

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

Comment Type E Comment Status A 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

Response Response Status C

ACCEPT.

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

Comment Type E Comment Status R ez

No RO in Table 45-7

SuggestedRemedy

No need to include in the draft amendment

Response Response Status C

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 A 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."

Response Response Status C

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 A 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

Response Response Status C

ACCEPT.

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

Comment Type E Comment Status A ez formatted

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

SuggestedRemedy

Change all instances of "formatted" to "formatted"

Response Response Status C

ACCEPT.

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

Comment Type E Comment Status A ez

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

SuggestedRemedy

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

Response Response Status C

ACCEPT.
only one instance in draft

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

Comment Type E Comment Status A 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

Response Response Status C

ACCEPT IN PRINCIPLE.
fix this instance and any others noticed

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

Comment Type E Comment Status A 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)

Response Response Status C

ACCEPT IN PRINCIPLE.
See comment 4303

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

Comment Type E Comment Status R

Footnote separated from the table

SuggestedRemedy

Please make sure footnotes do not get separated from the tables

Response Response Status C

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.

CI 00 SC 45.2.1.166.3 P 51 L 23 # 4193
Hajduczenia, Marek Bright House Networks

Comment Type TR Comment Status A Tuesday

"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.

Response Response Status C

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.

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

Comment Type TR Comment Status A

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.

Response Response Status C

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."

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

Comment Type E Comment Status A 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)

Response Response Status C

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".

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

Comment Type E Comment Status A 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.

Response Response Status C

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.

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

Comment Type TR Comment Status A 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

Response Response Status C

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.

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

Comment Type E Comment Status A 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

Response Response Status C

ACCEPT.

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

Comment Type T Comment Status A 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"

Response Response Status C

ACCEPT.

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

Comment Type E Comment Status A 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

Response Response Status C

ACCEPT IN PRINCIPLE.

Change to note format. Other instances in the draft will be corrected if noticed.

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

Comment Type E Comment Status A EZ

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

SuggestedRemedy

Change to "The CLT ensures the following"

Response Response Status C

ACCEPT.

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

Comment Type ER Comment Status A Variable Def

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.

Response Response Status C

ACCEPT IN PRINCIPLE.

ReportedPwr is communicated across the PHY Link from each CNU to the CLT.

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

Pg 90 line 20 add:

"The CNU shall report its transmit power using the variable ReportedPwr when requested by the CLT."

Update PICS

For PHY Link managed variables, isolate these variables into a separate sub-clause titled "PHY Link managed variables"

Add the following intro para to the end of the intro [par for Tables 100-1, 101-1 and 102-3

"These variables are used by the PHY Link for PHY management."

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

Comment Type ER Comment Status A

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?

Response Response Status C

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 A 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

Response Response Status C

ACCEPT IN PRINCIPLE.

1) Accept: change multiplication symbols to be consistent

2) 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 0.1." 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 A Discussed

"P1scaled = $P1 \times (0.4 \text{ MHz}) / (\text{Measurement Bandwidth (MHz)})$ 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

Response Response Status C

ACCEPT IN PRINCIPLE.
Page number changed to 95.
Line 22, remove "(MHz)".

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

Comment Type E Comment Status A

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)

Response Response Status C

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 A 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

Response Response Status C

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(I_value, Q_value, ChNum)
Add circle around the PMD_UNITDATA.request lines

Make similar changes for PMD_UNITDATA.indication including Fig 101-3

CI 101 SC 101.1.4 P 122 L 34 # 4208
Hajduczenia, Marek Bright House Networks

Comment Type TR Comment Status A ez

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

Response Response Status C

ACCEPT.

CI 101 SC 101.1.4 P 125 L 45 # 4209
Hajduczenia, Marek Bright House Networks

Comment Type E Comment Status A ez

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

SuggestedRemedy

remove the extra "\"

Response Response Status C

ACCEPT.

CI 101 SC 101.2 P 126 L 3 # 4210
Hajduczenia, Marek Bright House Networks

Comment Type T Comment Status R

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

SuggestedRemedy

Change to "See 76.2."

Response Response Status C

REJECT.

We are not so limited on bits that we can't be this explicit and clear for the benefit of the reader.

