

CI 1 SC 1.4.277a P 28 L 47 # i-1
 Anslow, Peter Ciena Corporation

Comment Type E Comment Status D EZ

The P802.3bq amendment is expected to be approved before 802.3bn. The P802.3bq draft is inserting a new definition for "MultiGBASE-T" which should be 1.4.277a . P802.3bq D3.0 has this as 1.4.277b, but a comment will be submitted to correct this.

SuggestedRemedy

Change the editing instruction to: "Insert the following definition after 1.4.277 "mixing segment" and before 1.4.277a (as inserted by IEEE Std 802.3bq-201x) as follows:"
 Change the definition to be 1.4.277aa

Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 1 SC 1.4.294b P 29 L 5 # i-2
 Anslow, Peter Ciena Corporation

Comment Type E Comment Status D EZ

"optical distribution network (ODN)" should be after 1.4 296 "Operations, Administration, and Maintenance (OAM)"

SuggestedRemedy

Renumber 1.4.294b to 1.4.296a and add appropriate editing instruction

Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 30 SC 30.3.5.1.3 P 32 L 11 # i-3
 Anslow, Peter Ciena Corporation

Comment Type T Comment Status D EZ

Text has been added to say "When this attribute has the enumeration "CLT", the interface acts as a CLT. When this attribute has the enumeration "CNU", the interface acts as a CNU."

However, the APPROPRIATE SYNTAX section of 30.3.5.1.3 only has enumerations of "OLT" and "ONU"

SuggestedRemedy

Add enumerations of "CLT" and "CNU" to the APPROPRIATE SYNTAX section of 30.3.5.1.3

Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 45 SC 45.2.1.14aa P 38 L 17 # i-4
 Anslow, Peter Ciena Corporation

Comment Type E Comment Status D EZ

In "Insert 45.2.1.14aa and Table 45-17aa after 45.2.1.14a as inserted by IEEE Std 802.3by-201x as follows:", "after" should be "before".

SuggestedRemedy

Change "after" to "before".

Proposed Response Response Status W
 PROPOSED ACCEPT.

CI FM SC FM P 1 L 1 # i-5
 Hajduczenia, Marek Bright House Network

Comment Type E Comment Status A +REV+ Sed

Based on IEEE P802.3by entering sponsor ballot in November 2015, IEEE P802.3bq and IEEE P802.3bp entering sponsor ballot in December 2015, the published timeline for IEEE P802.3bq showing approval in June 2016, and the published timeline for IEEE P802.3bp showing approval in August 2016, it seems likely that that IEEE P802.3by will be the second amendment, IEEE P802.3bq will be the third amendment, and IEEE P802.3bn will be the fifth or sixth amendment to IEEE Std 802.3-2015.

SuggestedRemedy

Please change '(Amendment of IEEE Std 802.3(TM)-2015)' to read 'Amendment of IEEE Std 802.3(TM)-2015 as amended by IEEE Std 802.3bw(TM)-2015), IEEE Std 802.3by(TM)-201X, IEEE Std 802.3bq(TM)-201X, IEEE Std 802.3bp(TM)-201X"
 Keep the list updated as project status changes

Response Response Status C
 ACCEPT.

CI FM **SC FM** **P 13** **L 14** # **i-6**
Hajduczenia, Marek Bright House Network

Comment Type **E** **Comment Status** **A** **+REV+ Sed**

Suggest that this text be updated based on: (a) the approval of IEEE Std 802.3bw-2015, the likelihood that IEEE P802.3by will be the second amendment, IEEE P802.3bq will be the third amendment, and IEEE P802.3bp will be the fourth amendment to IEEE Std 802.3-2015; (b) use of the (TM) symbol only on the first instance; and (c) alignment of IEEE P802.3bn description with other amendment descriptions

SuggestedRemedy

[1] The following text should be inserted prior to the existing text 'IEEE Std 802.3bn(TM)-201x':

IEEE Std 802.3bw-2015

Amendment 1--This amendment includes changes to IEEE Std 802.3-2015 and adds Clause 96. This amendment adds 100 Mb/s Physical Layer (PHY) specifications and management parameters for operation on a single balanced twisted-pair copper cable.

IEEE Std 802.3by-201x

Amendment 2--This amendment includes changes to IEEE Std 802.3-2015 and adds Clause 105 through Clause 112, Annex 109A, Annex 109B, Annex 110A, Annex 110B, and Annex 110C. This amendment adds MAC parameters, Physical Layers, and management parameters for the transfer of IEEE 802.3 format frames at 25 Gb/s.

IEEE Std 802.3bq-201x

Amendment 3--This amendment includes changes to IEEE Std 802.3-2015 and adds Clause 113 and Annex 113A. This amendment adds new Physical Layers for 25 Gb/s and 40 Gb/s operation over balanced twisted-pair structured cabling systems.

IEEE Std 802.3bp-201x

Amendment 4--This amendment includes changes to IEEE Std 802.3-2015 and adds Clause 97 and 98. This amendment adds point-to-point 1 Gb/s Physical Layer (PHY) specifications and management parameters for operation on a single balanced twisted-pair copper cable in automotive and other applications not utilizing the structured wiring plant.

[2] Insert "Amendment 5--" before the current descriptive text for IEEE Std 802.3bn(TM)-201x

Response **Response Status** **C**

ACCEPT IN PRINCIPLE.

REVISED

Per comment except [2] (WG Chair has not yet announced the order of this amendment)

CI 30 **SC 30** **P 31** **L 1** # **i-8**
Hajduczenia, Marek Bright House Network

Comment Type **E** **Comment Status** **A** **+REV+**

Suggest the editing instructions be updated listing the expected approval order for any objects modifying selected attributes.

This helps the reader understand that this object is being modified by multiple projects, and also help staff editorial combine individual amendments into a single base document down the road

This applies to aPhyType, aPhyTypeList, aMAUType

SuggestedRemedy

For example, aPhyType is being modified by all 5 amendments (this one and 4 previous ones):

Change "Insert in alphanumeric order a single line for "10GPASS-XR" type into the APPROPRIATE SYNTAX

list of 30.3.2.1.2 aPhyType as shown below." to Insert in alphanumeric order a single line for "10GPASS-XR" type into the APPROPRIATE SYNTAX

list of 30.3.2.1.2 aPhyType (as modified by IEEE Std 802.3bw-2015, IEEE Std 802.3by-201X, IEEE Std 802.3bq-201X, and IEEE Std 802.3bp-201X) as shown below.

Response **Response Status** **C**

ACCEPT IN PRINCIPLE.

REVISED

Insert "(as modified by IEEE Std 802.3bw-2015, IEEE Std 802.3by-20xx, IEEE Std 802.3bq-20xx, and IEEE Std 802.3bp-20xx)"

Note this is the syntax agreed with IEEE staff editors.

CI 45 **SC 45.2** **P 33** **L 6** # **i-9**
Hajduczenia, Marek Bright House Network

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

No need to show unchanged rows.

SuggestedRemedy

Change editorial instructions to read: "Change reserved row 12 through 28 as shown below (unchanged rows are not shown)"

Strike rows 0 through 11, 29 through 31

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

PROPOSED ACCEPT.

CI 45 SC 45.2.1.131 P 39 L 1 # i-10
Hajduczenia, Marek Bright House Network

Comment Type ER Comment Status A +REV+ DR Sed CI45 renum

Registers 45.2.1.133 through 45.2.1.137 are already allocated by P802.3bw, which will likely be published before .3bn

SuggestedRemedy

move registers 45.2.1.131 - 165 to 45.2.1.138 - 172 and renumber accordingly
Renumber also Tables to make sure there is no conflict with projects in Sponsor Ballot or approved.

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED

Coordinate with other clause 45 editors and change clause numbering as agreed, register numbering remains as is. Tables will be renumbered per comment i-371 (resolution copied below)

Editors to consult with WG Secretary and IEEE staff editors for preferred resolution.

CI 45 SC 45.2.1.144 P 49 L 32 # i-11
Hajduczenia, Marek Bright House Network

Comment Type T Comment Status D EZ

You might likely want to list full register number: "Registers 1.1923 and 1922 form an offset"

SuggestedRemedy

Change to "Registers 1.1923 and 1.1922 form an offset"

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 00 SC 45.2.1.147 P 51 L 1 # i-12
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

It is not clear why DS PMA/PMD data rate is chopped up in such an unreadable format: bits 15:0 first, followed by bits 2:0, followed by bits 31:16, followed by Reserved space and followed by bits 36:32

The same applies to Table 45-98r

SuggestedRemedy

Suggest the following order:

1.1927:15:0 -> bits 36:21 (call it fixed, upper)

1.1926:15:0 -> bits 20:5 (call it fixed, middle)

1.1925:15:14 -> bits 4:3 (call it fixed, bottom)

1.1925:13:11 -> bits 2:0 (call it fraction)

1.1925:10:0 -> Reserved

Similar changes for Table 45-98r

Response Response Status W

ACCEPT IN PRINCIPLE.

REVISED

Changed to CI 00

The mapping assigns the least significant bit to the lowest numbered register/bits and the highest significant numbers to the most significant bits.

Reserved bits are at the logical top of the structure. This is a logical order from a machine readable point of view.

Change the note accompanying tables 100-1, 101-1 & 102-3 regarding MSB/LSB to :

"The least significant bit in each variable is mapped to the lowest numbered bit in the lowest numbered register for Clause 45 registers."

CI 45 SC 45.2.1.149 P 52 L 1 # i-13
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status R +REV+

Table footnote got separated from table

SuggestedRemedy

Please make sure there are no runaway footnotes to tables

Response Response Status C

REJECT.

Standards are professionally edited by IEEE editors prior to publication

Cl 45 SC 45.2.7a.4 P 64 L 18 # i-14
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status R +REV+

Table 45-98q and Table 45-98r specify order of mapping of fixed and fractional elements of a floating point number. Why is the same not done in Table 45-211e and other table defining pre-equalizer coefficients? Is the mapping intended to start with fixed or fractional part?

SuggestedRemedy

Consider adding details from Table 45-98q/r to make sure that it is clear where fractional and fixed elements of the floating point numbers would be located

Response Response Status W

REJECT.

This 16-bit number wholly maps into a single MDIO register whereas the numbers in Table 45-98q/r require 3 registers with some spare register bits requiring enumeration of used and spare bits.

Cl 56 SC 56.1 P 69 L 31 # i-15
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

The list of Clauses for 10G-EPON lists PHY and PMD only, while EPoC also lists MPCP for some reason

SuggestedRemedy

Change "Clause 101, Clause 102, and Clause 103" to "Clause 101 and Clause 102"

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 56 SC 56.1.3 P 72 L 10 # i-16
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

Some spurious "\" in Rate column

SuggestedRemedy

Change "(tx)\h" to "(tx)h" with proper footnote reference format

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 100 SC 100.1.4 P 83 L 32 # i-17
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status R +REV+ Sed

Different ways to specify ranges: "RxMER_SC(4) through RxMER_SC(4095)" but "3050, 3052 ... 11238"

SuggestedRemedy

Use a consistent way, for example: "3050 through 11238"
Apply to all tables in Clause 100, 101, 102 - there are multiple instances

Response Response Status C

REJECT.

This is setting up a series: 3050, 3052, 3054, . 11238. Changing this to 3050 through would be incorrect and imply 3050, 3051 through 11238.

Cl 100 SC 100.2.1.2 P 84 L 17 # i-18
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status A +REV+

"an I / Q value" - it would make more sense to call it "an I/Q value" (no spaces) to avoid line breaking across "I / Q"

Make sure that line breaking on "/" is disabled

SuggestedRemedy

Per comment

Response Response Status C

ACCEPT.

CI 100 SC 100.2.1.2 P 84 L 20 # i-19
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

Text does not match primitive: "PMD_UNITDATA.request(I_value, Q_value, ChNum)" versus "The data conveyed by PMD_UNITDATA.request is a continuous stream of I / Q value pairs." - it is not just I/Q pairs that are being transmitted, but also channel number

SuggestedRemedy

Change "The data conveyed by PMD_UNITDATA.request is a continuous stream of I/Q value pairs and target OFDM channel."
Change "The Clause 101 PMA continuously sends the stream of I / Q value pairs to the Clause 100 PMD for transmission on the medium, at the nominal rate of 204.8 million samples per second (Msps)." to "The Clause 101 PMA continuously sends the stream of I/Q value pairs and OFDM channel number to the Clause 100 PMD for transmission on the medium, at the nominal rate of 204.8 million samples per second (Msps)."
See Figure 101-1 for reference on what is sent to PMD via PMD_UNITDATA primitive
Similar changes needed to 100.2.1.3, where PMD_UNITDATA.indication is defined only in terms of I/Q pairs, omitting OFDM channel information altogether

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED

Change "The data conveyed by PMD_UNITDATA.request is a continuous stream of I/Q value pairs." to
"The data conveyed by PMD_UNITDATA.request is a continuous stream of I/Q value pairs and target OFDM channel."

Change "The Clause 101 PMA continuously sends the stream of I / Q value pairs to the Clause 100 PMD for transmission on the medium, at the nominal rate of 204.8 million samples per second (Msps)." to
"The Clause 101 PMA continuously sends the stream of I/Q value pairs and OFDM channel number to the Clause 100 PMD for transmission on the medium, at the nominal rate of 204.8 million samples per second (Msps)."

In 100.2.1.3 PMD_UNITDATA.indication
Add "and received OFDM channel" to end of sentence on line 33/34.
Add "and OFDM channel number" just after "I / Q value pairs" at line 37.

CI 100 SC 100.2.3 P 85 L 13 # i-20
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

Text "The PMD Receive function conveys the bits received from the MDI to the PMD service interface using the message PMD_UNITDATA.indication(I_value, Q_value), creating appropriately formatted stream of I / Q value pairs." does not match Figure 101-3, where PMD_UNITDATA.indication(I_value, Q_value, ChNum) is shown

SuggestedRemedy

Change text to read "The PMD Receive function conveys the bits received from the MDI to the PMD service interface using the message PMD_UNITDATA.indication(I_value, Q_value, ChNum), creating appropriately formatted stream of I/Q value pairs and OFDM channel information."

Response Response Status W

ACCEPT.

CI 100 SC 100.2.4 P 85 L 20 # i-21
Hajduczenia, Marek Bright House Network

Comment Type T Comment Status A EZ

Unclear what "this" is in the statement: "this is not defined for the CLT"

SuggestedRemedy

Change to "PMD_SIGNAL.request(Tx_Enable) message is not defined for the CLT"

Response Response Status C

ACCEPT.

CI 100A SC 100A.1 P 349 L 45 # i-22
Hajduczenia, Marek Bright House Network

Comment Type T Comment Status R +REV+

Figure 100A-1 is intended (I believe) to be an example, rather than a normative representation of EPoC network topology

SuggestedRemedy

Change "Figure 100A-1--EPoC network topology" to "Figure 100A-1--EPoC network topology (example)"

Response Response Status C

REJECT.
First paragraph explains it. The channel model is based on that topology model.

CI 100A SC 100A.1 P 349 L 48 # i-23
Hajduczenia, Marek Bright House Network

Comment Type ER Comment Status A +REV+ Sed

Reference in lines 49-53 should be converted into entries in Annex A, and then referenced via [XX] references - these are non-normative reference

SuggestedRemedy

Per comment
Change "NOTE - Additional information on cable coaxial network topology can be found in:" to "NOTE - Additional information on cable coaxial network topology can be found in [A] and [B]." update the proper letters, when references are inserted.
Also, apply proper FM style to NOTE - it is in T,Text right now

Response Response Status W

ACCEPT.

CI 100A SC 100A.2 P 350 L 7 # i-25
Hajduczenia, Marek Bright House Network

Comment Type T Comment Status D EZ

Is "HFC Node" the same as "Node"?

SuggestedRemedy

Seems that "Node" is more common. Change all "HFC Node" to "Node"
Also, consider adding definition of what a "Node" is, since it is used under assumption that it is a commonly known definition, which is not the case in 802.3

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
REVISED

In Fig 100A-1 expand "NODE" to "HFC NODE"
On Pg 350 line 13 change "the EPoC RF coupled after Node" to "the EPoC RF coupled after HFC Node"
Note that an HFC Node is a specific type of node which is well known in the cable industry. Other uses of the word node in the standard is consistent with the definitions of CCDN, ODN, etc.

CI 100A SC 100A.2 P 350 L 17 # i-26
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

Table 100A-1 contains multiple acronyms that are not defined anywhere - when they are used in 1/2 locations, just expand them and not define them at all

SuggestedRemedy

Examples: SCN, CTB, CSO, SCN

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
REVISED

First use of SCN is already expanded in Table 100A-1. Will add first-use expansions for first use of acronyms for CTB, CSO, as found. Note that SCN, CTB, and CSO well known in the cable RF industry.

CI 100A SC 100A.2 P 352 L 4 # i-27
Hajduczenia, Marek Bright House Network

Comment Type ER Comment Status R +REV+ Sed

All notes under the table are NOT in the right format.

SuggestedRemedy

Apply proper FM style - right now these are simple T,Text style text.
Also, is the intent to use informative or normative notes here? There is a difference and it seems that you're after footnotes, and not notes to table. If that is the case, use footnotes, and not notes.
The same observation applies to Table 100A-2

Response Response Status W

REJECT.

These are Table Notes and informative (see 14.4 in the Style Manual). IEEE Staff Editors approved the current format and paragraph tag.

