDX,i = ToD_EPOC_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* **O**

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

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

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

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

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* **O**

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

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

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* **O**

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

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

Incorrect multiplication symbol in DS_FEC_CW_Sz_FRAC□

SuggestedRemedy

Change "*" to proper "x" multiplication symbol

Proposed Response *Response Status* **O**

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

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

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

SuggestedRemedy

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

Proposed Response *Response Status* **O**

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

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

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* **O**

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

Comment Type **E** *Comment Status* **X**
Type "TYPE:Unsigned integer" should be "TYPE: unsigned integer"

SuggestedRemedy
Per comment

Proposed Response *Response Status* **O**

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

Comment Type **ER** *Comment Status* **X**
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 shortetning names of respective constants and making them more user friendly

Proposed Response *Response Status* **O**

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

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

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

Comment Type **E** *Comment Status* **X**
"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* **O**

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

Comment Type **E** *Comment Status* **X**
Dead link: "see Equation 101-31"

SuggestedRemedy
Per comment

Proposed Response *Response Status* **O**

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

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

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

Comment Type **E** *Comment Status* **X**
"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* **O**

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

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

"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* **O**

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

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

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* **O**

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

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

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* **O**

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

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

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

SuggestedRemedy

Remove Figure 103–26

Proposed Response *Response Status* **O**

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

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

Irrelevant information as far as the MPCPDU structure is concerned: "In EPoC the Sync Time field is calculated using rfOnTime, rfOffTime 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* **O**

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

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

45.2.1.4.b should be inserted after 45.2.1.4.b

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* **O**

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

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

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* **O**

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

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

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* **O**

Cl **100** *SC* **100.3.4** *P* **110** *L* **29** # 4264
Laubach, Mark Broadcom

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

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* **O**

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

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

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* **O**

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

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

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* **O**

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

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

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* **O**

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

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

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* **O**

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

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

Reword as only one upstream OFDMA channel

SuggestedRemedy

Delete "in a specified OFDMA channel "

Proposed Response *Response Status* **O**

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

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

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* **O**

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

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

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* **O**

Cl **100** *SC* **100.3.4** *P* **110** *L* **29** # 4272
Laubach, Mark Broadcom

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

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 refrence "(see 100.3.4)" after "OFDM Symbol Clock"
Page 161, Line 47, do the same.

Proposed Response *Response Status* **O**

Cl **101** *SC* **101.3.2.5.4** *P* **140** *L* **16** # 4273

Remein, Duane Huawei Technologies

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

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* **O**

Cl **102** *SC* **102.2.3.1.4** *P* **247** *L* **18** # 4274

Remein, Duane Huawei Technologies

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

Supurfelous period in figure title

SuggestedRemedy

removed.

Proposed Response *Response Status* **O**

Cl **101** *SC* **101.3.2.1.5** *P* **131** *L* **33** # 4275

Remein, Duane Huawei Technologies

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

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* **O**

Cl **101** *SC* **101.3.3.1.8** *P* **156** *L* **21** # 4276

Remein, Duane Huawei Technologies

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

Figures needing conversion to FM native formate
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 formate.
See remein_3bn_10_1115.pdf

Proposed Response *Response Status* **O**

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

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

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

SuggestedRemedy

Use EPoC message block

Proposed Response *Response Status* **O**

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

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

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

SuggestedRemedy

nudged left

Proposed Response *Response Status* **O**

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

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

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* **O**

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

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

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* **O**

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

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

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* **O**

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

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

missing space in "Clause 31and"

SuggestedRemedy

changed to "Clause 31 and"

Proposed Response *Response Status* **O**

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

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

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* **O**

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

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

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* **O**

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

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

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* **O**

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

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

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* **O**

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

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

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* **O**

Cl **101** *SC* **101.4.1.2** *P* **159** *L* **40** # 4288

Remein, Duane Huawei Technologies

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

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* **O**

Cl **101** *SC* **101.4.4.2.1** *P* **189** *L* **50** # 4289

Remein, Duane Huawei Technologies

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

Shouldn't 204 MHz be 204.8 MHz?

SuggestedRemedy

Change to 204.8 MHz

Proposed Response *Response Status* **O**

Cl **01** *SC* **1.4.134** *P* **20** *L* **21** # 4290

Remein, Duane Huawei Technologies

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

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 P802.3bby 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* **O**

Cl **102** *SC* **102.3.5.3** *P* **259** *L* **49** # 4291

Remein, Duane Huawei Technologies

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

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* **O**

Cl **00** *SC* **0** *P* **37** *L* **1** # 4292

Remein, Duane Huawei Technologies

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

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* **O**

Cl **101** *SC* **101.4.4.5.1** *P* **196** *L* **17** # 4293

Remein, Duane Huawei Technologies

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

"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* **O**

Cl **101** *SC* **101.4.4.3.5** *P* **192** *L* **21** # 4294

Remein, Duane Huawei Technologies

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

"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* **O**

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

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

Clause 31A Table 31A–1 lists Mac Control opcode assignements and clauses they are specifiec 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 Cl 31a, Table 31A–1 and add listings for Cl 103.

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

Proposed Response *Response Status* **O**

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

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

"Where;" clauses are using an incorrect style.
pg ln 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* **O**

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

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

"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* **O**

Cl **01** *SC* **1.4.294b** *P* **21** *L* **1** # 4298
Anslow, Pete Ciena

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

"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* **O**

Cl **01** *SC* **1.4.331** *P* **21** *L* **10** # 4299
Anslow, Pete Ciena

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

Deleting the definition in 1.4.331 and re-numbering will change the definition numbering from that poit 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 by the deletion of 1.4.331) as follows:" etc.

Proposed Response *Response Status* **O**

Cl **30** *SC* **30.3.2.1.2** *P* **23** *L* **15** # 4300
Anslow, Pete Ciena

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

"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* **O**

Cl **45** *SC* **45.2.1.4.b** *P* **29** *L* **19** # 4301

Anslow, Pete Ciena

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

"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* **O**

Cl **45** *SC* **45.2.1.14a** *P* **30** *L* **19** # 4302

Anslow, Pete Ciena

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

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* **O**

Cl **45** *SC* **45.2.1.163.2** *P* **49** *L* **10** # 4303

Anslow, Pete Ciena

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

"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 odf the draft to make all other instances of similat text consistent.

Proposed Response *Response Status* **O**

Cl **100** *SC* **100.2.12** *P* **103** *L* **9** # 4304

Dawe, Piers Mellanox

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

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* **O**

Cl **100** *SC* **100.2.5** *P* **77** *L* **22** # 4305

Dawe, Piers Mellanox

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

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* **O**

Cl **101** *SC* **101.4.1** *P* **159** *L* **9** # 4306

Dawe, Piers Mellanox

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

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* **O**

Cl **100** *SC* **100.2.10.2** *P* **101** *L* **16** # 4307

Dawe, Piers Mellanox

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

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* **O**

Cl **100** *SC* **100.2.10.2** *P* **100** *L* **21** # 4308

Dawe, Piers Mellanox

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

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* **O**

Cl **100** *SC* **100.2.10.2** *P* **100** *L* **25** # 4309

Dawe, Piers Mellanox

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

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 x 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 x 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 x 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* **O**