Cl **80** *SC* **80.1** *P* **61** *L* **11** # 61

Marris, Arthur Cadence

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

No editing instruction for Figure 80.1

SuggestedRemedy

Insert editing instruction
"Replace Figure 80–1 with the following:"

Response *Response Status* **W**

ACCEPT. Dup of comment 381

Cl **81** *SC* **81.1** *P* **65** *L* **10** # 62

Marris, Arthur Cadence

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

Incorrect editing instruction

SuggestedRemedy

Change
Change Figure 81-1 as follows:
To
Replace Figure 81-1 as follows:

Also fix key at bottom of Figure 81.1

Response *Response Status* **W**

ACCEPT.

Cl **113** *SC* **113.1** *P* **71** *L* **20** # 65

Marris, Arthur Cadence

Comment Type **TR** *Comment Status* **A** *EZ*

No need to mention Cluase 30 here.

SuggestedRemedy

Replace
"Management is specified in Clause 30."
With
"Management functions are optionally accessible through the management interface defined in Clause 45, or equivalent."

Response *Response Status* **W**

ACCEPT.
Text is consistent with Clause 55 but that is inconsistent with other 10G clauses. Commenter is encouraged to submit a maintenance request or comment on a revision draft to clause 55

Cl **113** *SC* **113.1.2** *P* **72** *L* **7** # 66

Marris, Arthur Cadence

Comment Type **TR** *Comment Status* **A** *EZ*

XLGMII is never physically implemented.

SuggestedRemedy

Change
The 40GBASE-T PHY architecture specified in this standard is referenced to the XLGMII interface, it is recognized that the XLGMII interface need not be physically implemented. Chip to chip interfaces based on other IEEE defined 40Gb/s PCS/PMA combinations which translate to XLGMII may be used

To
The 40GBASE-T PHY service interface is the XLGMII, which is defined in Clause 81. The 40GBASE-T PHY may connect to the 40 Gb/s Attachment Unit Interface (XLAUI) defined in Annex 83B using the PCS defined in Clause 82.

Remove "*XLGMII is optional" from Figure 113-1

Response *Response Status* **W**

ACCEPT.

Cl **113** *SC* **113.1.3.1** *P* **76** *L* **1** # 68

Marris, Arthur Cadence

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

Heading depth wrong.

SuggestedRemedy

Promote to heading 2:
113.2 Physical Coding Sublayer (PCS)

Consider promoting "113.1.3 Operation of 40GBASE-T"

Consider restructuring document to remove split between PCS description in the overview and later in the document.

Response *Response Status* **W**

ACCEPT IN PRINCIPLE.
Change headings to read "Summary of Physical Coding Sublayer" so as not to be confused with 113.3 which specifies the PCS
do similar change to other 113.1.3.x titles

Cl **113** *SC* **113.3.4** *P* **110** *L* **12** # 93

McClellan, Brett Marvell

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

The optional periodic training sequence in this text is identical to the 10GBASE-T periodic training that was added to Clause 55 based on a vendor proposal:
http://www.ieee802.org/3/an/public/nov04/ungerboeck_1_1104.pdf slide 23
However, the same vendor recently reported that the periodic training sequence is not used by any 10GBASE-T device and is not suitable for adapting equalizer and canceller coefficients.
http://www.ieee802.org/3/bq/public/jul14/souvignier_3bq_01_0714.pdf slide 3
If requested by the link partner a local device is required to transmit the periodic training sequence resulting in poor adaptation of echo and NEXT cancellers at the local device.
Further, 10GBASE-T and 40GBASE-T share one advertisement bit for the periodic training request from the link partner. Since 10GBASE-T PHY's cannot work with the periodic training, a 10G/40G capable PHY will never advertise the periodic training.

SuggestedRemedy

Eliminate the optional periodic training sequence.

113.3.4 PMA training side-stream scrambler polynomials
remove text:
"Moreover during Auto-Negotiation each transceiver may request the remote transceiver to reinitialize the values of its scrambler state after every 16384 symbol periods, to generate a periodically repeating pattern with repetition period 16384. The initial 33-bit values of the scrambler state shall be generated by combining 0x39A422 for the 22 MSBs and random value SB10-SB0 from Table 113-20 generated by the local device for the 11 LSBs as shown in Figure 113-14."
Figure 113-14
remove text from "n mod 16384 = 0" through "else:"
113.3.5.3 Refresh period signaling
delete the text:
"The training sequence without periodic reinitialization described in 113.3.4 shall be used during the LPI mode, with the scramblers free-running starting in the state PMA_PBO_Exch. If scrambler reinitialization is used for normal training, it shall be disabled and the scramblers shall begin free-running when the PHY Control state diagram is in the state PMA_PBO_Exch and the receiver detects a valid requested transmitter PBO setting (Oct 7 Valid<7> equal to 1)."