CI 101 SC 101.3.2.1.3 P 130 L 6 # 4211
Hajduczenia, Marek Bright House Networks

Comment Type E Comment Status A ez

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

SuggestedRemedy

Per comment

Response Response Status C

ACCEPT.

CI 101 SC 101.3.2.1.5 P 131 L 1 # 4212
Hajduczenia, Marek Bright House Networks

Comment Type ER Comment Status A Tuesday

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

Response Response Status C

ACCEPT IN PRINCIPLE.

Font was changed based on comment # 3980. Font, and Font size are consistent with Style Manual (9 pt Arial, as in most 802.3 SDs).

In Figure 102-16—CLT PHY Link transmit process state diagram
pg 255 ln 23 there are 3 instances of "EPCH_Len ===" with no argument, correct this.

Editors to consult with other TF Editors and Staff Editors to see if some solution can be found. If no solution is found expand to arg = arg - arg1

CI 101 SC 101.3.2.5.6 P 141 L 39 # 4213
Hajduczenia, Marek Bright House Networks

Comment Type E Comment Status A ez

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

SuggestedRemedy

Change to ((1800+40)/65)

Response Response Status C

ACCEPT.

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

Bright House Networks

Comment Type

E

Comment Status

A

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"

Response

Response Status

C

ACCEPT.

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

Bright House Networks

Comment Type

ER

Comment Status

R

Tuesday

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.

Response

Response Status

C

REJECT.
The text in question uses Paragraph Tag "DefinitionList" per the current 802.3 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. There is not known solution to this issue that the Editors are aware of.

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

Bright House Networks

Comment Type

T

Comment Status

A

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"

Response

Response Status

C

ACCEPT.

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

Bright House Networks

Comment Type

E

Comment Status

R

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

Response

Response Status

C

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.

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

Comment Type ER Comment Status A 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 ...

Response Response Status C

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.
Change all instances of UTC to UCT
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.

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

Comment Type E Comment Status A 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."

Response Response Status C

ACCEPT.

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

Comment Type TR Comment Status A 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)"

Response Response Status C

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

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

Comment Type T Comment Status A
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 {}

Response Response Status C

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

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

Comment Type TR Comment Status A 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)

Response Response Status C

ACCEPT.

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

Comment Type E Comment Status A 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"

Response Response Status C

ACCEPT.

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

Comment Type ER Comment Status A Discussed, variable def location

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

Response Response Status C

ACCEPT IN PRINCIPLE.

For PHY Link managed variables, isolate these variables into a separate sub-clause titled "PHY Link managed variables"

Add the following intro para to the end of the intro [par for Tables 100-1, 101-1 and 102-3 "These variables are used by the PHY Link for PHY management."

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

Comment Type E Comment Status A 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.

Response Response Status C

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 A

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)

Response Response Status C

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 A ez

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

SuggestedRemedy

Add missing "."

Response Response Status C

ACCEPT.

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

Comment Type E Comment Status A 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

Response Response Status C

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 A

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.

Response Response Status C

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 A 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

Response Response Status C

ACCEPT.

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

Comment Type TR Comment Status A

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.

Response Response Status C

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

Change "resource element" to "Resource Element"
Change "resource block" to "Resource Block"

Look for RB & RE and remove abbreviations

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

Comment Type E Comment Status A 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

Response Response Status C

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 A

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

Response Response Status C

ACCEPT.

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

Comment Type ER Comment Status A

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"

Response Response Status C

ACCEPT.

CI 01 SC 101.5 P 218 L 1 # 4235
Hajduczenia, Marek Bright House Networks

Comment Type ER Comment Status A

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

Response Response Status C

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 A

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"

Response Response Status C

ACCEPT.

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

Comment Type ER Comment Status A 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)

Response Response Status C

ACCEPT IN PRINCIPLE.

Per comment (Ichange "should be" to "is" 2x) and also add to the end of the para in 101.5: "CLTs and CNUs should use the 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 support | 101.5.3 | Methods described in 101.5.4.1, 101.5.4.2, and 101.5.4.3 supported. | O

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

Comment Type ER Comment Status A 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

Response Response Status C

ACCEPT IN PRINCIPLE.
Add at the beginning of 101.5.3
"The following material is provided to assist IEEE Std 802.1AS implementers in understanding how to apply IEEE Std 802.3AS, 13.1.4 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 renumbered 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 A 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

Response Response Status C

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 A Discussed

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

SuggestedRemedy

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

Response Response Status C

ACCEPT.