Cl **100A** SC **100A.4.3** P **356** L **6** # **i-28**
 Hajduczenia, Marek Bright House Network

Comment Type **TR** Comment Status **A** +REV+

I am very confused by TOPO PICS entry - what does it even mean that the baseline channel model shall be based on Figure 100A-1? PERF1 and PERF2 make some sense, in that these are requirements for channel to meet in order to support baseline EPoC operation.

SuggestedRemedy

Strike 100A.4.3 + remove associated shall requirement

Response Response Status **W**

ACCEPT IN PRINCIPLE.
 REVISED
 Strike "TOTO" requirement and 100A.4.4 header.

At pg 349 line 4 strike the statement "Devices designed to the EPoC PHY standard shall meet or exceed normative performance when operated in any network which meets or exceeds the parameters given in Table 100A-1 and Table 100A-2 regardless of the network topology."

Add at pg 350 line 3 as the 1st sentence of the para:
 "Devices designed to the EPoC PHY standard shall meet or exceed normative performance when operated in any network which meets or exceeds the parameters given in Table 100A-1 regardless of the network topology."

Add at pg 352 line 30 as 1st sentence of the para:
 "Devices designed to the EPoC PHY standard shall meet or exceed normative performance when operated in any network which meets or exceeds the parameters given in Table 100A-2 regardless of the network topology."

Update PICS PERF1 & PERF2

Cl **100** SC **100.3.2.1** P **87** L **10** # **i-29**
 Hajduczenia, Marek Bright House Network

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

"This establishes nominal data rate for CLT PMA_UNITDATA.request() service interface." - unclear what "This" means in this sentence. Is this reference to equation 100-1 or DS-DataRate? Please clarify
 Also, "CLT PMA_UNITDATA.request()" should be "CLT PMA_UNITDATA.request", since we do not list all primitive parameters. Same on page 88, line 1

SuggestedRemedy

Per comment

Proposed Response Response Status **W**

PROPOSED ACCEPT IN PRINCIPLE.
 REVISED
 Change "This" to "Equation 100-1" cross ref. Do the other two changes.

Cl **100** SC **100.3.2.2** P **87** L **30** # **i-30**
 Hajduczenia, Marek Bright House Network

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

Odd unit: "(upstream) (us))

SuggestedRemedy

Change to "(us)"
 It is not clear what the implication of "(upstream)" is here

Proposed Response Response Status **W**

PROPOSED ACCEPT IN PRINCIPLE.
 REVISED
 Remove "(upstream)".

Cl **100** SC **100.3.2.3** P **88** L **19** # **i-31**
 Hajduczenia, Marek Bright House Network

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

There is no reason to keep DS_ChCnt variable in bit-format - it should be specified as unsigned integer and how it is mapped into register(s) is quite straightforward, considering the value range: 1- 5
 Similar comment on DS_PowerCh(n) in 100.3.4.2.1

SuggestedRemedy

Per comment

Proposed Response Response Status **W**

PROPOSED ACCEPT IN PRINCIPLE.
 REVISED
 Change "3-bit integer" to "3-bit unsigned integer"

Cl 100 SC 100.3.3 P 88 L 37 # i-32
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

This kind of information should be included in the subclause called "Labelling"

SuggestedRemedy

Move this to 100.5.4 and convert into a non-requirement. Unless you provide specific normative way of labelling wavelength ranges, it is not testable as defined right now. Remove associated PICS

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED

1) Move 100.3.3, 100.3.3.1, and 100.3.3.2 under 100.5.4, as 100.5.4.1, 100.5.4.1.1, and 100.5.4.1.2 respectively. Move DS_FreqCh(n) and US_FreqCh1 definitions from 100.3.3.3 to 100.3.2.3. Delete 100.3.3.3 subclause header. Update PICS.

2) The TF and IEEE Staff Editor agree that labeling in normative and thus a "shall" is appropriate? A black box without labeling on supported frequency ranges is also not useful to the operator.

Update PICS as needed.

Cl 100 SC 100.3.4.1 P 89 L 29 # i-33
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

I do not see any value in Equation 100-3 - it is a simple division, which can be described in simple words

SuggestedRemedy

Strike Eq (100-3)

Change "The number of equivalent 6 MHz channels, N_{eq} , is constant and is derived from a single OFDM channel size of 192 MHz" to "The number of equivalent 6 MHz channels, N_{eq} , is constant and calculated for a single OFDM channel size of 192 MHz as follows: $192/6 = 32$."

Response Response Status W

ACCEPT.

Cl 100 SC 100.3.4.1 P 89 L 43 # i-34
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

Text does not match the equation 100-4. "Occupied spectrum (Occupiedspectrum) ... is the sum of ..."

SuggestedRemedy

Change to "Occupied spectrum (Occupiedspectrum) as shown in Equation (100-4) is the product of ..."

Response Response Status W

ACCEPT.

Cl 100 SC 100.3.4.1 P 90 L 13 # i-35
Hajduczenia, Marek Bright House Network

Comment Type T Comment Status D EZ

"The modulated spectrum at the MDI ("RF port") is" - MDI is defined already before

SuggestedRemedy

Strike ("RF port") here and going forward - there is no need to repeat the statement that MDI is the said RF port

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

REVISED

Page 89, Line 31, change "MDI ("RF port")" to "MDI (TP1, see 100.4)"

Page 90, Line 13 and 21 remove ("RF port")

Page 93, Line 11, 31, and 36: change "RF port" to "MDI"

Page 94, Line 11 and 12 change "RF port" to "MDI"

Page 95, Line 52, change "RF port" to "MDI"

Cl 1 SC 100.3.4.2 P 92 L 16 # i-36
Hajduczenia, Marek Bright House Network

Comment Type ER Comment Status A +REV+

"[ISO/IEC-61169-24] or [SCTE 02]" are not in the list of references right now ...

SuggestedRemedy

Add these as normative references to Clause 1

Response Response Status W

ACCEPT IN PRINCIPLE.

REVISED

Changed to Clause 1. The references on Page 92, line 16 need to be added to Clause 1.

Cl 100 SC 100.3.4.2 P 92 L 21 # i-37
Hajduczenia, Marek Bright House Network

Comment Type ER Comment Status A +REV+ Sed

Seems like definition of MER should be moved to a normative part of the text, where other definitions are also detailed: 100.3.4.1 OFDM channel power definitions

SuggestedRemedy

Per comment - it is used in at least 286 locations in the draft today, with no other definition.

Response Response Status W

ACCEPT IN PRINCIPLE.

REVISED

MER is being added as a defintion in Clause 1. See Page 28, line 47, CL 1.4.277a, of draft D3.0. In Table Footnote "c" change "MER (modulation error ratio)" to "Modulation error ratio (MER)"

Cl 100 SC 100.3.4.4 P 93 L 14 # i-38
Hajduczenia, Marek Bright House Network

Comment Type T Comment Status D EZ

minimum function is typically surrounded by () and not by []

SuggestedRemedy

Change "minimum[.]" to "minimum(...)"

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 100 SC 100.3.4.4 P 93 L 14 # i-39
Hajduczenia, Marek Bright House Network

Comment Type T Comment Status R +REV+

Equations splicing two curves are typically written with a curly bracket format: see P802.3bp D3.1, Eq 97-17 as an example. Then whole "if" conditioning becomes unnecessary

SuggestedRemedy

Per comment

Response Response Status C

REJECT.

As is, the IEEE Staff Editor feels that current equation is more clear. The TF also prefers the equation as is.

Cl 100 SC 100.3.4.4 P 93 L 34 # i-40
Hajduczenia, Marek Bright House Network

Comment Type T Comment Status D EZ

"NOTE-- With N* = bottom term in Equation (100-6)" - this is unnecessary, you already provide condition, i.e., Neqport ' >= Neqport

SuggestedRemedy

Strike "NOTE-- With N* = bottom term in Equation (100-6)"

Strike "NOTE-- With N* = top term in Equation (100-6)"

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 100 SC 100.3.4.4 P 94 L 1 # i-41
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

Notes separated from table

SuggestedRemedy

Please make sure that footnotes are not separated from the table

Proposed Response Response Status W

PROPOSED REJECT.

Staff editors say that standards are professionally edited by IEEE editors prior to publication.

CI 00 SC 100.3.4.4 P 94 L 7 # i-42
Hajduczenia, Marek Bright House Network

Comment Type ER Comment Status A +REV+ Sed

Notation for ceiling not consistent with 100.1.1, where specific symbols are introduced

SuggestedRemedy

Please align the use of "ceiling" function in footnote d) with symbols defined in 100.1.1
The same applies to floor function.
Multiple locations in the draft

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED
Move footnote d to the closing ceiling bracket on line 31 and copy footnote d to line 36.
Change text of footnote d from:
"All equations are Ceiling(Power, 0.5) dBc. Use "Ceiling(2□Power) / 2" to get 0.5 steps
from ceiling functions that
return only integer values. For example Ceiling(-63.9, 0.5) = -63.5 dBc."
to
"Ceiling function rounds to the nearest 0.5."

In Figure 101-6 SD change the two instances of "floor(..)" into floor bracket symbols.

CI 100 SC 100.3.4.5 P 94 L 25 # i-44
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

"The CLT modulator shall satisfy ... " - it is hardly a requirement for the modulator itself that
we write. It is the CLT PMD that we're writing requirements against.

SuggestedRemedy

Change all requirements towards the "CLT modulator" to "10GBASE-XR-D PMD", which is
what we need. This is as specific as we need to get here IMO
Multiple locations are affected.

Response Response Status W

ACCEPT.

CI 100 SC 100.3.4.5 P 95 L 10 # i-45
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status A +REV+

No need to break out Neqi definition into a separate line and merge with text from line 12

SuggestedRemedy

Change text 8-10: "each contiguous sub-block is denoted as <i>Neqi</i>, for <i>i</i> = 1 to
<i>K</i>, where <i>K</i> is the number of contiguous blocks. Therefore,"

Response Response Status C

ACCEPT.

CI 100 SC 100.3.4.5 P 96 L 20 # i-46
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status A +REV+ Sed

Text in Requirement column for some of rows is very, very small. Suggest to either break
the text down into multiple lines per entry, or alternatively create external equation, and just
reference in the table. The way it is right now it is only readable when zoomed in to 400%

SuggestedRemedy

Per comment - this applies to items 1, 2, 6. Other items could be also more readable as
external equations

Response Response Status C

ACCEPT IN PRINCIPLE.
REVISED
Discussed with IEEE Editors. Will reduce size of column "Band" and increase font size of
text in third column lines 24 to 27, and 28 to 30, and 31, to 33 to size 9.

Cl 100 SC 100.3.4.6 P 97 L 25 # i-47
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status R +REV+

"The CLT shall provide for ... " - CLT as a system? This is the PMD clause

SuggestedRemedy

Consider rewriting it to a CLT PMD requirement, e.g., "The 10GPASS-XR-D PMD shall support ..."
Update PICS. There are multiple entries in Clause 100 where similar generic requirement is stated
There are also similar generic statements for a CNU, without indicating which layer is responsible for the function

Response Response Status W

REJECT.
The construct of "CLT shall" is consistent with usage in IEEE STD 802.3 2015 clauses 64 . 77 that use "OLT shall"

The commenter is invited to submit a maintenance request if this remains a blocking issue.

Cl 100 SC 100.3.5.1 P 97 L 37 # i-48
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

RB Superframe or RB superframe?

SuggestedRemedy

Pick one, use consistently

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
REVISED
It is "RB Superframe" everywhere except in the title for Figure 100-2. Consider capitalizing it there.

Cl 100 SC 100.3.5.2 P 98 L 38 # i-49
Hajduczenia, Marek Bright House Network

Comment Type T Comment Status D EZ

Is the ending dot in Eq 100-9 associated with any specific meaning?

SuggestedRemedy

Remove the dot in Eq 100-9

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 100 SC 100.3.5.2 P 98 L 40 # i-50
Hajduczenia, Marek Bright House Network

Comment Type T Comment Status D EZ

Units in the wrong location: "53.2 dBmV+ (PMax - 65)"

SuggestedRemedy

Change to "53.2 + (PMax - 65) dBmV"

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 100 SC 100.3.5.4.2 P 102 L 10 # i-54
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

In Eq 100-14, the Round function for some reason is written in non-italics. Is this intentional?

SuggestedRemedy

Per comment

Proposed Response Response Status W

PROPOSED REJECT.
As per style guide "16.3 Presentation of equations", functions are Roman.

Cl 100 SC 100.3.5.4.2 P 103 L 1 # i-56
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

Odd dot in the top left hand corner

SuggestedRemedy

Please remove. There are multiple pages in the draft where such standalone dots are visible.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
REVISED
1) Reattach the period to the preceding sentence on Page 102.
2) Please state the other pages.

Cl 100 SC 100.3.5.4.3 P 103 L 46 # i-58
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

This is not intended to be lecture notes: "Firstly, it should be noted ..."

SuggestedRemedy

Change to "Note that ..." if such introduced is needed at all. Later in the same para, remove "Secondly," which is also not necessary

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 100 SC 100.3.5.4.3 P 103 L 48 # i-59
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

"provides specification "dBc" only" - what does it mean that Table provides such specification? The term "dBc" is not explained, and it is not clear what "specification dBc really is"

SuggestedRemedy

Please clarify - no clue what it is supposed to be

Response Response Status W

ACCEPT IN PRINCIPLE.

REVISED

Add footnote to Table 100-7 "dBc" at line 18 & line 19 to read "The signal reference power, 0 dBc, is the total transmit power defined in 100.3.5.4.1."

In Table 100-8 add the a footnote with same text as above to "dBc" at line 9 (2x).

In Table 100-9 add the a footnote with same text as above to "dBc" at line 9 (2x).

Cl 100 SC 100.3.5.4.3 P 104 L 10 # i-60
Hajduczenia, Marek Bright House Network

Comment Type T Comment Status D EZ

Rather odd equation with "The" in the middle: "Modulated Subcarriers - The Under-grant Hold Bandwidth"

SuggestedRemedy

Change "for a grant equal to:
Modulated Subcarriers - The Under-grant Hold Bandwidth."
to

"for a grant equal to <i>Modulated Subcarriers</i> - <i>Under-grant Hold Bandwidth</i>."

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

REVISED

See i-340. Copy of Reponse:

- 1)Change Page 104, Line 1, "with the number of Modulated Subcarriers" to "with the Grant Spectrum".
- 2)Change, page 104, line 3, in the denominator of the equation, "Modulated Subcarriers" should be replaced with "Grant Spectrum", with the latter in italics as on page 102.
- 3)On page 104, line 10, the italicized words "Modulated Subcarriers" in the equation should be replaced with the italicized words "Grant Spectrum". Remove the "The"
- 4)On page 104, line 18, in the equation, the italicized words "Modulated Subcarriers" should be replaced with the italicized words "Grant Spectrum".
- 5)Page 100, line 1, "simultaneous" is misspelled.
- 6)Page 103, line 39, first sentence of Section 100.3.5.4.3, the use of "Table 100-8" should be "Table 100-9".
- 7)Page 103, line 48, second word of third sentence of paragraph, the use of "Table 100-8" should be "Table 100-9". (The use of "Table 100-8" later in the sentence, on line 49, is CORRECT and should not be changed.
- 8)Page 104, line 7, the use of "Table 100-8" should be "Table 100-9".
- 9)Page 104, line 8, the use of "Table 100-7" should be "Table 100-8".
- 10)Page 104, lines 12 through 16 are CORRECT, FYI.
- 11)Page 104, line 19, the use of "Table 100-7" should be "Table 100-8".
- 12)Page 104, line 21, the use of "Table 100-8" should be "Table 100-9".
- 13)Page 104, line 22, the use of "Table 100-7" should be "Table 100-8". (Page 104, line 26, the use of "Table 100-9" is CORRECT, FYI.)

CI 100 SC 100.3.5.4.4 P 105 L 37 # i-62
 Hajduczenia, Marek Bright House Network

Comment Type **TR** Comment Status **A** +REV+

Requirement broken into two sentences: "The CNU's voltage step shall be dissipated no faster than 4 us of constant slewing. This requirement applies when the CNU is transmitting at +55 dBmV or more."

SuggestedRemedy
 Change to "The CNU's voltage step shall be dissipated no faster than 4 us of constant slewing when the CNU is transmitting at +55 dBmV or more."
 Update PICS

Response Response Status **W**
 ACCEPT.

CI 100 SC 100.3.5.5 P 105 L 52 # i-64
 Hajduczenia, Marek Bright House Network

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

Inter-Carrier Interference (ICI) - used only once, no need to define

SuggestedRemedy
 Remove "(ICI)"

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

CI 100 SC 100.3.5.5 P 105 L 54 # i-65
 Hajduczenia, Marek Bright House Network

Comment Type **TR** Comment Status **A** +REV+

Requirements can be hardly measured ... "MER requirements are measured with a calibrated test instrument ..."

SuggestedRemedy
 Change to read: "Compliance with MER requirements is verified with the use of a calibrated test instrument ..."
 It would be also very valuable to include any reference to a normative MER test procedure, or where the said device is defined / described in more detail - SCTE?

Response Response Status **W**
 ACCEPT IN PRINCIPLE.
 REVISED
 Changes as per remedy. With respect to normative MER test procedures in the industry the draft is contribution driven. If such an industry reference is provided it can be included in the draft.

CI 100 SC 100.3.5.5.1 P 106 L 27 # i-66
 Hajduczenia, Marek Bright House Network

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

Seems like the top of Eq 100-19 is cut off

SuggestedRemedy
 Please move the top edge of equation up, and show the missing elements of (I assume) round brackets

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

CI 100 SC 100.3.5.5.1 P 106 L 41 # i-67
 Hajduczenia, Marek Bright House Network

Comment Type **TR** Comment Status **A** +REV+

The summation symbol in Eq 100-20 used "j" index, which is NOT used then in RBMER

SuggestedRemedy
 Please fix equation and show where "j" index is used

Response Response Status **W**
 ACCEPT IN PRINCIPLE.
 REVISED
 Add j in the parenthesis to RBMER, should be RB_{MER}(j) in the summation

CI 100 SC 100.3.5.6 P 107 L 29 # i-69
 Hajduczenia, Marek Bright House Network

Comment Type **E** Comment Status **A** +REV+

"characteristics delineated in Table 100-11" - this is a new word :)

SuggestedRemedy
 Change to "characteristics defined in Table 100-11"

Response Response Status **C**
 ACCEPT IN PRINCIPLE.
 REVISED
 See <http://www.merriam-webster.com/dictionary/delineate>

Cl 100 SC 100.3.5.6 P 107 L 35 # i-70
 Hajduczenia, Marek Bright House Network

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

"7.4 to at least 204" - to avoid interpretation issues, please indicate if 204 is included or not

SuggestedRemedy
 Change to "7.4 to >=204"

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

Cl 100 SC 100.3.5.6 P 107 L 47 # i-71
 Hajduczenia, Marek Bright House Network

Comment Type **TR** Comment Status **A** +REV+

Double requirements - must be really important: "CNU shall be capable of transmitting a total average output power."

SuggestedRemedy
 Either move it out of the normative (required) table, or convert into a normative footnote to table

Response Response Status **W**
 ACCEPT IN PRINCIPLE.
 REVISED
 Change "Level CNU shall be capable of transmitting a total average output power."
 To: "Total average transmit output power"

Update PICS as needed.

Cl 100 SC 100.3.5.7 P 108 L 18 # i-72
 Hajduczenia, Marek Bright House Network

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

Seems like two sentences were joined together? "In EPoC, the upstream CNU PMD RF power amplifier (PA) may be turned off between bursts as shown in Figure 100-3 PMD_SIGNAL.request(ON) is asserted when the first bit of the burst is conveyed from the PCS to the PMA via PMA_UNITDATA.request() (see 101.4.2.1)."

SuggestedRemedy
 Change to: "In EPoC, the upstream CNU PMD RF power amplifier (PA) may be turned off between bursts as shown in Figure 100-3. PMD_SIGNAL.request(ON) is asserted when the first bit of the burst is conveyed from the PCS to the PMA via PMA_UNITDATA.request() (see 101.4.2.1)."

Proposed Response Response Status **W**
 PROPOSED ACCEPT.
 See i-345.
 Copy of Suggested Remedy:
 "per comment."

Cl 100 SC 100.3.5.7 P 108 L 21 # i-73
 Hajduczenia, Marek Bright House Network

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

TPMA is mentioned, but not really defined. TPMA = The delay time through the EPoC PMA???

SuggestedRemedy
 Please define the acronym, it is used 6 times in the document altogether

Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE
 REVISED
 It is defined as "the delay time through the EPoC PMA" on first use. Change the six occurrences of "TPMA" to "T_{PMA}".

CI 100 SC 100.3.6.1 P 109 L 28 # i-74
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

"The CLT should be configured according to Table 100-12" - and what if it is not? Seems like an important requirement to be mandatory, unless power normalization does not really matter.

Later on the very same table is referenced in a normative requirement in line 35

SuggestedRemedy

Consider making it a normative requirement (if received power normalization is really needed - seems like it for sure) or changing into informative text, if there is no need for it. Optional requirements are odd

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED
Change "should" to "shall".
Update PICS as needed.

CI 100 SC 100.3.6.1 P 110 L 1 # i-76
Hajduczenia, Marek Bright House Network

Comment Type ER Comment Status R +REV+ Sed

Table title is incomplete: "Upstream OFDMA channel demodulator input power characteristics (con-"

SuggestedRemedy

Make sure it is complete, even when broken across line

Response Response Status W

REJECT.
This appears to be a Framemaker table continuation issue with the automatically appended "(continued)" text.
Staff editors say that standards are professionally edited by IEEE editors prior to publication.

CI 100 SC 100.3.6.1 P 110 L 14 # i-77
Hajduczenia, Marek Bright House Network

Comment Type T Comment Status D EZ

It would seem that footnote a) applies to both Minimum Set Point and Maximum Set Point - they are both defined referencing the same point (IMO)

SuggestedRemedy

Replicate footnote a) anchor for Minimum Set Point and Maximum Set Point

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 100 SC 100.3.6.2 P 110 L 20 # i-78
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

There is a very long list of conditions under which CLT receiver is expected to obtain "frame loss ratio of less than or equal to 10-6". Are these conditions expected to be inclusive (all have to be met to allow Rx to achieve target FER) or not (only some are expected to be met to achieve FER)?

SuggestedRemedy

If the first option is correct (that is my inclination), change the statement to read: "The CLT shall achieve a received frame loss ratio of less than or equal to 10-6 when all of the following input load and channel conditions are met:

Response Response Status W

ACCEPT.

CI 100 SC 100.3.6.2 P 110 L 37 # i-79
Hajduczenia, Marek Bright House Network

Comment Type T Comment Status D EZ

"CLT is allowed to construct Grants according to its own scheduler implementation." - given that scheduler is NOT defined in Clause 103, it is an unnecessary statement, which brings questions on where such a scheduler be specified.

SuggestedRemedy

Strike

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
REVISED

As per suggested remedy. Note: This was DOCSIS'ism carried over. Agree that the DBA is outside the spec.

CI 100 SC 100.3.6.3 P 111 L 23 # i-80
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

"This item provides measurements" - rather, "subclause"

SuggestedRemedy

Change to "This subclause provides measurements"

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 100 SC 100.3.6.3.1 P 112 L 5 # i-83
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

Incomplete statement: "When TRUE this variable indicates that the values RxMER_SC(n) for the CNU indicated by RxMER_CNU_ID or the OFDM channel indicated by RxMER_ChID." - what happens / is wrong with the values "indicated by RxMER_CNU_ID or the OFDM channel indicated by RxMER_ChID" ???

SuggestedRemedy

Please finish the statement

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED
Insert "are valid" at end of first sentence.

Cl 100 SC 100.3.7.1 P 112 L 13 # i-84
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

Way too many requirements for the same thing: "The CNU shall meet ..", "The CNU receiver shall meet...", and "The OFDM signals and CNU interfaces shall have ..."
First, we cannot make requirements towards "OFMD signals", given that it is what the channel model is supposed to define, and these have been covered before, I believe. Strike the statement: "The OFDM signals and CNU interfaces shall have the characteristics and limitations defined in Table 100-14."
Second, requirements towards CNU and CNU receiver and overlapping - without clear delineation, it is a single shall test point anyway, given that it points to a single table. Change "The CNU shall meet all performance specification when receiving a signal conformant to the parameters shown in Table 100-14. The CNU receiver shall meet electrical parameters per Table 100-14." to "The 10GPASS-XR-U PMD receiver shall meet electrical performance requirements per Table 100-14."
Update respective PICS.
Remove any requirements for OFDM *signal* itself, and put these into the channel model. that is where they should be located, not in the receiver requirements

SuggestedRemedy

Per comment

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED
Replace the para with
"The CNU shall meet electrical parameters and all performance specifications when receiving a signal conformant to the parameters shown in Table 100-14."

Update PICS as needed.

Cl 100 SC 100.3.7.1 P 113 L 1 # i-86
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status R +REV+

More footnotes separated from tables

SuggestedRemedy

Please make sure they go together with the table for improved readability

Response Response Status C

REJECT.
Staff editors say that standards are professionally edited by IEEE editors prior to publication.

Cl 100 SC 100.3.7.3 P 114 L 8 # i-87
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status R +REV+

Conflicting definitions
Page 114, line 8: "RxMER is defined as the ratio of the average power of the ideal QAM constellation to the average error-vector power"
Page 111, line 23: "RxMER is defined as the ratio of the average power of the ideal BPSK constellation to the average error-vector power"
Which is it then?

SuggestedRemedy

Rationalize - either it is one and the same (then which one is correct??) or expand the acronym to reflect that one is for QAM and another for BPSK constellation

Response Response Status W

REJECT.
One (pg 111) is for the CLT: "For the purposes of RxMER measurement at the CLT, ."
The other (pg 114) is for the CNU: "For the purposes of RxMER measurement at the CNU,.."
And yes these are different.

CI 100 SC 100.3.7.3 P 114 L 38 # i-88
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

Repeated (though rephrased) requirement:
Page 114, line 3: "The CNU receiver shall provide measurements of the downstream receive modulation error ratio (RxMER) for each subcarrier in all enabled OFDM channels."
Page 114, line 38: "The CNU shall be capable of providing measurements of RxMER for all active subcarrier locations for each OFDM downstream channel, using pilots and PHY Link preamble symbols."
I suggest these be combined into a single statement, since they are almost identical anyway

SuggestedRemedy

Strike text on Page 114, line 38
Change text on Page 114, line 38 to read "The CNU provide measurements of downstream receive modulation error ratio (RxMER) for all active subcarrier locations for each OFDM downstream channel, using pilots and PHY Link preamble symbols."
I suggest these be combined into a single statement, since they are almost identical anyway
Update PICS

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED
Strike last sentence of the para beginning on line 38.
Replace the sentence at line 3 with "The CNU provides measurements of downstream receive modulation error ratio (RxMER) for all active subcarrier locations for each OFDM downstream channel, using pilots and PHY Link preamble symbols."

CI 100 SC 100.3.7.3 P 115 L 16 # i-89
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

The text in Figure 100-4, box: 10xlog10 does not need to be broken into two lines

SuggestedRemedy

Make sure text is not broken into two lines - there is enough space to make box wider and make sure it is not broken across lines
Similarly, box with "Mag Squared" - should be changed to "Magnitude Squared" ???

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
REVISED
Adjust "10xlog10" as per remedy.
Change "Mag" to "Magnitude". Adjust box sizes as needed.

CI 100 SC 100.3.7.3 P 115 L 1 # i-90
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

Figure 100-4 seems to be artificially broken across the Error Vector [e]

SuggestedRemedy

Suggest that the line from top of the figure (Error vector e) be continued to input of Error vector e in the lower part of the figure, showing continuity in terms of electrical signal
Now the continuity is only logical (same value?)

Response Response Status W

ACCEPT.

CI 100 SC 100.3.8.1 P 115 L 38 # i-91
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

What does it really mean: "The CLT ensures that the encompassed spectrum of each 192 MHz downstream OFDM channel does not exceed 190 MHz and does not exceed 3800 active subcarriers (see Table 100-3)." - the only thing that the OLT can do is use up to 192 MHz of spectrum and up to 3800 active subcarriers, but apart from that, I am not clear what else the OLT can ensure. This statement and the whole subclause 100.3.8 seems to be a restatement of existing requirements scattered through the rest of Clause 100.

SuggestedRemedy

It would make sense to include some of these requirements in PMD specification tables instead, and make them normative. The current informative text is kind of in the middle - it provides some information, but it is not normative anyway.

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED
See Suggested Remedy for accepted comment i-348 copied below

Remove the phrase at line 32.
Remove the phrase at line 38 and change "does not" to "cannot" so the sentence reads: "The encompassed spectrum of each 192 MHz downstream OFDM channel cannot exceed 190 MHz and does not exceed 3800 active subcarriers (see Table 100-3)."
Remove the phrase at line 42.
Remove the phrase at pg 116 line 24 and change "does not" to "cannot" 2x so the sentence reads: "the encompassed spectrum of the upstream OFDMA channel cannot exceed 190 MHz and cannot exceed 3800 active subcarriers (see Table 100-11)."

Cl 1 SC 100.3.8.2 P 116 L 5 # i-94
 Hajduczenia, Marek Bright House Network

Comment Type **ER** Comment Status **R** +REV+

CFR 76 is not defined anywhere

SuggestedRemedy
 Add to list of references, if needed

Response Response Status **W**

REJECT.
 See editor instructions to change in 1.3 Normative references.

Cl 100 SC 100.3.8.2 P 116 L 5 # i-95
 Hajduczenia, Marek Bright House Network

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

"The ONLY exception" - why is ONLY capitalized?

SuggestedRemedy
 We do not use capitalization as emphasis in standard. If something is very important, it becomes a requirement of a sort. Drop case down

Proposed Response Response Status **W**

PROPOSED ACCEPT.

Cl 100 SC 100.3.8.2 P 115 L 50 # i-96
 Hajduczenia, Marek Bright House Network

Comment Type **TR** Comment Status **A** +REV+

Havign read the whole of 100.3.8, I am still confused as to what 100.3.8.2 and 100.3.8.4 really define. Are these intended to cover rules for where exclusion bands can be placed - if so, it is not clear right now, especially in 100.3.8.4, where just three bullets are provided within any context

SuggestedRemedy
 If these are expected to be requirements for channel for EPoC, these ought to be converted into requirements and moved into Annex 100A which was created to account for channel model. If not, I am not sure what the value 100.3.8.2 and 100.3.8.4 really have, given that they are not bound into the PMD requirements in any way right now

Response Response Status **W**

ACCEPT IN PRINCIPLE.
 REVISED
 At line 33/34 strike "Definitions of parameters and measurement methods."

The para at 100.3.8 provides rules for usage of exclusions as explained in the first sentence. Further appendix 100A is not relevant as this text does not talk to channel model nor topology.

In 100.3.8.4 pg 116 line 38 add as first sentence in subclause "The CLT and CNU are not expected to meet performance and fidelity requirements when the system configuration does not comply with the downstream exclusion band rules listed below."

Cl 100 SC 100.4.1 P 116 L 48 # i-99
 Hajduczenia, Marek Bright House Network

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

Missing space in "TP1/MD1of"

SuggestedRemedy
 Per comment

Proposed Response Response Status **W**

PROPOSED ACCEPT.

Cl 100 SC 100.4.1 P 116 L 28 # i-100
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

Repeated requirement - Table 100-3 is already mandatory: "The output return loss at TP1/MD1 of the muted device shall comply with the Output Return Loss requirements for inactive OFDM channels given in Table 100-3."

SuggestedRemedy

Remove the requirement, make it into statement. Remove any associated PICS

Response Response Status W

ACCEPT.

Cl 100 SC 100.4.1 P 116 L 53 # i-101
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

An odd way to define a requirement - "When this variable is set to TRUE the CLT shall set the RF output power = 73 dBc" - this should be part of Table 100-3 (similar to power output in OFF state for optical Tx in EPON), while it is not there

SuggestedRemedy

Move the requirement to Table 100-3. Change the definition of "CLT_TxMute" to read as follows: "When this variable is set to TRUE the CLT sets the RF output power = 73 dBc (see Table 100-3) below the operationally configured aggregate power of the RF modulated signal, in every 6 MHz channel from 258 MHz to 1218 MHz."
Remove any associated PICS

Response Response Status W

ACCEPT.

Cl 100 SC 100.4.2 P 117 L 16 # i-102
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status R +REV+

"A minimum warm-up time of 30 minutes occurs before measurements are made." - if the measurements are time correlated in any way, measurements should be performed in discrete intervals, e.g., every 5 minutes for a specific number, and then mean and deviation should be presented. Otherwise, it is hardly a measurement at all - you pick one point of time, at an arbitrary distance (30 minutes) from start-up time and treat that as a true value

SuggestedRemedy

Add information that RxMER is a mean value for X number of measurements, starting from 30 minutes, occurring every X minutes for Y total measurement time
The last bullet kind of goes in that direction, but M remains undefined, measurement frequency is also undefined ("are taken in succession (e.g., over a period of up to 10 minutes) at both CNR values" - does not provide for repeatability of measurements across vendors
Mean and deviation are not provided as normative parameters today, just the mean, which is kind of meaningless, given the variability expected in this parameter over the range of measurements

Response Response Status W

REJECT.
The TF believes requiring a warm-up time is reasonable and appropriate.

Cl 100 SC 100.4.2 P 117 L 27 # i-103
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

Requirements out of place: "The CNU shall provide RxMER measurements with RxMER_std 0.5 dB under the above specified conditions.
Define delta_RxMER = (RxMER_mean at CNR_data_subcarrier = 35 dB) - (RxMER_mean at CNR_data_subcarrier = 30 dB). The CNU shall provide RxMER measurements such that 4 dB delta_RxMER 6 dB under the above specified condition."

SuggestedRemedy

Move these requirements into 100.3.7.3, which already covers RxMER for CNU, but does not really have any requirements ...
Update PICS accordingly

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED
Move the text at line 27 - 32 after the last para on pg 114 and replace "under the above specified conditions" with "under the conditions specified in 100.4.2". Update PICS.

CI 100 SC 100.4.3 P 117 L 45 # i-104
Hajduczenia, Marek Bright House Network

Comment Type **TR** Comment Status **A** +REV+

"The CLT shall provide upstream power measurements with a standard deviation of 0.33 dB or better under the following test conditions" - this should go into 100.3.6 where CLT Rx requirements are listed, and text in 100.4.3 should be made informative, as far as measurement conditions are concerned

SuggestedRemedy

Per comment + update PICS accordingly

Response Response Status **W**

ACCEPT IN PRINCIPLE.
REVISED

Change line 45 to read: "The CLT provides upstream power measurements with a standard deviation of 0.33 dB or better under the following test conditions"

At the end of 100.3.6.1 add: "The CLT shall provide upstream power measurements with a standard deviation of 0.33 dB or better under the test conditions given in 100.4.3."