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

Comment Type TR Comment Status A 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 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, Clause 13 shall recalculate the value of ToDXi (see IEEE Std 802.1AS, 13.1.4) using Equation (101-38)."

Response Response Status C

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 A Tuesday, 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

Response Response Status C

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"

Add after Eq 103-39:
"(i.e., CNU time = CNUi future time sent by CLT + CNUi correction factor)"

Add after Eq 103-38:
"(i.e., future time sent by CLT to CNUi = 802.1AS future time + CLT correction factor)"

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

Comment Type **TR** Comment Status **A** Tuesday, 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.

Response Response Status **C**

ACCEPT IN PRINCIPLE.
See Response to comment #4242

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

Comment Type **ER** Comment Status **R**

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

Response Response Status **C**

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

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

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

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"

Response Response Status **C**

ACCEPT.
Change the listed variables to unsigned integer

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

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

Incorrect multiplication symbol in DS_FEC_CW_Sz_FRAC

SuggestedRemedy

Change "*" to proper "x" multiplication symbol

Response Response Status **C**

ACCEPT.
(Ctrl Q 0)

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

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

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)

Response Response Status **C**

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."

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

Comment Type **TR** Comment Status **R** 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

Response Response Status **U**

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.

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

Comment Type E Comment Status A ez

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

SuggestedRemedy

Per comment

Response Response Status C

ACCEPT.

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

Comment Type ER Comment Status A

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

Response Response Status C

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.

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

Comment Type E Comment Status A 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.

Response Response Status C

ACCEPT IN PRINCIPLE.

Use Arial

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

Comment Type E Comment Status A ez

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

SuggestedRemedy

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

Response Response Status C

ACCEPT.

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

Comment Type E Comment Status A Eq 101-32

Dead link: "see Equation 101-31"

SuggestedRemedy

Per comment

Response Response Status C

ACCEPT IN PRINCIPLE.

AIP see 4254

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

Comment Type TR Comment Status A Eq 101-32

RB_time_quanta is NOT defined in Equation 101-31

SuggestedRemedy

Please provide correct reference where the said variable is defined

Response Response Status C

ACCEPT IN PRINCIPLE.

s/b Eq 101-32

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

Comment Type E Comment Status A 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)"

Response Response Status C

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

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

Comment Type TR Comment Status A

"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

Response Response Status C

ACCEPT IN PRINCIPLE.
Per comment add PICS statement.

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

Comment Type TR Comment Status A

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."

Response Response Status C

ACCEPT IN PRINCIPLE.
Change
"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." to
"The generic MPCPDU structure and encoding in EPoC is as described in 77.3.6. The MPCPDU structure shall be as shown in Figure 77-31. Changes to specific MPCPDU messages are noted below."

CI 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 Z

REJECT.

This comment was WITHDRAWN by the commenter.

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

Comment Type T Comment Status A discussed, Fig 103-26
Unnecessary Figure 103–26 - it is not referenced in the text anyway.

SuggestedRemedy
Remove Figure 103–26

Response Response Status C
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 A 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

Response Response Status C
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 A ez
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):"

Response Response Status C
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 Z
REJECT.

This comment was WITHDRAWN by the commenter.

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 Z
REJECT.

This comment was WITHDRAWN by the commenter.

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

Comment Type T Comment Status A 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

Response Response Status C

ACCEPT.
Changed to CI 00

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

Comment Type ER Comment Status A 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"

Response Response Status C

ACCEPT.

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

Comment Type ER Comment Status A 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"

Response Response Status C

ACCEPT.

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

Comment Type T Comment Status A 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.

Response Response Status C

ACCEPT.

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

Comment Type T Comment Status A 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"

Response Response Status C

ACCEPT.

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

Comment Type T Comment Status A EZ

Reword as only one upstream OFDMA channel

SuggestedRemedy

Delete "in a specified OFDMA channel "

Response Response Status C

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 A 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".

Response Response Status C

ACCEPT.

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

Comment Type T Comment Status A

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

SuggestedRemedy

As per comment.

Response Response Status C

ACCEPT.

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

Comment Type E Comment Status A 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.

Response Response Status C

ACCEPT.

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

Comment Type E Comment Status A Tuesday

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, shortened 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."

Response Response Status C

ACCEPT.

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

Comment Type E Comment Status A ez

Supurfelous period in figure title

SuggestedRemedy

removed.

Response Response Status C

ACCEPT.

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

Comment Type E Comment Status A

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

Response Response Status C

ACCEPT.

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

Comment Type E Comment Status A 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 formate.

See remain_3bn_10_1115.pdf

Response Response Status C

ACCEPT.

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

Comment Type E Comment Status A

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

SuggestedRemedy

Use EPoC message block

Response Response Status C

ACCEPT.

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

Comment Type E Comment Status A

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

SuggestedRemedy

nudged left

Response Response Status C

ACCEPT.

CI 01

SC 1.4

P 21

L 24

4279

Remein, Duane

Huawei Technologies

Comment Type

E

Comment Status

A

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."

Response

ACCEPT.

Response Status

C

CI 00

SC 0

P

L

4280

Remein, Duane

Huawei Technologies

Comment Type

E

Comment Status

A

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

Response

ACCEPT.

Response Status

C

CI 45

SC 45.2.1.131

P 31

L 1

4281

Remein, Duane

Huawei Technologies

Comment Type

E

Comment Status

A

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."

Response

ACCEPT.

Response Status

C

CI 103

SC 103.1

P 289

L 32

4282

Remein, Duane

Huawei Technologies

Comment Type

E

Comment Status

A

missing space in "Clause 31and"

SuggestedRemedy

changed to "Clause 31 and"

Response

ACCEPT.

Response Status

C

CI 00

SC 0

P 34

L 22

4283

Remein, Duane

Huawei Technologies

Comment Type

ER

Comment Status

A

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.

Response

ACCEPT.

Response Status

C

CI 103

SC 103.3.5.2

P 321

L 1

4284

Remein, Duane

Huawei Technologies

Comment Type

T

Comment Status

A

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

SuggestedRemedy

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

Response

ACCEPT.

Response Status

C

CI 103	SC 103.2.2.3	P 300	L 16	# 4285
Remein, Duane		Huawei Technologies		
Comment Type	T	Comment Status	A	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."				
Response	Response Status C			
ACCEPT IN PRINCIPLE.				
Change to:				
"This variable represents the number of octets that can be transmitted in 128				
<italic>time_quantum<italic> units; i.e., 2048 ns."				

CI 103	SC 103.3.5.2	P 321	L 28	# 4286
Remein, Duane		Huawei Technologies		
Comment Type	T	Comment Status	A	
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."				
Response	Response Status C			
ACCEPT IN PRINCIPLE.				
"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."				

CI 45	SC 45.2.1.137.2	P 37	L 44	# 4287
Remein, Duane		Huawei Technologies		
Comment Type	T	Comment Status	A	
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."				
Response	Response Status C			
ACCEPT.				

CI 101	SC 101.4.1.2	P 159	L 40	# 4288
Remein, Duane		Huawei Technologies		
Comment Type	T	Comment Status	A	
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."				
Response	Response Status C			
ACCEPT.				

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

Comment Type T Comment Status A

Shouldn't 204 MHz be 204.8 MHz?

SuggestedRemedy

Change to 204.8 MHz

Response Response Status C

ACCEPT.

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

Comment Type T Comment Status A

Align definition of channel with modifications being made in P802.3by (see [http://www.ieee802.org/3/by/public/comments/ comment #104](http://www.ieee802.org/3/by/public/comments/comment%20#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"

Response Response Status C

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, 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 A

US_PhylLinkMod

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

Response Response Status C

ACCEPT.

CI 00SC 0P 37L 1# 4292

Remein, DuaneHuawei Technologies

Comment TypeTRComment StatusA

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

ResponseResponse StatusC

ACCEPT.

CI 00SC 101.4.4.5.1P 196L 17# 4293

Remein, DuaneHuawei Technologies

Comment TypeTRComment StatusA

"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)."

Response

Response StatusC

ACCEPT IN PRINCIPLE.
Per suggestion but use "at the US_DataRate" rather than "a the US_DataRate"

Editor to check on "TYPE:" vs "Type:"

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

Comment Type TR Comment Status A 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

Response Response Status C

ACCEPT IN PRINCIPLE.