Update PICS as needed.

CI 100 SC 100.4.4 P 118 L 23 # i-106
Hajduczenia, Marek Bright House Network

Comment Type **TR** Comment Status **A** +REV+

This has nothing to do with measurement methods - these are CLT TX requirements

SuggestedRemedy

If these are needed, move them to 100.3.6 in appropriate location.
Update PICS as needed

Response Response Status **W**

ACCEPT IN PRINCIPLE.
REVISED

Change the title of subclause 100.4. from "Definitions of parameters and measurement methods" to
"Test requirements and measurement methods"

CI 100 SC 100.4.4 P 118 L 29 # i-107
Hajduczenia, Marek Bright House Network

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

Definition of CW signal is hidden in a footnote on page 99 ... odd

SuggestedRemedy

Expand CW to "Continuous Wave (CW)" in Table 100-16

Proposed Response Response Status **W**

PROPOSED REJECT.

Definition of CW is in 1.4.165. First use is expanded already in this clause in footnote on page 99.

CI 100 SC 100.4.4 P 119 L 30 # i-108
Hajduczenia, Marek Bright House Network

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

It seems like specific test modes are defined in here and in line 52, and they are "hidden" in the text itself.

SuggestedRemedy

Suggest to create

- 100.4.4.1 Test Mode 1 and include page 119, lines 30-50 in this new subclause
- 100.4.4.2 Test Mode 2 and include page 119, lines 52-54, and page 120, lines 1-8 in this new subclause
Update PICS accordingly

Proposed Response Response Status **W**

PROPOSED ACCEPT.

CI 100 SC 100.5.3 P 120 L 28 # i-109
Hajduczenia, Marek Bright House Network

Comment Type **E** Comment Status **R** +REV+

"It is recommended that manufacturers indicate in the literature associated with the PHY" - we do not prescribe where it needs to be indicated. Technical notes, summary notes, etc. are also allowed. Poems might be a tad too much

SuggestedRemedy

Change to "It is recommended that manufacturers indicate ..."
Similar change in line 30

Response Response Status **C**

REJECT.

The suggested remedy does not suggest a change to the existing text.

CI 100 SC 100.6 P 120 L 42 # i-110
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status R +REV+

Untestable requirement: "For the 10GPASS-XR-U PHY the CNU shall enable Energy-Efficient Ethernet (EEE) capability to conserve energy by deactivating power-consuming PMD Functions (e.g. RF power amplifier) between bursts using PMD_SIGNAL.request (see 100.2.1.4)."

SuggestedRemedy

The very nature of EPoC (like EPON) implies that transmit path is disabled in between bursts.

Change the text to read: "In order to support EEE-like power saving, the 10GPASS-XR PHYs may deactivate some PHY functional blocks, e.g., RF power amplifier, between individual data bursts (in case of 10GPAS-XR-U PHY), disable some of OFDM channels (in case of 10GPAS-XR-D PHY) when traffic load is low, or use other vendor-specific mechanisms to lower the overall PHY consumption without affecting the latency and BER on the EPoC link." - this is as good as we can do here without specific hooks for EEE at the PHY layer

Response Response Status W

REJECT.

There is no support in this standard to "disable some of OFDM channels (in case of 10GPAS-XR-D PHY) when traffic load is low", "other vendor-specific mechanisms " are outside the scope of the standard.

CI 103 SC 103.1 P 299 L 23 # i-112
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status R +REV+ Sed

Comment bait: "Topics dealt with in this clause include allocation of upstream transmission resources to different CNUs, discovery and registration of CNUs into the network, and reporting of congestion to higher layers to allow for dynamic bandwidth allocation schemes and statistical multiplexing across the CCDN. This clause does not deal with topics including bandwidth allocation strategies, authentication of enddevices, quality-of-service definition, provisioning, or management." - line 30 already states what is being specified in this clause, and everything else is NOT specified. Period

SuggestedRemedy

Strike text "Topics dealt with in this clause include allocation of upstream transmission resources to different CNUs, discovery and registration of CNUs into the network, and reporting of congestion to higher layers to allow for dynamic bandwidth allocation schemes and statistical multiplexing across the CCDN. This clause does not deal with topics including bandwidth allocation strategies, authentication of enddevices, quality-of-service definition, provisioning, or management."

Response Response Status W

REJECT.

For consistency reasons the Staff editors would prefer if we included this given that it already appears in CI 64 and 77.

If this wording is objectionable, the commenter is invited to submit a maintenance request on the similar text in CI 64 and 77

CI 103 SC 103.2.2.7 P 314 L 1 # i-118
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status R +REV+ Sed

Figure 103-9 is no different than Figure 77-10

SuggestedRemedy

Remove Figure 103-9 and replace all references with Figure 77-10

Response Response Status W

REJECT.

The staff editors indicate that in such cases it is preferred to include the similar figure in the new Clause. It was also pointed out that the titles do not match.

Cl 103 SC 103.2.2.7 P 316 L 1 # i-120
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status R +REV+ Sed

Figure 103-11 is no different than Figure 77-12, excluding guardThresholdCNU which is guardThresholdONU in Figure 77-12 - a change that can be described in words.

SuggestedRemedy

Remove Figure 103-11 and replace all references with Figure 77-12

Response Response Status W

REJECT.

The staff editors indicate that in such cases it is preferred to include the similar figure in the new Clause. It was also pointed out that the titles do not match.

Cl 103 SC 103.2.2.7 P 316 L 24 # i-121
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

Name of state in PARSE OPCODE state overlaps with top border of the state

SuggestedRemedy

Please move the text a bit down, so that it does not overlap with the top edge of the state box

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

REVISED

per comment which I suspect the comment is about pg 317.

Cl 103 SC 103.3.3.4 P 323 L 18 # i-126
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

Is there any special reason why rOnTime and rOffTime are in italics, when most other parameters are not?

SuggestedRemedy

Either use italics for all parameters, or do not - right now it is almost half/half for no special reason

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

REVISED

Italicise rOnTime, rOffTime on pg 339 line 42 (remove line break also). All other instances are already in italic, in SD (which use a different font) are targeted to be removed per comment from the commenter.

Cl 103 SC 103.3.5.1 P 330 L 46 # i-129
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

What is the unit for min_processing_time? Please clarify what 1024 really means (us, TQ, something else?)

SuggestedRemedy

In 77.3.5.1, it is defined as: VALUE: 0x00000400 (16.384 us)

Response Response Status W

ACCEPT IN PRINCIPLE.

REVISED

Change link to 77.3.5.1

Replace 1024 with 0x00000400 (16.384 us)

Cl 103 SC 103.3.5.2 P 331 L 12 # i-131
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

Compound adjectives needs to be hyphenated: 48 bit unsigned, 32 bit unsigned, 16 bit unsigned, etc.

SuggestedRemedy

Change to "48-bit unsigned, 32-bit unsigned, 16-bit unsigned"
Scrub the rest of the draft, there are more instances

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

REVISED

Ref pg/line

48 bit: 331/12

32 bit: 257/3, 263/31, 264/7, 266/49, 331/13

16 bit: 331/14

Cl 103 SC 103.3.5.6 P 335 L 36 # i-133
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status R +REV+ Sed

Figure 103-23 is the same as Figure 77-28

SuggestedRemedy

Remove 103-23 and replace all reference with Figure 77-28

Response Response Status W

REJECT.

The staff editors indicate that in such cases it is preferred to include the similar figure in the new Clause. It was also pointed out that the titles do not match.

CI 103 SC 103.3.6.2 P 338 L 15 # i-135
 Hajduczenia, Marek Bright House Network
 Comment Type E Comment Status D EZ
 Double reference without any need: in 77.3.6.2 (see 64.3.6.1).
 SuggestedRemedy
 Change to "in 77.3.6.2"
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 101 SC 101.1 P 127 L 9 # i-137
 Hajduczenia, Marek Bright House Network
 Comment Type T Comment Status D EZ
 Unnecessary detail - already included in definition of CCDN: "passive or amplified"
 SuggestedRemedy
 Remove "passive or amplified"
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 101 SC 101.1.4 P 132 L 19 # i-140
 Hajduczenia, Marek Bright House Network
 Comment Type TR Comment Status A +REV+
 The relationship between SCRAMBLER and FCP GENERATION is not clear. It seems that data is inserted into SCRAMBLER but there is also FCP GENERATION operating at the same level, feeding PHY Link
 SuggestedRemedy
 Given that the FCP provides codeword pointer for FEC encoded data, it would seem be more reasonable to show FCP to generated by FEC Encoder, and not SCRAMBLER.
 Response Response Status W
 ACCEPT IN PRINCIPLE.
 REVISED
 FCP is actually generated by the Symbol Mapper (see 101.4.3.8).
 Change the two lines separating the SCRAMBLER, the FCP GENERATION and the SYMBOL MAPPER into dotted lines as the Scrambler and the FCP GENERATION are sub-functions of the SYMBOL MAPPER.
 Note tha the FEC ENCODER is not superframe timing aware.

CI 101 SC 101.3.2.1.1 P 138 L 42 # i-141
 Hajduczenia, Marek Bright House Network
 Comment Type E Comment Status D EZ
 Off formatting for DS_PHY_Dsize - "DS_" is not italicized, while the rest of the term is. Why?
 SuggestedRemedy
 Italicize the term for consistency with other terms shown in italics. Multiple instances
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 00 SC 101.3.2.1.5 P 141 L 1 # i-144
 Hajduczenia, Marek Bright House Network
 Comment Type E Comment Status A +REV+ Sed
 Figure 101-6 use think line boxes for states, while most of other ddate diagrams use thick boxes for states. See Figure 103-8 for an example
 SuggestedRemedy
 Consider aligning format of state diagrams for consistency
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 REVISED
 Staff editors prefer lines of 0.5 pt.
 Chnages to CI 00

CI 101 SC 101.3.2.5.2 P 147 L 11 # i-149
 Hajduczenia, Marek Bright House Network
 Comment Type E Comment Status D EZ
 Unit of size missing in "a single FEC LDPC codeword size of 16200 indicated by "DS""
 SuggestedRemedy
 Change to "a single FEC LDPC codeword size of 16200 bits indicated by "DS""
 There are other locations in this subclause where the size of parity and payload is expressed in numeric value without any units
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 REVISED
 Change in 3x

Cl 101 SC 101.3.2.5.2 P 147 L 26 # i-150
 Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

What does "specify" mean in this statement: "The resulting FP bits of data are then passed to the LDPC Encoder specifying a payload length of FP - BP bits."

SuggestedRemedy

??? Seems like a logical change would be to modify text to "The resulting FP bits of data are then passed to the LDPC Encoder operating on a payload of FP - BP bits."

Response Response Status W

ACCEPT.

Cl 101 SC 101.3.2.5.4 P 150 L 6 # i-152
 Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

The description in lines 12-26 is a tad chaotic - it uses B to designate burst size but also number of 65-bit blocks available for transmission.

SuggestedRemedy

The upstream burst filling process is described as follows:

START: Add burst start marker. Move to STEP 1.

STEP 1: If the number of available 65-bit blocks (Bin) is sufficient to fill a long FEC codeword (BQ >= 220), create a long FEC codeword. Repeat STEP 1 as long as Bin >= 220; otherwise move to STEP 2.

STEP 2: If 220 > Bin >= 101, create a shortened long FEC codeword and move to END; otherwise move to STEP 3.

STEP 3: If 101 > Bin >= 76, create a medium FEC codeword. Move to STEP 4.

STEP 4: If 76 > Bin >= 25, create a shortened medium FEC codeword and move to END; otherwise move to STEP 5.

STEP 5: If 25 > Bin >= 12, create a short FEC codeword. Move to STEP 6.

STEP 6: If 12 > Bin >= 1, create a shortened short FEC codeword and move to END.

END: Add burst end marker.

use appropriate formatting, as needed

Response Response Status W

ACCEPT IN PRINCIPLE.

REVISED

Change to:

1) Add burst start marker.

2) If the number of available 65-bit blocks (Bin) is sufficient to fill a long FEC codeword (BQ >= 220), create a long FEC codeword.

3) If 220 > Bin >= 101, create a shortened long FEC codeword.

4) If 101 > Bin >= 76, create a medium FEC codeword.

5) If 76 > Bin >= 25, create a shortened medium FEC codeword.

6) If 25 > Bin >= 12, create a short FEC codeword.

7) If 12 > Bin >= 1, create a shortened short FEC codeword and move to END.

8) If Bin = 0 go to step 9 else go to step 2.

9) Add burst end marker.

Cl 101 **SC 101.3.2.5.6** **P 150** **L 46** # **i-153**
Hajduczenia, Marek Bright House Network

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

"This variable represents the number of either 65-bit blocks input to the FEC Encoder." - the use of "either" implies an "on/nor" to complete the sentence, yet it is not present

SuggestedRemedy
Change to "This variable represents the number of 65-bit blocks input to the FEC Encoder." ?

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

Cl 101 **SC 101.3.2.5.6** **P 151** **L 10** # **i-154**
Hajduczenia, Marek Bright House Network

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

Variables seem to be ordered alphabetically apart from xfrSize, which is stuck now in between burstEnd and burstStart for some reason

SuggestedRemedy
Move xfrSize to proper location in the list

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

Cl 101 **SC 101.3.2.5.7** **P 153** **L 3** # **i-155**
Hajduczenia, Marek Bright House Network

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

Unclear designation: "dataPayload<>" and tx_coded_out<>" to add CRC40 and appropriate LDPC parity. The tx_coded_out<>" - given the the size of arrays is not given, skip "<>" - they do not add anything and individual arrays are already defined separately and clearly.

SuggestedRemedy
Per comment

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

Cl 101 **SC 101.3.2.5.7** **P 153** **L 27** # **i-157**
Hajduczenia, Marek Bright House Network

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

Extra spaces in resetArray(dataPayload); and resetArray(dataParity);

SuggestedRemedy
Change ")" to ")"

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

Cl 101 **SC 101.3.2.5.7** **P 153** **L 46** # **i-158**
Hajduczenia, Marek Bright House Network

Comment Type ER **Comment Status A** **+REV+ Sed**

Code snippet for Check_dataPayload uses smaller font than Calculate_CRC40_and_3Parity (which I find more readable)

SuggestedRemedy
Align the use of font size for code snippets

Response **Response Status W**
ACCEPT IN PRINCIPLE.
REVISED
Should be 9 pt Courier New using new style defined for code.

Cl 101 **SC 101.3.2.5.7** **P 153** **L 10** # **i-159**
Hajduczenia, Marek Bright House Network

Comment Type TR **Comment Status A** **+REV+**

Logical comparison operator (=) and assignment operator (=) are the same. Compare line 10 and 17, for example.

SuggestedRemedy
Use "==" as logical comparison for IF statements
Applies to all code snippets (except page 155, lines 3-13, which seems to be using proper C++ syntax already)

Response **Response Status W**
ACCEPT.

CI 101 SC 101.3.2.5.7 P 155 L 15 # i-165
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

The way the NOTE is placed, it seems to apply to all functions in 101.3.2.5.7 and not just the last function

SuggestedRemedy

Either indent the NOTE to right to be visually part of the code snippet and move it above the code snippet, or make it part of the function definition, and not a separate NOTE for some reason

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
REVISED

Remove note and add text after sentence ending on line 1:
"In the CLT the lastcodeword argument to this function is always TRUE (see Figure 101-12)."

CI 00 SC 101.3.3.1.3 P 160 L 16 # i-167
Hajduczenia, Marek Bright House Network

Comment Type ER Comment Status A +REV+ Sed

Persistent use of "will" in multiple locations in the draft outside of FM. "the CLT will remove"

SuggestedRemedy

Please convert all cases of "will" to Present Simple statement (here: "the CLT removes"), unless the very specific use case of "will" is met, per Style Manual

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED

Changed to Clause 00 as this impact several clauses. Editors to review each instance on a case by case basis. Below is the Style Guide note on use of "will" for editors reference:
NOTE—The use of the word must is deprecated and shall not be used when stating mandatory requirements; must is used only to describe unavoidable situations. The use of the word will is deprecated and shall not be used when stating mandatory requirements; will is only used in statements of fact.

CI 101 SC 101.3.3.1.4 P 160 L 26 # i-168
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

"The FEC Decoder in the CNU shall provide" - what happened with this function in the CLT, where it is more needed due to bursty feature of upstream channel?

SuggestedRemedy

Please consider adding support for signalling uncorrectable FEC codewords to CLT, where it is more useful and does not lead to additional new requirements (CRC40 is calculated in upstream anyway)

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED
Strike "in the CNU" in this sentence.

CI 101 SC 101.3.3.1.6 P 161 L 15 # i-169
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

The description of CRC40ErrCtrl variable is not correct - it implies right now that CRC40 is calculated for individual 66B vectors, and that is not the case - there is a single CRC40 per FEC codeword.

SuggestedRemedy

Change definition of CRC40ErrCtrl to read: This variable controls the processing of 66B blocks recovered from FEC codewords that fail the CRC40 checksum test. When CRC40ErrCtrl is set to TRUE, all 66B blocks recovered from a FEC codeword that fail the CRC40 checksum test are flagged as errored. When CRC40ErrCtrl is set to FALSE, all 66B blocks recovered from a FEC codeword that fail the CRC40 checksum test are not marked in any way.