As per comment with the addition of a xref to figure 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 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 A

Clause 31A Table 31A-1 lists Mac Control opcode assignments and clauses they are
 specified 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.

Response Response Status C
 ACCEPT.

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

Comment Type E Comment Status A

"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

Response Response Status C
 ACCEPT.

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

Comment Type E Comment Status A 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

Response Response Status C
 ACCEPT.

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

Comment Type E Comment Status A 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"

Response Response Status C

ACCEPT.

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

Comment Type E Comment Status A Tuesday

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.

Response Response Status C

ACCEPT IN PRINCIPLE.

Remove the removal of 1.4.331

Change the wording to:

Change 1.4.331 as follows:

1.4.331 Point-to-Multipoint network (P2MP): A network topology based on a centralized station connected to a number end stations. Frames transit the network between the central station and the end stations and do not transit directly from end station to end station. (See IEEE Std 802.3, Clause 64, Clause 65, Clause 76, Clause 77, Clause 101, and Clause 103).

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

Comment Type E Comment Status A 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

Response Response Status C

ACCEPT.

CI 45 SC 45.2.1.4.b P 29 L 19 # 4301
 Anslow, Pete Ciena

Comment Type E Comment Status A 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 "

Response Response Status C

ACCEPT.

CI 45 SC 45.2.1.14a P 30 L 19 # 4302
 Anslow, Pete Ciena

Comment Type E Comment Status A 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

Response Response Status C

ACCEPT.

CI 00 SC 45.2.1.163.2 P 49 L 10 # 4303
Anslow, Pete Ciena

Comment Type E Comment Status A 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.

Response Response Status C

ACCEPT.

See comment 4191

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

Comment Type E Comment Status A 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.

Response Response Status C

ACCEPT.

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

Comment Type T Comment Status A 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.

Response Response Status C

ACCEPT IN PRINCIPLE.

Take existing 100.2.5 thru 100.2.13 move under new L2 header "PMD functional requirements"

Rename existing 100.2 to "PMD service interface requirements"

The editor is given license on L2 header titles.

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

Comment Type T Comment Status A

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."

Response Response Status C

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 (CLT only), 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-interleaver (CNU only), symbol de-mapper, and data de-scrambler.

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

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

Comment Type TR Comment Status A 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.

Response Response Status W

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.

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

Comment Type TR Comment Status A 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?

Response Response Status W

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 "Ethernet frames".

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

Comment Type TR Comment Status R Tuesday, 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.

Response Response Status W

REJECT.

Inside the receive direction PMD everything is inside the time domain (pre FFT) and all signal processing is done in the time domain, where there are no relevant statistics related to error ratios. All decoding and error performance is in the frequency domain (post FFT) in the PMA. Even SNR evaluation (using equalized modulation error ratio MER) can only be done immediately after processing by the FFT when analyzing the QAM symbol in each decoded OFDM/A subcarrier. Note for EPoC, the PMD receiver is essentially a pre-amp (with slope correction and assuming wideband conversion), an AGC, and an A/D converter that produces the time domain samples delivered across the PMD service interface.

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

Comment Type E Comment Status A 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.

Response Response Status C

ACCEPT IN PRINCIPLE.

Redraw the figure in Frame, remove shading.

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

Comment Type E Comment Status A 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.

Response Response Status C

ACCEPT IN PRINCIPLE.

See remain_3bn_10_1115 and comments #4232 and #4276

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

Comment Type E Comment Status A 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.

Response Response Status C

ACCEPT IN PRINCIPLE.

See comment #4259 (adding ref).

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

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

SuggestedRemedy

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

Response Response Status C
 ACCEPT.

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

Comment Type ER Comment Status A 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.

Response Response Status C

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".

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

Comment Type TR Comment Status A 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

Response Response Status C
 ACCEPT.

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

Comment Type TR Comment Status A 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.

Response Response Status C
 ACCEPT IN PRINCIPLE.
 See Comment #4222

CI 101 SC 101.3.2.5.6 P 142 L 1 # 4317
 Remein, Duane Huawei Technologies

Comment Type T Comment Status A From the Floor
 Comment #3832 did not get implemented properly.

SuggestedRemedy

Changed
 "TYPE: 32-bit unsigned integer"
 to
 "TYPE: 32-bit signed integer"

Response Response Status C
 ACCEPT.

(same as maintance Req #1282)