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED

Replace "When CRC40ErrCtrl is TRUE 66B vectors that fail the CRC40 checksum test are flagged as errored. When this variable is set to FALSE 66B vectors that fail the CRC40 checksum test are passed as is." with
"See 101.3.3.1.4."

CI 101 SC 101.3.3.1.6 P 161 L 37 # i-170
 Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

Missing closing bracket in dataIn<(dataInSize-1:0>

SuggestedRemedy
 Change to dataIn<dataInSize-1:0>

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 101 SC 101.3.3.1.8 P 163 L 12 # i-171
 Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

Text in line 12 is 1 pt smaller than in remaining text.

SuggestedRemedy
 Please applt T,Text and remove any overrides in this line

Proposed Response Response Status W

PROPOSED REJECT.
 Text on line 12 is Times New Roman 10 pt per template.

CI 101 SC 101.3.3.1.8 P 164 L 26 # i-173
 Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

"CLK" is written in different font than the res of the SD. There are also scattered characters which look to be using different font, e.g.. "d" in tx_code<1> dataOut<loc> (line 40, state DECODE_FAIL)

SuggestedRemedy
 Please make sure that consistent fonts are used in the SDs!

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
 REVISED
 The two instances noted will be corrected.

CI 101 SC 101.4.1 P 169 L 5 # i-174
 Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

per primitive definitions "a stream of IQ data pairs" is not correct, since it is a stream of I/Q pairs with channel number information

SuggestedRemedy
 Change "a stream of IQ data pairs" to "a stream of I/Q data pairs and channel number"
 Also, glovally align the use of "IQ pair" and "I/Q pair" - I believe these are intended to be the same

Response Response Status W

ACCEPT IN PRINCIPLE.
 REVISED
 Change 2x from
 "IQ data pairs" to
 "I/Q value pair and channel number"

CI 101 SC 101.4.1.1 P 169 L 20 # i-175
 Hajduczenia, Marek Bright House Network

Comment Type E Comment Status A +REV+ EZ

Something went wrong with the variable definitions: "DS_PrflCpy ,DS_CpyCh, and US_PrflCpy variables"

SuggestedRemedy
 Change to "DS_PrflCpy, DS_CpyCh, and US_PrflCpy variables" and make sure DS_CpyCh is written in italics

Response Response Status C

ACCEPT.

CI 101 SC 101.4.1.1 P 169 L 19 # i-176
 Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

The mechanics of profile change belong to Clause 102, and not Clause 101.

SuggestedRemedy
 Move text from lines 19-30 to Clause 102 into proper location

Response Response Status W

ACCEPT IN PRINCIPLE.
 REVISED
 Retitle 102.4 to PHY Link applications
 Move 101.4.1.1 to 102.4.5 and renumber.

Cl 101 SC 101.4.2 P 170 L 22 # i-177
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

Definition of PMA primitives is not consistent between 101.4.2 and Figures 101-1/2/3/4

SuggestedRemedy

Update Figures 101-1/2/3/4 to match PMA_UNITDATA primitive syntax

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED

In figures change to:

"PMA_UNITDATA.request(...)"

"PMA_UNITDATA.indication(...)"

Note this is consistent with style use in Fig 77-4

Cl 101 SC 101.4.2.1.2 P 170 L 48 # i-178
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

When multiple NOTEs are added one after another, they should be numbered

SuggestedRemedy

Please add numbers to NOTEs

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 101 SC 101.4.3.2 P 172 L 39 # i-179
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status R +REV+

There is requirement for downstream clock synchronization: "CLT transmitters and CNU receivers shall conform to the requirements given in Table 101-7." - what about upstream direction? The CLT and CNU clocks are not synchronized?

SuggestedRemedy

Please add either a requirement for upstream or informative text explaining why there is no requirement for upstream (perhaps it is not needed)

Response Response Status W

REJECT.

The CLT is the only master clock in the network. This is the same time synchronization architecture as EPON or DOCSIS and should not be confused with burst mode clock recovery.

Cl 101 SC 101.4.3.3 P 173 L 36 # i-180
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

Odd equation 101-6: $((2(10))/4096)$ - what is the operand between 2 and 10?

SuggestedRemedy

Please clarify what operand is expected between 2 and 10

Response Response Status W

ACCEPT.

Cl 101 SC 101.4.3.3 P 174 L 6 # i-181
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status R +REV+

Equation 101-8 is not the final form

SuggestedRemedy

Change to: "6.4 x DSNcp", which is simpler and avoids unnecessary multiplications and exponents

Response Response Status W

REJECT.

While this is true it would leave the reader with no hint as to how we arrived at this magic number of 6.4. It is informative to the reader to know how the formula was arrive at in this case; 128 and 50,000 should be well known to the reader at this point.

Cl 101 SC 101.4.3.6.1 P 177 L 13 # i-182
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

The figure is hardly sufficiently detailed for a normative reference.

SuggestedRemedy

Change The scattered pilot pattern shall be synchronized to the PHY Link as illustrated in Figure 101-20." to "The scattered pilot pattern are synchronized to the PHY Link as illustrated in Figure 101-20."

The requirement on page 178 is sufficient, where a mathematical formula is used

Response Response Status W

ACCEPT IN PRINCIPLE.

REVISED

Per comment except use proper verb tense ("is" instead of "are").

Remove PICS PI2 and renumber.

Cl 101 SC 101.4.3.6.4 P 180 L 15 # i-184
 Hajduczenia, Marek Bright House Network

Comment Type **TR** Comment Status **A** +REV+

Not sure what "190e6" in Eq 101-9 is expected to mean. Is "6" supposed to be the exponent?

SuggestedRemedy
 Please fix the equation

Response Response Status **W**
 ACCEPT IN PRINCIPLE.
 REVISED
 I believe this should be equivalent to
 190 x 10^6

Cl 101 SC 101.4.3.8.1 P 182 L 31 # i-187
 Hajduczenia, Marek Bright House Network

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

It is not clear what "begins by" is supposed to imply - it initializes scrambler and other functions. Period

SuggestedRemedy
 Change to "Initializes (resetting) the scrambler function (see 101.4.3.7), sets an FCPbitCnt to to 1 (see 101.4.3.8.7), and initializes the mapping function with the lowest numbered active subcarrier."

Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 REVISED
 Per comment but use "(resets)" instead of "(resetting)"

Cl 101 SC 101.4.3.8.1 P 182 L 35 # i-188
 Hajduczenia, Marek Bright House Network

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

Variable formatting

SuggestedRemedy
 Put burstStart and burstEnd in italics, if that is the prevailing formatting style you're using. There are more instances of such inconsistent formatting in the draft

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

Cl 101 SC 101.4.3.8.3 P 184 L 19 # i-191
 Hajduczenia, Marek Bright House Network

Comment Type **TR** Comment Status **R** +REV+

Untestable requirement: "The symbol mapping function therefore shall process all active subcarriers per symbol across all OFDM channels." - there is no measurement or reference point allowing access to mapper function to confirm that it is indeed happening

SuggestedRemedy
 Convert itno a statement. Remove PICS

Response Response Status **W**
 REJECT.
 This is testable at the MDI connector using an NSA that looks at OFDM symbols.

Cl 00 SC 101.4.3.8.4 P 186 L 6 # i-193
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

"downstream frame" - another one of ambiguous terms. The only definition I can find is in 101.4.3.5, and it is unclear, since it references symbols, which are not defined by themselves.

SuggestedRemedy

Please provide clear definition of "downstream frame" and "upstream frame". I would also suggest that these be renamed to "PHY frames" or soemthing similar, emphasizing the fact that we do not mean MAC frames by any chances

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED
Changed to CL 00

Change
"downstream frame" to
"downstream OFDM frame"
at (pg/line): 171/7, 176/10, 176/12, 182/23. 185/50, 186/5, 186/6, 186/9, 186/24. 188/4

Change "upstream frame" to
"upstream OFDM superframe"
in Cl 100 pg 87 line 31

Change "upstream frame" to
"upstream PHY Link frame"
in Cl 102 (pg/line): 258/6, 258/28, 258/48, 256/26 (102.3.2)

On pg 262 Cl 102.2.7.3 Line 48
Change "EPoC frame"
to "PHY Link frame"

Cl 101 SC 101.4.3.9.2 P 186 L 43 # i-195
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

We have a requirement to perform time interleaving and when it is done (lines 43/44) but no requirement that I can find to follow the specific methodology described in this draft

SuggestedRemedy

Please add a requirement to perform time interleaving per method described in this subclause. Add PICS.

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED
At the end of the first sentence of 101.4.3.9.2 add "as described in this subclause."
change Value/Comment of EN3 from:
"Time interleaving meets the requirement of 101.4.3.9.2" to
"Time interleaving as described in 101.4.3.9.2"

Cl 101 SC 101.4.3.9.2 P 187 L 21 # i-196
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status R +REV+

Clearly untestable: The CLT shall support values of DS_TmIntrlv from 1 to 32 (see 101.4.3.9.5).

SuggestedRemedy

Convert into statement. Update PICS

Response Response Status W

REJECT.
This is testable at the MDI connector using an NSA that looks at OFDM symbols.

CI 101 SC 101.4.3.9.3 P 187 L 43 # i-197
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

We have a requirement to perform time interleaving and when it is done (lines 52/53) but no requirement that I can find to follow the specific methodology described in this draft

SuggestedRemedy

Please add a requirement to perform time interleaving per method described in this subclause. On pages 190/191 there are reference implementations for specific functions for frequency interleaver, which I would expect to be functionally normative, as we always do, ie., require the implementation produce the same result. Add PICS.

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED
See comment i-195
Response copied below:
At the end of the first sentence of 101.4.3.9.2 add "as described in this subclause."
change Value/Comment of EN3 from:
"Time interleaving meets the requirement of 101.4.3.9.2" to
"Time interleaving as described in 101.4.3.9.2"

CI 101 SC 101.4.3.9.3 P 189 L 37 # i-198
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

Tiny little text

SuggestedRemedy

Please make sure text of inline equations meets the T,Text style font size requirements

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 101 SC 101.4.3.11 P 193 L 41 # i-199
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

Sounds like a requirement for CLT/CNU transmitter: These 3800 maximum active subcarriers shall occupy the range 148 k 3947, where k is the spectral index of the subcarrier in Equation (101-25).

SuggestedRemedy

There is no DUTright now. Please rewrite and make it a requirement for CLT/CNU Tx (I guess)

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED
Change from :
"These 3800 maximum active subcarriers shall ..." to
"These 3800 maximum active subcarriers of a CLT or CNU OFDM transmitter channel shall ..."

CI 101 SC 101.4.3.12 P 195 L 24 # i-200
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

Two separate requirements, one would be enough

SuggestedRemedy

Change to: "In the downstream direction, the CLT shall use one of the permissible values for DSNcp and DSNrp given in Table 101-10 and Table 101-11, respectively, selected such that DSNrp < DSNcp." Update PICS accordingly

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED
Per comment and change OC5 from:
"As shown in Table 101-11" to
"As shown in Table 101-11 and less than CP value"

Strike PICS OC6 and renumber

Cl 101 SC 101.4.3.12 P 195 L 39 # i-201
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

Rather than add notes to Table 101-10/11, add "[OFDM Clock period (1/204.8 MHz)] under DSNcp and DSNrp.

SuggestedRemedy
per comment

Proposed Response Response Status W
PROPOSED ACCEPT.

Cl 101 SC 101.4.3.13 P 198 L 27 # i-204
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

These seem like downstream OFDM channel requirements, not just any requirements

SuggestedRemedy

Change "The 10GPASS-PX PHY shall comply" to "The 10GPASS-PX-D PHY shall comply" since we are placing requirements on Tx side only
Update PICS

Response Response Status W
ACCEPT IN PRINCIPLE.
REVISED
Per comment, no change to PICS required.

Cl 101 SC 101.4.4.2.1 P 199 L 40 # i-206
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

Unnecessary separate requirements

SuggestedRemedy

Change to: "The CNU shall lock the frequency of the upstream Subcarrier Clock (50 kHz) and subcarrier frequency to the 10.24 MHz Master Clock derived from the downstream OFDM signal."
Update PICS

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED

Change to "The CNU shall lock the frequency of the upstream Subcarrier Clock (50 kHz) and lock each upstream subcarrier frequency to the 10.24 MHz Master Clock derived from the downstream OFDM signal."

Change OT8 Value/Comment from
"CNU Subcarrier Clock locked to 10.24 MHz Master Clock"
to
"CNU Subcarrier Clock and 50 kHz subcarrier frequency locked to 10.24 MHz Master Clock"

Strike OT11 & renumber.

Cl 101 SC 101.4.4.3.1 P 200 L 21 # i-207
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status R +REV+

Unnecessary requirement - it is not testable anyway: The upstream Superframe shall be composed of the Probe Period followed by 256 OFDMA symbols.

SuggestedRemedy

Change into informative text instead. Remove PICS

Response Response Status W

REJECT.
This is easily observable with a NSA and is required for proper interoperability.

CI 101 SC 101.4.4.3.1 P 200 L 21 # i-208
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

what is the difference between "upstream frame" and "upstream superframe"? Both are used, with no clear definitions

SuggestedRemedy

Please clarify whether these are the same. In downstream, we only use "downstream frame"

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED
See comment i-193 Response copied below
Change
"downstream frame" to
"downstream OFDM frame"
at (pg/line): 171/7, 176/10, 176/12, 182/23. 185/50, 186/5, 186/6, 186/9, 186/24. 188/4

Change "upstream frame" to
"upstream OFDM superframe"
in CI 100 pg 87 line 31

Change "upstream frame" to
"upstream PHY Link frame"
in CI 102 (pg/line): 258/6, 258/28, 258/48, 256/26 (102.3.2)

On pg 262 CI 102.2.7.3 Line 48
Change "EPoC frame"
to "PHY Link frame"

CI 101 SC 101.4.4.3.2 P 201 L 35 # i-209
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+

No DUT. Rewrite to "The 10GPASS-XR-U shall start the transmission of the upstream (super)frame with ..."

SuggestedRemedy

Per comment. Update PICS
The same issue in 101.4.4.3.4

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED
Change from
"An OFDMA transmission shall start ..." to
"A CNU OFDMA transmission shall start ..."

Change TX4 from "Burst begins with" to "CNU Burst begins with"

CI 101 SC 101.4.4.3.5 P 202 L 16 # i-212
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

No need to repeat variable type when it is explicitly defined using TYPE field: "This Boolean variable ..."

SuggestedRemedy

Change all instances of "This Boolean variable" to "This variable" when TYPE field is present explicitly and set to Boolean already

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 101 SC 101.4.4.3.5 P 202 L 39 # i-213
Hajduczenia, Marek Bright House Network

Comment Type T Comment Status D EZ

I assume both SYMcount and Rbmode variables donot need to be negative.

SuggestedRemedy

Change type to "unsigned integer"

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 101 SC 101.4.4.3.6 P 203 L 17 # i-214
 Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ
 "SYMcount = SYMcount + 1" uses different font than rest of the SD

SuggestedRemedy
 Align font use

Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 101 SC 101.4.4.4 P 203 L 46 # i-217
 Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+
 No DUT in "Subcarrier configuration in an EPoC OFDM channel of 192 MHz shall conform ..."

SuggestedRemedy
 rewrite the requirement to include actual DUT (CLT/CNU). Update PICS

Response Response Status W
 ACCEPT IN PRINCIPLE.
 REVISED
 Change "192 MHz shall conform" to "192 MHz at the CNU shall conform"
 PICS ok as is (CNU: M)

Cl 101 SC 101.4.4.4.3 P 204 L 29 # i-218
 Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status A +REV+
 Undefined DUT: "EPoC devices ..."

SuggestedRemedy
 rewrite the requirement to include actual DUT (CLT/CNU). Update PICS

Response Response Status W
 ACCEPT IN PRINCIPLE.
 REVISED
 Change "EPoC devices" to "CNUs"
 At pg 175 line 2 change "An EPoC Phy" to "CLTs"
 Change Status of PICS TX1 to CLT:M, add "N/A[]" to support col.

Cl 101 SC 101.4.4.5.1 P 206 L 17 # i-220
 Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ
 Extra " after Boolean

SuggestedRemedy
 Strike "

Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 101 SC 101.4.4.5.4 P 212 L 5 # i-223
 Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status R +REV+
 It seems like there should be a requirement about this somewhere: "The CLT ensures a minimum gap time between bursts ..." to make sure that the CLT receiver can operate correctly, but I could not locate such a requirement anywhere

SuggestedRemedy
 Consider converting this statement into a requirement either in here, or adding a new one where the CLT transmitter is defined (likely in Clause 103, since that is what drives upstream scheduling)

Response Response Status W
 REJECT.
 See CC5 in 103.4

Cl 101 SC 101.4.4.5.4 P 212 L 9 # i-224
 Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ
 Some odd strikethrough in the word "time_quantum"

SuggestedRemedy
 Remove "a" in this word. Also, remove italics from this word - it is not variable.

Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 REVISED
 Remove "a", (note time_quantum is used in Eq 101-33 at line 12 and so should be considered a variable)
 Good catch.

Cl 101 SC 101.4.4.6.1 P 213 L 51 # i-225
 Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ
 Seems like there is space missing between "TYPE:" and following variable definition

SuggestedRemedy
 Scrub the draft, make sure there is space after "TYPE:" definition

Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 REVISED
 Pg/line: 161/20, 181/39, 213/51, 214/2, 214/5, 263/7

Cl 101 SC 101.4.4.7.1 P 214 L 15 # i-226
 Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ
 Incomplete variable formatting for "RB_Frame"

SuggestedRemedy
 Make sure "R" is italicized

Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 101 SC 101.4.4.8.1 P 214 L 53 # i-227
 Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ
 Missing space between numeric value and units in "3dB"

SuggestedRemedy
 Per comment

Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 101 SC 101.4.4.8.2 P 215 L 5 # i-228
 Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status R +REV+
 It seems that both statements in lines 5 and 6 should be converted into requirements - I do not see any other requirements for burst marker structure anywhere

SuggestedRemedy
 Per comment + add PICS

Response Response Status W
 REJECT.
 See TX4 & TX5 and states PLACE_START_MARKER and PLACE_END_MARKER in SD Figure 101-33

Cl 101 SC 101.4.4.9.1 P 220 L 25 # i-229
 Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status R +REV+
 Is this externally observable: "The CNU shall normalize the newly calculated coefficients?"

SuggestedRemedy
 If so, leave it as is. If not, convert into a statement instead and remove associated PICS

Response Response Status W
 REJECT.
 This is observable by the CLT and NSAs. It is the only way the CLT can update the coefficients to observe the CLT's output and set what they need to be. The CNU must update upon receiving from the CLT. As this is essentially a CLT/CNU feedback loop.

Cl 101 SC 101.4.4.9.1 P 220 L 35 # i-230
 Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status R +REV+
 This requirement seems more like a product spec than anything that we need for Tx/Rx definitions.

SuggestedRemedy
 Convert into informative text instead and remove any associated PICS

Response Response Status W
 REJECT.
 This must be a CLT requirement in order to meet interoperability.

CI 101 SC 101.4.4.9.2 P 220 L 41 # i-231
 Hajduczenia, Marek Bright House Network

Comment Type **TR** Comment Status **A** +REV+

All testing modes and testign procedures should be moved to 101.4.6 which already defines PMA testing

SuggestedRemedy
 Per comment

Response Response Status **W**
 ACCEPT IN PRINCIPLE.
 REVISED
 Move to 101.4.6.1 & renumber

CI 101 SC 101.4.5 P 223 L 5 # i-232
 Hajduczenia, Marek Bright House Network

Comment Type **TR** Comment Status **A** +REV+

no DUT in requirement: the output bit stream of the scrambler shall be mapped to QAM symbols such that first bit is the least-significant bit of the first QAM subcarrier constellation m-tuple, see Figure 101-39

SuggestedRemedy
 Please add DUT for this requirement and then update PICS

Response Response Status **W**
 ACCEPT IN PRINCIPLE.
 REVISED
 Change:
 "output bit stream of the scrambler" to
 "output bit stream of the CLT and CNU Symbol Mapper"
 No change to PICS needed.

CI 101 SC 101.4.5.3 P 224 L 20 # i-233
 Hajduczenia, Marek Bright House Network

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

More tiny equations

SuggestedRemedy
 Please fix equation size to match T,Text definition

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

CI 101 SC 101.4.5.4 P 225 L 4 # i-234
 Hajduczenia, Marek Bright House Network

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

Incorrent multiplication operator

SuggestedRemedy
 Please use "x" instead - multiple instances in draft

Proposed Response Response Status **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 REVISED
 Instructions on how to: In Eq Editor; cut term(s) to right of offensive dot, select multi operator, paste cut term(s)
 Locations noted (pg/ln); 225/24, 226/20-25

CI 101 SC 101.4.5.5 P 227 L 37 # i-235
 Hajduczenia, Marek Bright House Network

Comment Type **TR** Comment Status **A** +REV+

No DUT in "Both real and imaginary axes of a QAM constellation shall be scaled..."

SuggestedRemedy
 Please add DUT for this requirement and then update PICS

Response Response Status **W**
 ACCEPT IN PRINCIPLE.
 REVISED
 Change
 "shall be scaled using" to
 "shall be scaled by the CLT or CNU transmitter using"

Not change to PICS required.

CI 101 SC 101.5.1 P 228 L 41 # i-236
 Hajduczenia, Marek Bright House Network

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

Formatting mess

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,"

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

Cl 101 **SC 101.5.1** **P 228** **L 54** # **i-237**
Hajduczenia, Marek Bright House Network

Comment Type **TR** **Comment Status** **A** **+REV+**

What is the purpose of T_CORR_CLT where all it does it replace DiffDelay/2?

SuggestedRemedy
Replace T_CORR_CLT with "DiffDelay/2". Remove T_CORR_CLT definition
Same for T_CORR_CNUi on page 229, line 16

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

ACCEPT IN PRINCIPLE.
REVISED
Use DiffDelay_CLT/2 & DiffDelay_CNU/2

Cl 101 **SC 101.6.4.4** **P 234** **L 29** # **i-240**
Hajduczenia, Marek Bright House Network

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

Seems like font in this table is larger than in previous tables

SuggestedRemedy
Align font size
Same in 101.6.4.9

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

PROPOSED ACCEPT.

Cl 101 **SC 101.6.4.7** **P 236** **L 33** # **i-241**
Hajduczenia, Marek Bright House Network

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

Wrong ", " placement in LDPC code designation

SuggestedRemedy
Is " , " and should be " , " - affects FE4 and FE5

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

PROPOSED ACCEPT.

Cl 101 **SC 101.6.4.10** **P 238** **L 28** # **i-242**
Hajduczenia, Marek Bright House Network

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

Unclear mathematical meaning: (Ck)^2

SuggestedRemedy
It is probably meant to be (Ck)²

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

PROPOSED ACCEPT.

Cl 102 **SC 102** **P 239** **L 1** # **i-243**
Hajduczenia, Marek Bright House Network

Comment Type **TR** **Comment Status** **R** **+REV+**

All of the recent non-fiber based projects define their own Operations, Administration, and Maintenance (OAM) protocols, providing the function of what you call "PHY Link". Even GPOF does it in their own OAM specification. All of these OAMs are PHY specific, and are aptly called "1000BASE-T1 OAM", "1000BASE-H OAM", etc.

SuggestedRemedy
Rename "PHY Link" to "10GPASS-XR OAM", which is what this really is - it is an OAM link that allows for exchange of some data and provides for bidirectional low-level link between CLT and CNU
The proposed name does not conflict with Clause 57 OAM, and has been accepted by multiple projects consistently.

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

REJECT.
The term PHY Link is clear, unambiguous and not technically incorrect. It appears in the draft 542 times. Changing now would be a massive change to resolve a personal preference and at this point in the process is ill advised and will likely introduce errors into the draft.

Cl 102 SC 102.1.4.2 P 244 L 14 # i-258
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

The purpose of 102.1.4.2 is unclear.

SuggestedRemedy

- Move text from lines 15 - 22 to 102.1.4.2.1
- Move text from lines 24 - 28 to 102.1.4.2.2
- Remove 102.1.4.2
- Promote 102.1.4.2.1 and 102.1.4.2.2 one level up

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
REVISED
Leave text in place but combine with 102.1.4. Promote 102.1.4.2.1 and 102.1.4.2.2

Cl 102 SC 102.1.8 P 247 L 14 # i-263
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

Incorrect multiplication operator: *. Use "x" instead

SuggestedRemedy

Per comment

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 102 SC 102.2.1.1 P 250 L 45 # i-266
Hajduczenia, Marek Bright House Network

Comment Type TR Comment Status R +REV+

There is terminology confusion here: first we say Phy Link is allocated 400 KHz and then we say it is allowed 24 MHz of contiguous OFDM channel. I am not sure how both of these requirements can be met at the same time.

SuggestedRemedy

Change

During network setup the downstream PHY Link shall be allocated 400 kHz of spectrum. The allocated spectrum for the downstream PHY Link shall reside anywhere within a 24 MHz contiguous OFDM channel spectrum (i.e., 24 MHz with no internal exclusion bands) and have at least 3 MHz of contiguous spectrum above and below it for a total band of 6 MHz.

to

During network setup the downstream PHY Link is allocated 400 kHz of spectrum anywhere within a 24 MHz contiguous OFDM channel spectrum (i.e., 24 MHz with no internal exclusion bands) and have at least 3 MHz of contiguous spectrum above and below it for a total band of 6 MHz.

Remove existing PICS. Remove d1,d2,d3,d4 from Figure 102-8 unless they are needed somewhere (I could not locate any references to these in text today)
Add a requirement in 102.2.11 saying: The placement of the PHY Link within the contiguous OFDM channel shall be per Figure 102-8. Add a new PICS.

Response Response Status W

REJECT.

The text reads: "During network setup the downstream PHY Link shall be allocated 400 kHz of spectrum. The allocated spectrum for the downstream PHY Link shall reside anywhere within a 24 MHz contiguous OFDM channel spectrum (i.e., 24 MHz with no internal exclusion bands) and have at least 3 MHz of contiguous spectrum above and below it for a total band of 6 MHz."

Note that the "allocated 400 kHz" is not the same as "24 MHz contiguous OFDM channel spectrum".

Cl 102 SC 102.2.3 P 254 L 42 # i-268
 Hajduczenia, Marek Bright House Network
 Comment Type E Comment Status D EZ
 Wrong font for heading
 SuggestedRemedy
 Please reapply heading style to 102.2.3
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 102 SC 102.2.3.1.1 P 255 L 30 # i-272
 Hajduczenia, Marek Bright House Network
 Comment Type E Comment Status D EZ
 Comma not needed in "inform a CNU, to"
 SuggestedRemedy
 Per comment
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 102 SC 102.2.3 P 254 L 54 # i-269
 Hajduczenia, Marek Bright House Network
 Comment Type E Comment Status D EZ
 "CRC(32)" ???
 SuggestedRemedy
 Change to "CRC32"
 There are multiple instances in Clause 102
 There are also instances of "CRC-32" and "CRC 32", which should be also converted to "CRC32" for consistency
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 102 SC 102.2.3.1.1 P 255 L 33 # i-273
 Hajduczenia, Marek Bright House Network
 Comment Type TR Comment Status A +REV+
 This just reads wrong: "The CLT shall ensure that the inactive profile in all CNU is identical prior to making it the active profile."
 SuggestedRemedy
 Change to "The CLT shall set an identical inactive profile in all active CNU prior to its activation."
 Update PICS
 Response Response Status W
 ACCEPT.

Cl 102 SC 102.2.3.1 P 255 L 24 # i-271
 Hajduczenia, Marek Bright House Network
 Comment Type E Comment Status D EZ
 RD_IF should be italicised
 SuggestedRemedy
 Per comment
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 102 SC 102.2.3.1.4 P 257 L 3 # i-278
 Hajduczenia, Marek Bright House Network
 Comment Type E Comment Status D EZ
 More compound adjectives: "32 bit field"
 SuggestedRemedy
 Change to "32-bit field"
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 102 SC 102.2.3.4 P 260 L 18 # i-282
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

EMBcnt and EMBerr variables seem to be using smaller font than normal T,Text

SuggestedRemedy

Please apply proper style

Proposed Response Response Status W

PROPOSED REJECT.
The font is correct in the source file.

CI 102 SC 102.2.4 P 260 L 36 # i-283
Hajduczenia, Marek Bright House Network

Comment Type E Comment Status D EZ

binary size of the FEC code follows code name, usually

SuggestedRemedy

Change
a (384,288) binary punctured LDPC code
to
a binary punctured LDPC (384,288) code

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 1 SC 1.4.144b P 28 L 33 # i-285
Rolfe, Benjamin Blind Creek Associate

Comment Type TR Comment Status R +REV+ Sed

the term is used in it's own definition. This is not allowed in an IEEE standard.

SuggestedRemedy

Delete second sentence

Response Response Status W

REJECT.
The definition is modeled directly after a similar definition for the OLT in the 2015 STD. We would like to maintain consistency with previous PON related definitions.
"1.4.302 Optical Line Terminal (OLT): The network-end DTE for an optical access network. The OLT is the master entity in a P2MP network with regard to the MPCP protocol."

If the commenter feels strongly about this issue they are invited to submit a maintenance request.

CI 1 SC 1.4.144c P 28 L 37 # i-286
Rolfe, Benjamin Blind Creek Associate

Comment Type TR Comment Status R +REV+

Term is used in the definition. This is not allowed in an IEEE Standard (see IEEE Standard Style Manual)

SuggestedRemedy

Delete everything after first period.

Response Response Status W

REJECT.
The definition is modeled directly after a similar definition for the ONU in the 2015 STD. We would like to maintain consistency with previous PON related definitions.
"1.4.304 Optical Network Unit (ONU): The subscriber-end DTE to an optical access network. An ONU is a slave entity in a P2MP network with regard to the MPCP protocol."

If the commenter feels strongly about this issue they are invited to submit a maintenance request.

CI 1 SC 1.4.170a P 28 L 42 # i-287
Rolfe, Benjamin Blind Creek Associate

Comment Type TR Comment Status A +REV+

"The k redundant CP samples attached at the beginning of the symbol are identical to the last k samples of the same symbol prior to applying windowing." is a normative characteristic of the cyclic prefix, and does not belong in the definition of the term cyclic prefix.

SuggestedRemedy

Remove from definition, and move to appropriate normative clause.

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED
Remove the phrase. The CP description in CI 101 is sufficient as is.

CI 1 SC 1.4.277a P 28 L 47 # i-288
 Rolfe, Benjamin Blind Creek Associate

Comment Type TR Comment Status A +REV+

"In effect, MER is a measure of how spread out the symbol points in a constellation are. More specifically, MER is a measure of the cluster variance that exists in a transmitted or received waveform at the output of an ideal receive matched filter. MER includes the effects of all discrete spurious, noise, carrier leakage, clock lines, synthesizer products, linear and nonlinear distortions, other undesired transmitter and receiver products, ingress, and similar in-channel impairments." may well be useful to know, but is WAY more than is appropriate in the definition of the term. This appears a mix of normative and informative text, which is better suited to a normative clause(s) and general informative overview, respectively.

SuggestedRemedy

Remove extra informative and normative text from the definition and move it to an appropriate place in the standard.

Response Response Status W

ACCEPT IN PRINCIPLE.
 REVISED

Remove the referenced text. Normative description in CI 100 is sufficient as is.

CI 1 SC 1.4.306a P 29 L 10 # i-289
 Rolfe, Benjamin Blind Creek Associate

Comment Type TR Comment Status A +REV+ OFDM def

"Thus individual QAM subcarriers carry a small percentage of the total payload at a low data rate." is an interesting and informative bit of additional information, but not part of the definition of the term. This text belongs in an overview discussion of OFDM.

SuggestedRemedy

Remove the interesting and informative extra text from the definition and move to an overview clause where it will be both interesting have useful context for the user of the standard.

Response Response Status W

ACCEPT IN PRINCIPLE.
 REVISED
 Strike the sentence.

CI 1 SC 1.4.345b P 29 L 27 # i-290
 Rolfe, Benjamin Blind Creek Associate

Comment Type TR Comment Status A +REV+

This text is explaining a notation for describing normative requirement (format) of certain MDIO registers, It is not a "term" and so this definition does not belong in this clause. A better place might be clause 45. Or in a clause in the standard titled "notation conventions".

SuggestedRemedy

Delete the definition. Add text in clause 45 to explain the notation as used in defining MDIO registers.

Response Response Status W

ACCEPT IN PRINCIPLE.
 REVISED

Remove current definition 1.4.345b and 1.4.424a and adjust editing instructions as appropriate.
 Add 1.2.7 as follows:

Insert the following notation after subclause 1.2.6 Accuracy and resolution of numerical quantities.

1.2.7 Qm.n number format

The Qm.n number format is a fixed-point number format where the number of fractional bits is specified by n and optionally the number of integer bits is specified by m. For example, a Q14 number has 14 fractional bits; a Q2.14 number has 2 integer bits and 14 fractional bits. Preceding the "Q" with a "U" indicates an unsigned number.

Cl 100 SC 100.3.5.2 P 98 L 49 # i-291
 Rolfe, Benjamin Blind Creek Associate

Comment Type TR Comment Status A +REV+

What is "lowest power"? Without defining what this means, the requirement is unverifiable and thus invalid. Is this meant to be the lowest power supported by an implementation? I do not find a specific level or other clue as to what is meant by "lowest power" other than that it may, or may not, be up to 9dB below P1.6Min.

SuggestedRemedy

Restate requirement clearly and in a way which may be verified.

Response Response Status W

ACCEPT IN PRINCIPLE.
 REVISED

Modify the text to read:

"During PHY Discovery ranging a CNU shall initiate communications starting from lowest power, which is set by the CLT using PdResplnitPwr (see Section 102.4.1.8)."

Update PICS as needed.

Cl 100 SC 100.3.5.6 P 107 L 48 # i-292
 Rolfe, Benjamin Blind Creek Associate

Comment Type TR Comment Status A +REV+

"shall" in table is unnecessary and contradicts text. The sentence "The CNU shall output an RF Modulated signal with characteristics delineated in Table 100-11" makes the table "requirements"; "shall be capable of" is not the same as "shall output" so this is contradicting the normative text above; "CNU shall be capable of transmitting a total average output power." is not an compete (sensible) requirement, but for example "be capable of transmitting a total average output power of 65 dBmV" would be both complete and completely sensible. It would appear either this text is misplaced, or otherwise mangled in editing?

SuggestedRemedy

Clarify the requirement. Suggest that if there is in fact a power range intended, specify the minimum and maximum power that shall be used at any given time.

Response Response Status W

ACCEPT IN PRINCIPLE.
 REVISED

See response to i-71 copied below
 Change "Level CNU shall be capable of transmitting a total average output power."
 To: "Total average transmit output power"

Update PICS as needed.

Cl 100 SC 100.5.3 P 120 L 23 # i-293
 Rolfe, Benjamin Blind Creek Associate

Comment Type TR Comment Status A +REV+

"Normative specifications in this clause shall be met by a system integrating 10GPASS-XR over the life of the product while the product operates within the manufacturer's range of environmental, power, and other specifications."

How would one verify that this requirement has been met by a conforming product? It would require testing the entire life of the product, which is only possible if the product is designed to end it's life at the completion of conformance testing. If that is the intention clearly state the self-destruct requirement (although this seems to limit severely the utility of the product).

SuggestedRemedy

- (1) delete the paragraph,
- or
- (2) change "shall" to "should be designed to"

Response Response Status W

ACCEPT IN PRINCIPLE.
 REVISED
 Option 2 as per remedy

Cl 100 SC 100.7 P 121 L 5 # i-294
 Rolfe, Benjamin Blind Creek Associate

Comment Type GR Comment Status R +REV+ Sed

"The supplier of a protocol implementation that is claimed to conform to Clause 100, Physical Medium Dependent (PMD) sublayer and medium for passive optical networks type 10GPASS-XR shall complete the following protocol implementation conformance statement (PICS) proforma." is stating a required behavior of the USER of the standard (implementer), which is out of scope of this standard.

SuggestedRemedy

Change "shall" to "will".

Response Response Status W

REJECT.
 The phrasing of this paragraph is consistent with all other PICS clauses in STD 802.3 2015 and the working group template.
 The commenter is invited to submit a maintenance request against the standard if this is considered a blocking issue.

CI 101 SC 101.6.1 P 231 L 7 # i-295
 Rolfe, Benjamin Blind Creek Associate

Comment Type GR Comment Status R +REV+

The statement "The supplier of a protocol implementation that is claimed to conform to Clause 101, Reconciliation Sublayer, Physical Coding Sublayer, and Physical Media Attachment for EPoC, shall complete the following protocol implementation conformance statement (PICS) proforma." is specifying a required behavior of the user (implementer) of a standard, which is out of scope of this standard.

SuggestedRemedy

Change "shall" to "will". Or delete the paragraph. Or change the scope of the standard to include human behavior.

Response Response Status W

REJECT.

The phrasing of this paragraph is consistent with all other PICS clauses in STD 802.3 2015 and the working group template.

The commenter is invited to submit a maintenance request against the standard if this is considered a blocking issue.

CI 102 SC 102.5.1 P 291 L 5 # i-298
 Rolfe, Benjamin Blind Creek Associate

Comment Type GR Comment Status R +REV+

"The supplier of a protocol implementation that is claimed to conform to Clause 102, EPoC PHY Link, shall complete the following protocol implementation conformance statement (PICS) proforma." is specifying a required behavior or the implementer of the standard (a human being), which is out of scope of this standard (which defines behaviors of conforming devices).

SuggestedRemedy

Change "shall" to "will"

Response Response Status W

REJECT.

The phrasing of this paragraph is consistent with all other PICS clauses in STD 802.3 2015 and the working group template. The commenter is invited to submit a maintenance request against the standard if this is considered a blocking issue.

CI 103 SC 103.4.1 P 341 L 6 # i-299
 Rolfe, Benjamin Blind Creek Associate

Comment Type GR Comment Status R +REV+

"The supplier of a protocol implementation that is claimed to conform to Clause 103, Multipoint MACControl for EPoC, shall complete the following protocol implementation conformance statement (PICS)proforma." is (again) specifying required behavior of a person or entity who's behavior is out of scope of this standard (and thus out of scope of the project)

SuggestedRemedy

Withdraw the draft as the content exceeds the scope of the PAR.
 or
 change "shall" to "will".

Response Response Status W

REJECT.

The phrasing of this paragraph is consistent with all other PICS clauses in STD 802.3 2015 and the working group template. The commenter is invited to submit a maintenance request against the standard if this is considered a blocking issue.

CI 100A SC 100A.4.1 P 355 L 6 # i-300
 Rolfe, Benjamin Blind Creek Associate

Comment Type GR Comment Status R +REV+

"The supplier of a protocol implementation that is claimed to conform to Annex 100A, EPoC OFDM channel model, shall complete the following protocol implementation conformance statement (PICS) proforma." specifies requirements outside the scope of this standard (e.g. behavior of the supplier). Either the draft exceeds the scope of the PAR, or we are stating a FACT, not a requirement (in the context of the standard). I prefer the second option ;-)

SuggestedRemedy

Change "shall" to "will"

Response Response Status W

REJECT.

The phrasing of this paragraph is consistent with all other PICS clauses in STD 802.3 2015 and the working group template. The commenter is invited to submit a maintenance request against the standard if this is considered a blocking issue.

Cl 1 SC 1.4.306a P 29 L 10 # i-301
 Rolfe, Benjamin Blind Creek Associate

Comment Type **TR** Comment Status **A** +REV+ OFDM def

This definition contradicts the NORMATIVE definition of OFDM Channel used in for example Table 45-98a which states the OFDM Channel includes pilots, which are modulated using BPSK, and 101.4.3.4.3 where it states When a subcarrier is used to carry MAC data it uses the modulation type of QPSK or 2n-QAM. Thus "over a number of orthogonal QAM subcarriers." is incorrect.

SuggestedRemedy

Remove the definition from this clause.

Response Response Status **W**

ACCEPT IN PRINCIPLE.
 REVISED
 Strike the word QAM from the definition.

Cl 100 SC 100.3.4.2 P 92 L 22 # i-302
 Nakada, Juichi ADVANTEST

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

Table 100-3 CLT RF output requirements
 p.92, line 22, "Phase noise up to of the subcarrier's center".
 I think that numerical value is insufficient in this sentence.

SuggestedRemedy

Proposed Response Response Status **W**

PROPOSED ACCEPT IN PRINCIPLE.
 REVISED
 See comment i-382.
 Suggest remedy copied below:
 "After +- symbol add "50 kHz"

Cl 103 SC 103.1.3 P 304 L 1 # i-304
 Remein, Duane Futurewei Technologie

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

This section is essentially a duplicate of 77.1.4 and can be removed.

SuggestedRemedy

Replace the para with "See 77.1.4"

Proposed Response Response Status **W**

PROPOSED ACCEPT.

Cl 103 SC 103.2.2 P 305 L 9 # i-305
 Remein, Duane Futurewei Technologie

Comment Type **E** Comment Status **D** EZ i-115

Figure 103-4 is a duplicate of 77-6.

SuggestedRemedy

Replace the figure 103-4 with "See Figure 77-6 for a high level diagram of the multipoint transmission control service interfaces."

Proposed Response Response Status **W**

PROPOSED ACCEPT IN PRINCIPLE.
 REVISED
 See accepted comment i-115 (suggested remedy copied below)

In other locations 802.3, there are cases where text was marked as applicable, with some listed changes. Here, change "The purpose and high level functionality of multipoint transmission control is similar to those described in 77.2.2 for EPON." to "The purpose and high level functionality of multipoint transmission control is similar to those described in 77.2.2 for EPON, including Figure 77-6 through Figure 77-9, where the term "ONU" is replaced with "CNU" and the term "OLT" is replaced with "CLT"."
 Strike Figure 103-4 through Figure 103-7

Cl 103 SC 103.2.2 P 305 L 21 # i-306
 Remein, Duane Futurewei Technologie

Comment Type **E** Comment Status **D** EZ i-115

Figure 103-5 is a duplicate of 77-7.

SuggestedRemedy

Replace the figure 103-5 with "See Figure 77-7 for a high level diagram of the control parser service interfaces."

Proposed Response Response Status **W**

PROPOSED REJECT.
 See accepted ER comment i-115 by the same commenter which removed this figure

CI 103 **SC 103.2.2** **P 306** **L 1** # **i-307**
 Remein, Duane Futurewei Technologie

Comment Type **E** **Comment Status** **D** **EZ i-115**

Figure 103-6 is a near duplicate of 77-8.

SuggestedRemedy
 Replace the figure 103-6 with "See Figure 77-8 for a high level diagram of the CLT control multiplexer service interfaces (CLT operates the same as an OLT)."

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

PROPOSED REJECT.
 See accepted ER comment i-115 by the same commenter which removed this figure

CI 103 **SC 103.2.2** **P 306** **L 1** # **i-308**
 Remein, Duane Futurewei Technologie

Comment Type **E** **Comment Status** **D** **EZ i-115**

Figure 103-7 is a near duplicate of 77-9.

SuggestedRemedy
 Replace the figure 103-7 with "See Figure 77-9 for a high level diagram of the CNU control multiplexer service interfaces (CNU operates the same as an ONU)."

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

PROPOSED REJECT.
 See accepted ER comment i-115 by the same commenter which removed this figure

CI 103 **SC 103.2.1** **P 304** **L 49** # **i-311**
 Remein, Duane Futurewei Technologie

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

Verb tense incorrect

SuggestedRemedy
 Change "is" to "are" so the sentence reads "The principles of Multipoint MAC Control are the same as those described in 77.2.1 for EPON." This change is included in 3bn_remein_02_0216.pdf.

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

PROPOSED ACCEPT.

CI 100 **SC 100.2.1.1** **P 84** **L 13** # **i-312**
 Remein, Duane Futurewei Technologie

Comment Type **E** **Comment Status** **D** **+REV+**

The definition of time_quantum is located in 64.2.2.1 not 77.2.2.1 (which references 64.2.2.1).

SuggestedRemedy
 Change the reference from 77.2.2.1 to 64.2.2.1 so as to avoid a double reference.

Proposed Response **Response Status** **Z**

This comment was WITHDRAWN by the commenter.

CI 101 **SC 101.1.2** **P 127** **L 33** # **i-313**
 Remein, Duane Futurewei Technologie

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

The definition of time_quantum is located in 64.2.2.1 not 77.2.2.1 (which references 64.2.2.1).

SuggestedRemedy
 Change the reference from 77.2.2.1 to 64.2.2.1 so as to avoid a double reference.

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

PROPOSED ACCEPT.

CI FM **SC FM** **P 1** **L 30** # **i-314**
 Remein, Duane Futurewei Technologie

Comment Type **E** **Comment Status** **A** **+REV+ Sed EZ**

Change "IEEE P802.3bn initial Sponsor ballot"

SuggestedRemedy
 to "IEEE P802.3bn Sponsor ballot recirculation"

Response **Response Status** **C**

ACCEPT IN PRINCIPLE.
 REVISED
 "IEEE P802.3bn Sponsor ballot first recirculation"

CI 45 SC 45.2.1.3 P 36 L 27 # i-315
 Remein, Duane Futurewei Technologie
 Comment Type E Comment Status D EZ
 "1.1958 through 1.1959" should be "1.1958 and 1.1959"
 SuggestedRemedy
 per comment.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 45 SC 45.2.1.131.1 P 39 L 50 # i-317
 Remein, Duane Futurewei Technologie
 Comment Type E Comment Status D EZ
 Missing word "variable" between "TimeSyncCapable defined"
 SuggestedRemedy
 per comment.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 45 SC 45.2.1.131.8 P 40 L 44 # i-318
 Remein, Duane Futurewei Technologie
 Comment Type E Comment Status D EZ
 missing period after "102.2.7.3"
 SuggestedRemedy
 per comment.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 45 SC 45.2.1.132.2 P 41 L 31 # i-319
 Remein, Duane Futurewei Technologie
 Comment Type E Comment Status D EZ
 Missing word "counter between "the DS_ChCnt"
 SuggestedRemedy
 per comment.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 45 SC 45.2.1.160 P 55 L 21 # i-320
 Remein, Duane Futurewei Technologie
 Comment Type E Comment Status D EZ
 Missing word "variable" between "the PhyLinkRspTm"
 SuggestedRemedy
 per comment.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 45 SC 45.2.1.161.1 P 56 L 3 # i-321
 Remein, Duane Futurewei Technologie
 Comment Type ER Comment Status A +REV+
 The text indicates a 2 bit value maps to 1 bit variable. Also an incorrect reference to 101.4.3.4.5.
 SuggestedRemedy
 Change
 "These bits are a reflection of bit 1 of variable US_ModAbility defined in 101.4.3.4.5." to
 "These bits are a reflection of the variable US_ModAbility defined in 101.4.4.4.4."
 Response Response Status W
 ACCEPT.

CI 45 SC 45.2.1.163.1 P 57 L 16 # i-324
 Remein, Duane Futurewei Technologie
 Comment Type E Comment Status D EZ
 Incorrect reference to 102.4.1.9.2.
 Same issue for 45.2.1.163.2 line 22
 SuggestedRemedy
 Change to 102.4.1.8.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 45 SC 45.2.1.166.1 P 59 L 20 # i-325
 Remein, Duane Futurewei Technologie
 Comment Type E Comment Status D EZ
 "indicated" shold be "indicates"
 SuggestedRemedy
 per comment.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 45 SC 45.2.1.166.1 P 59 L 23 # i-326
 Remein, Duane Futurewei Technologie
 Comment Type E Comment Status D EZ
 Incorrect ref to 100.4.3.
 Same issue line 30.
 SuggestedRemedy
 Change to 100.4.3.1.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 45 SC 45.2.1.167.1 P 60 L 4 # i-327
 Remein, Duane Futurewei Technologie
 Comment Type E Comment Status D EZ
 Variable name ReportedPwr should be italics. Reference should be 100.3.5.3.1.
 SuggestedRemedy
 per comment.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 56 SC 56.1.2.1 P 69 L 53 # i-328
 Remein, Duane Futurewei Technologie
 Comment Type E Comment Status D EZ
 ODN is already spelled out and doe not need to be done again here
 SuggestedRemedy
 Change "optical distribution network (ODN)" to "ODN" with underlining.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 56 SC 56.1.3 P 72 L 1 # i-329
 Remein, Duane Futurewei Technologie
 Comment Type E Comment Status D EZ
 The editing instruction should refer to Table 56-1 not 56-2.
 SuggestedRemedy
 Change "Insert two rows at the end of Table 56-2, ..." to "Insert two rows at the end of Table 56-1, ..."
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 67 SC 67.1 P 75 L 10 # i-330
 Remein, Duane Futurewei Technologie
 Comment Type E Comment Status D EZ
 It appears that the basis for Table 67-1 was taken from 2012 edition and not the latest revision.
 SuggestedRemedy
 Change the editing instruction to read: "Insert two new rows at the end of Table 67-1 and two new footnotes labeled d and e as shown below (unchanged rows and footnotes not shown)".
 Remove the unchanged rows and footnotes from the table.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 100 SC 100.2.1.1 P 84 L 13 # i-331
 Remein, Duane Futurewei Technologie
 Comment Type E Comment Status D +REV+
 77.2.2.1 only points to 64.2.2.1. rather than create a double reference for the reader point directly to 64.2.2.1. Could also point to 103.2.2.1 for a "sectional local" reference.
 SuggestedRemedy
 Change 77.2.2.1 to 64.2.2.1.
 Proposed Response Response Status Z
 This comment was WITHDRAWN by the commenter.

Cl 100 SC 100.7.3.1 P 123 L 19 # i-332
 Remein, Duane Futurewei Technologie
 Comment Type E Comment Status D EZ
 Everywhere else in the draft "I/Q" is "I / Q" (with spaces).
 SuggestedRemedy
 Change "I/Q" to "I / Q" in 2 places (line 19 & 22).
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 REVISED
 See accepted comment i-18 which changes all instances to "I/Q"

Cl 100 SC 100.3.4.1 P 89 L 26 # i-336
 Remein, Duane Futurewei Technologie
 Comment Type E Comment Status D EZ
 The "N" in "Neq" is not italicised: "The number of equivalent 6 MHz channels, Neq, is ..."
 SuggestedRemedy
 per comment.
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 REVISED
 The "N" in "Neq" should italicised.

Cl 100 SC 100.3.2.1 P 88 L 6 # i-334
 Remein, Duane Futurewei Technologie
 Comment Type TR Comment Status A +REV+
 This statement disagree with the definition of in 100.3.2.3
 "... sets DS_RateMatchFail to "1" indicating mismatch, otherwise "0".
 Same issue for US_RateMatchFail in 100.3.2.2
 SuggestedRemedy
 Change to read "... sets DS_RateMatchFail to TRUE indicating mismatch, otherwise it is set to FALSE." and "... sets US_RateMatchFail to TRUE indicating mismatch, otherwise it is set to FALSE."

Cl 100 SC 100.3.5.2 P 98 L 24 # i-337
 Remein, Duane Futurewei Technologie
 Comment Type E Comment Status D EZ
 "P1.6" should be italicised. Same issue:
 pg 98 ln 27 "Pmax"
 pg 98 ln 52 "P1.6t"
 SuggestedRemedy
 per comment.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Response Response Status C
 ACCEPT.

Cl 100 SC 100.3.3 P 88 L 37 # i-335
 Remein, Duane Futurewei Technologie
 Comment Type E Comment Status D EZ
 Spelling "labelled"
 SuggestedRemedy
 "labeled"
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 100 SC 100.3.5.4.2 P 102 L 22 # i-338
 Remein, Duane Futurewei Technologie
 Comment Type E Comment Status D EZ
 In Eq 100-16 the term "Under-grant Hold #Users" appears as "Under-grant Hold # Users" with a space between "#" and "Users"
 SuggestedRemedy
 remove the excess space.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 100 SC 100.3.5.4.4 P 105 L 37 # i-341
 Remein, Duane Futurewei Technologie
 Comment Type T Comment Status D EZ
 To what voltage step does this refer "The CNU's voltage step shall be dissipated ..."? Presumably that at the MDI
 SuggestedRemedy
 Change to read "The CNU's voltage step at the MDI shall be dissipated ..."
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 REVISED
 Change to read "The CNU's voltage step at the MDI (TP2) shall be dissipated ."

CI 100 SC 100.3.5.4.4 P 105 L 40 # i-342
 Remein, Duane Futurewei Technologie
 Comment Type TR Comment Status A +REV+
 What is a "backed-off transmit level"? This term is not used anywhere in the draft. "Back-off" is only used to refer to the Discovery back-off algorithm.
 SuggestedRemedy
 Clarify the term.
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 REVISED
 Replace the sentence at line 40 beginning with "At backed-off transmit level ." with "At transmit levels below +55 dBmV, the CNU's maximum change in voltage shall decrease by a factor of 2 for each 6 dB decrease of power level, from +55 dBmV down to a maximum change of 3.5 mV at 31 dBmV and below."
 Update PICS as needed.

CI 100 SC 100.3.5.5.1 P 106 L 14 # i-343
 Remein, Duane Futurewei Technologie
 Comment Type E Comment Status D EZ
 Hopefully this is true "carrier phase offset, and timing will be adjusted" but we typically don't use the work "will"
 SuggestedRemedy
 Change to "carrier phase offset, and timing are adjusted"
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 100 SC 100.3.5.5.1 P 106 L 37 # i-344
 Remein, Duane Futurewei Technologie
 Comment Type E Comment Status D EZ
 "BURSTMER" should be italicised.
 SuggestedRemedy
 per comment.
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 REVISED
 To be clear: <ital>BURST_{MER}</ital>

CI 100 SC 100.3.5.7 P 108 L 19 # i-345
 Remein, Duane Futurewei Technologie
 Comment Type E Comment Status D EZ
 Add missing period between "Figure 100-3" and "PMD_SIGNAL.request(ON)"
 SuggestedRemedy
 per comment.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 100 SC 100.3.7.1 P 112 L 27 # i-346
 Remein, Duane Futurewei Technologie
 Comment Type E Comment Status D EZ
 Excessive white space in row starting "OFDM channel input level range" (probably due to para mark rather than linefeed).
 SuggestedRemedy
 Remove excess white space.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 100 SC 100.3.8 P 115 L 33 # i-347
Remein, Duane Futurewei Technologie

Comment Type E Comment Status D EZ
Unwarrented period between "subclause" and "Definitions"

SuggestedRemedy
Remove period, insert missing space, and change ""Definitions" to "definitions"

Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
REVISED
Line 33, remove "Definitions of parameters and measurement methods." It is a remenent left in error from prior subclause changes.

CI 100 SC 100.3.8 P 115 L 32 # i-348
Remein, Duane Futurewei Technologie

Comment Type TR Comment Status A +REV+ ensures
The phrase "The CLT ensures that" implies a requirement on the CLT which cannot currently be met as there is no way to ensure the configuration meets these objectives (e.g., a "NACK" capability in MDIO). These implied requirements can easily be provided by a system which includes the PHY but should not be implied requirements of the PHY. See comment against pg 193 line 39 CI 101.4.3.11.

SuggestedRemedy
Remove the phrase at line 32.
Remove the phrase at line 38 and change "does not" to "cannot" so the sentence reads: "The encompassed spectrum of each 192 MHz downstream OFDM channel cannot exceed 190 MHz and does not exceed 3800 active subcarriers (see Table 100-3)."
Remove the phrase at line 42.
Remove the phrase at pg 116 line 24 and change "does not" to "cannot" 2x so the sentence reads: "the encompassed spectrum of the upstream OFDMA channel cannot exceed 190 MHz and cannot exceed 3800 active subcarriers (see Table 100-11)."

Response Response Status U
ACCEPT IN PRINCIPLE.
REVISED
As per remedy. Editor to additionally check other "CLT ensures" in Clause 100 and make similar updates.

CI 101 SC 101.4.3.11 P 193 L 39 # i-349
Remein, Duane Futurewei Technologie

Comment Type TR Comment Status A +REV+ ensures
The phrase "The CLT ensures that" implies a requirement on the CLT which cannot currently be met as there is no way to ensure the configuration meets these objectives (e.g., a "NACK" capability in MDIO). These implied requirements can easily be provided by a system which includes the PHY but should not be implied requirements of the PHY. See comment against pg 115 line 32 CI 100.3.8.

SuggestedRemedy
Remove the phrase, change "does not" to "cannot" and close parenthesis so the sentence reads: "The encompassed spectrum of a 192 MHz OFDM channel cannot exceed 190 MHz (3800 active subcarriers, see Table 100-3 and Table 100-11)."

Response Response Status C
ACCEPT IN PRINCIPLE.
REVISED
At line 40 strike "The CLT ensures that" and change "does not exceed" to "is"

CI 100 SC 100.4.4 P 119 L 25 # i-351
Remein, Duane Futurewei Technologie

Comment Type E Comment Status D EZ
In "The OFDM test receiver need to be functionally" "need" should be "needs"

SuggestedRemedy
per comment.

Proposed Response Response Status W
PROPOSED ACCEPT.

CI 100 SC 100.3.2.1 P 87 L 5 # i-352
Remein, Duane Futurewei Technologie

Comment Type T Comment Status A +REV+
"DS_Frame_Data_Load has the same value every frame, ..." My recollection is that this should be for every superframe not every frame.

SuggestedRemedy
Change "frame to superframe"

Response Response Status C
ACCEPT IN PRINCIPLE.
REVISED
Editors to search for superframe and ensure that it is only used in reference to upstream. If referring to downstream change to "OFDM frame". Include "downstream" if not clear from context.

CI **FM** SC **FM** P **13** L **13** # **i-363**
 Grow, Robert RMG Consulting

Comment Type **ER** Comment Status **A** +REV+ Sed

The amendment identification is not consistent. I believe it is correct here and most places in the draft, but not at P.12, L.3. Basically, we have drifted away from all references in the body of the standard being of the form IEEE Std 802.3bp-20xx, (with document title and headers using the project designation P802.3bp/D3.1). Though likely to be caught in publication preparation (especially since this note is instructed to be this way in current IEEE templates), we should strive for consistency in the body of the document so publication editors only search for one string that needs to be updated.

SuggestedRemedy

The note is something carried into the published standard and therefore should in that note be IEEE Std 802.3bp-201x. This may be something that IEEE editorial staff has changed recently. We should get clear guidance from staff (especially since they are currently revising the Style Manual). We also use the IEEE Std 802.3bp-201x in the PICS template and PICS in this draft.

Response Response Status **W**

ACCEPT IN PRINCIPLE.
 REVISED

Staff Editors would like to change all amendment references to "IEEE Std 802.3yy-20xx" where yy is the project designation and xx is the year completed. If a project is not completed when this draft is approved by SASB leave the "xx".

Editors verified this with staff editors and will make appropriate changes.

CI **FM** SC **FM** P **13** L **13** # **i-364**
 Grow, Robert RMG Consulting

Comment Type **ER** Comment Status **A** +REV+ Sed

There are other approved or likely to be approved amendments to IEEE Std 802.3 that should be concurrent or before P802.3bp approval.

SuggestedRemedy

P802.3bw is approved and designated Amendment 1, P802.32by has been designated Amendment 2, P802.3bq Amendment 3 and P802.3bp Amendment 4. br failed to meet conditions for RevCom submittal, by and bq also in Sponsor ballot. Either add an editor's note that other amendment descriptions will be added during publication preparation, or gather the amendment information (I think they are all in P802.3bv).

Response Response Status **W**

ACCEPT IN PRINCIPLE.
 REVISED

See comment i-6 (Response copied below)

Per comment except [2] (WG Chair has not yet announced the order of this amendment)

CI **FM** SC **FM** P **27** L **44** # **i-365**
 Grow, Robert RMG Consulting

Comment Type **ER** Comment Status **A** +REV+ Sed

I expect the WG Chair will designate an amendment number for this project.

SuggestedRemedy

This note should be updated for the known preceding amendments (bw, by, bq, bp) and any others that the draft assumes to precede this in approval order.

Response Response Status **W**

ACCEPT IN PRINCIPLE.
 REVISED

Add the following after confirming with Working Group Secretary:

IEEE Std 802.3bw-2015
 IEEE Std 802.3by-20xx
 IEEE Std 802.3bq-20xx
 IEEE Std 802.3bp-20xx

See i-363 (response copied below)

Staff Editors would like to change all amendment references to "IEEE Std 802.3yy-20xx" where yy is the project designation and xx is the year completed. If a project is not completed when this draft is approved by SASB leave the "xx".

CI **1** SC **1.5** P **29** L **42** # **i-366**
 Grow, Robert RMG Consulting

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

The acronyms list is alphanumeric, not only alphabetic.

SuggestedRemedy

Change alphabetical to alphanumeric.

Proposed Response Response Status **W**

PROPOSED ACCEPT.

CI 30 SC 30.3.2.1.2 P 31 L 11 # i-367
 Grow, Robert RMG Consulting

Comment Type TR Comment Status A +REV+

The SYNTAX list is not sorted. (It begins with other, unknown, none).

SuggestedRemedy

I assume the correct point is insert after 10GBASE-PRX. Same change for aPHYTypeList. For aMAUType, I believe the insert is after 10GBASE-T.

Response Response Status W

ACCEPT IN PRINCIPLE.

REVISED

Change editing instruction by removing "in alphanumeric order" and insert "after 10/1GBASE-PRX" for aPhyType and aPhyTypeList as per comment for aMAUType.

CI 45 SC 45.2.1.6 P 38 L 3 # i-368
 Grow, Robert RMG Consulting

Comment Type T Comment Status R +REV+ Sed

P802.3bv has comments to put in the specifications for changes to the reserved rows.

SuggestedRemedy

This is possible when amendment order is known, but better is a suggestion the publication editors liked for an early project to individually list the code points as reserved (rather than in blocks), then subsequent amendments can simply indicate a change to the appropriate reserved rows. Encourage support for this approach.

Response Response Status C

REJECT.

This Editors instruction follows the recommendation of the WG Secretary. Should that recommendation change we will be happy to reconsider. However doing so without that recommendation may result in unnecessary churn in the draft. The commentor is invited to take this subject up with the WG Secretary.

CI 45 SC 45.2.1.17aa P 38 L 17 # i-369
 Grow, Robert RMG Consulting

Comment Type ER Comment Status A +REV+

This editorial instruction is wrong. Clause 45 presents registers in ascending number. The 2015 revision has 45.2.1.14 describing register 1.16. IEEE Std 802.3bw-2015 inserts 45.2.1.14a describing register 1.18. Register 1.17 belongs between these two register descriptions. (P802.3by inserts 45.2.1.14b and Table 45-17b describing register 1.19). While the aa is arguably correct (what happens when we need to do the 27th insert and want to wrap to aa), the referenced document isn't correct.

SuggestedRemedy

I recommend using the letter c and giving up on the letter meaning anything about order. Correct instruction to read Insert 45.2.1.14c and Table 45-17c after 45.2.1.14 (before the 45.2.1.14a and Table 45-17a inserted by IEEE Std 802.3bw-2015) as follows:

Response Response Status W

ACCEPT IN PRINCIPLE.

REVISED

See comment i-4 which changes "after" to "before" so correct order is maintained.

CI 45 SC 45.2.1.17aa P 38 L 17 # i-370
 Grow, Robert RMG Consulting

Comment Type E Comment Status A +REV+

This lettering of inserts illustrates how use of letters is broken given sufficient inserts (in this case two). When discussing this problem with our publication editors in Atlanta, they admitted after consultation with the manager of the IEEE editorial department that what the style manual describes breaks pretty quickly. They agreed a long string of a's is not particularly good. They also did not jump at making letters simply a tag, with alphabetic order not meaning anything (my preferred solution).

SuggestedRemedy

A revision of the Style Manual is underway and this is on the list for better directions. We probably need to apply greater pressure for an answers to our insert issues. I would encourage use of the letter b in this case, not aa.

Response Response Status C

ACCEPT IN PRINCIPLE.

REVISED

Editors to consult with WG Secretary and IEEE staff editors for preferred resolution.

Cl 45 SC 45.2.1.131 P 39 L 3 # i-371
Grow, Robert RMG Consulting

Comment Type ER Comment Status A +REV+ Cl45 renum

IEEE Std 802.3bw has inserted 45.2.1.131 and 45.2.1.132. Because these 802.3bw subclauses are defining registers 1.2101 and 1.2102, the inserts, if we continue to follow using letters, needs to be 45.2.1.130a through 45.2.1.130ak. (The instruction is also in error on the range of inserts as there is a 45.2.1.167 in the draft. This highlights the problem with aa being ambiguous as used on P.39, L.17.

SuggestedRemedy

Option 1 -- an option that I did not present to our publication editors would be to use our amendment number rather than trying to enforce an alphabetical ordered meaning. In that case, these would be 45.2.1.130bn1 through 45.2.1.130bn31. Pretty ugly. Option 2 -- 45.2.1.130a through 45.2.1.130ak. Option 3 -- Personally, I'd prefer not using letters but specify renumbering (but I seem to be in the minority of vocal participants). Doing that the instruction would be: Insert 45.2.1.131 through 45.2.1.167 and sub-clauses after 45.2.1.130 (before the inserts at the same place by IEEE Std 802.3bw), and renumber as required:.

Response Response Status W

ACCEPT IN PRINCIPLE.
REVISED
Editors to consult with WG Secretary and IEEE staff editors for preferred resolution.

Cl 00 SC 0 P 0 L 0 # i-372
Thompson, Geoffrey GraCaSI S.A.

Comment Type G Comment Status R +REV+

The addition of yet another flavor to the point-to-multipoint set of amendments to 802.3 reinforces my earlier position that the P2MP clauses deserve their own separate IEEE Standard.

SuggestedRemedy

Re-edit this clause to be a standalone standard (802.3.2 would be my choice). This standard would then provide the foundation during the next revision cycle to have all of the P2MP material added to it. The end result would be separate standards for CSMA/CD & P2P in one and P2MP in another.

Response Response Status C

REJECT.
The suggested Remedy is beyond the scope of the project PAR (see below).
5.2.b. Scope of the project: The project is to amend IEEE Std 802.3 to add physical layer specifications and management parameters for symmetric and/or asymmetric operation of up to 10 Gb/s on point-to-multipoint Radio Frequency (RF) distribution plants comprising either amplified or passive coaxial media. It also extends the operation of Ethernet Passive Optical Networks (EPON) protocols, such as MultiPoint Control Protocol (MPCP) and Operation Administration and Management (OAM).

Cl 101 SC 101.4.4.5.2 P 209 L 4 # i-373
Remein, Duane Futurewei Technologie

Comment Type E Comment Status D EZ

"data carry Resource Element" ? Same issue in In 5.

SuggestedRemedy

"data carrying Resource Element"

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 1 SC 1.4.49a P 28 L 18 # i-376
Healey, Adam Broadcom Ltd.

Comment Type E Comment Status D EZ

The parenthetical "(EPoC)" seems to be out of place here.

SuggestedRemedy

It is unclear what was intended here. Perhaps the definition should be changed to begin with "A collection of IEEE 802.3 EPON Protocol over Coax (EPoC) Physical Layer specifications for up to 10 Gb/s downstream and up to 1.6 Gb/s upstream point-to-multipoint link...". A simpler alternative would be to delete the parenthetical.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

REVISED

Change to begin with "A collection of IEEE 802.3 EPON Protocol over Coax (EPoC) Physical Layer specifications for up to 10 Gb/s downstream and up to 1.6 Gb/s upstream point-to-multipoint link..."

Cl 100 SC 100 P 79 L 1 # i-377
Healey, Adam Broadcom Ltd.

Comment Type E Comment Status R +REV+ Sed

The editing instruction "Insert new clauses and corresponding annexes as follows" isn't necessary.

SuggestedRemedy

Delete the instruction.

Response Response Status C

REJECT.

Staff editors insist that this editing instruction is required.

Cl 100 SC 100.2.1.1 P 84 L 10 # i-378
Healey, Adam Broadcom Ltd.

Comment Type E Comment Status D EZ

The "PMD Delay constraints" subclause should not be nested in the PMD service interface definition.

SuggestedRemedy

Suggest moving 100.2.1.1 to the same level in the heirarchy as the PMD service interface subclause (e.g., to 100.2.2 or 100.2.5).

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
REVISED
Use 100.2.2

Cl 102 SC 102.2.3.1.4 P 257 L 4 # i-380
Lin, Ru Shanghai Luster Terab

Comment Type E Comment Status D EZ

The word "ODFMA" is incorrect.

SuggestedRemedy

It should be corrected as "OFDMA"

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 00 SC 0 P L # i-383
Stanton, Penny

Comment Type E Comment Status A +REV+

This draft meets all editorial requirements.

SuggestedRemedy

Response Response Status C

ACCEPT IN PRINCIPLE.
REVISED
Thank you!