113.4.2.5.15 page 141 line 15
change "The training sequence without periodic re-initialization described in 113.3.4 shall be used
during fast retraining, with the scramblers free-running from PCS Reset. If scrambler re-initialization is used for normal training, it shall be disabled and the scramblers shall begin free-running when the PHY Control state diagram enters the PCS_Test state and the variable fr_active is FALSE."
to "The training sequence in 113.3.4 shall be used during fast retraining, with the scramblers free-running from PCS Reset."

113.6.1 Support for Auto-Negotiation
page 168 line 38 delete item c)

Table 113-20 in row U20 change text from "LD PMA training reset request"
to either "10GBASE-T LD PMA training reset request" or "This bit is not defined for 10GBASE-T but reserved for future use." depending on resolution to comment on 10GBASE-T periodic training.
113.12.3 Physical Coding Sublayer (PCS)
delete the line items:
PCT19 PMA training scrambler reset
PCT31 Disable scrambler reinitialization
under "PCT30 LPI scrambler" delete the text:
"The training sequence without periodic re-initialization described in 113.3.5 shall be used"

Response *Response Status* **U**

REJECT.
See comment 84.
Periodic training sequence for 40GBASE-T was modified during d1.1.1 comment resolution to address issues with 10GBASE-T periodic training.

Cl **113** *SC* **113.6.1.2** *P* **170** *L* **20** # 107

Lo, William — Marvell Semiconductor

Comment Type **TR** *Comment Status* **A** *Training*

40GBASE-T specifies option to reset training PRBS. However it is not clear such bit is defined in table 113-20

SuggestedRemedy

Option 1:
In bit U20 rename "LD PMA training reset request" to
"40/10GBASE-T LD PMA training reset request"
The rationale of sharing the same bit for both speeds is that any implementation that prefers one way for one speed will most likely prefer the same way for the other speed. There is no need to specify a separate bit for 10G and 40G.

Option 2:
Remove the option to reset PMA training PRBS every frame in 40GBASE-T

Commenter is ok if either option 1 or 2 adopted.

Response *Response Status* **U**

ACCEPT IN PRINCIPLE.
See comment 84.

Task Force to discuss with 93 & 84
Straw Poll:
Allocate a new autoneg bit (U21) for 40GBASE-T LD PMA training reset request
4

OR

Remove the option to reset PMA training PRBS every frame in 40GBASE-T
13

Move to remove the option to reset PMA training PRBS every frame in 40GBASE-T
M: Brett McClellan
S: William Lo
Y: 13
N: 6
A: 17
MOTION FAILS (Technical >= 75%)

Cl **00** *SC* **0** *P* *L* # 116

Anslow, Pete — Ciena

Comment Type **TR** *Comment Status* **A** *25G*

The objectives of the P802.3bq project were changed by motion #32 of the Berlin plenary to include:
"Support a data rate of 25 Gb/s at the MAC/PLS Service Interface
Define a single 25 Gb/s PHY supporting operation on the link segment"

This draft does not include a PHY to satisfy these objectives

SuggestedRemedy

Either:
remove the objectives
or:
modify the project PAR and CSD responses to reflect the additional objectives and revise the draft to include a suitable PHY

Response *Response Status* **U**

ACCEPT IN PRINCIPLE.
Objectives are removed AND
PAR modifications were accidently omitted from motions at Berlin plenary - project CSD modifications were approved.
Move project PAR for WG approval and progress project documentation at earliest opportunity.

Cl **01** *SC* **1.3** *P* **20** *L* **8** # 228

Booth, Brad — Microsoft

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

Reference to ANSI specification is incorrect. This draft specification must reference an existing specification or draft specification, not a pending specification.

SuggestedRemedy

Provide the correct reference.

Response *Response Status* **U**

REJECT.
Referenced document is a draft specification.

Cl **28A** *SC* **0** *P* **25** *L* **1** # 248

Frazier, Howard — Broadcom Corporation

Comment Type **TR** *Comment Status* **A** *EZ*

Annex 28A does not belong in this draft amendment because there are no changes being made to it.

SuggestedRemedy

Delete Annex 28A from this draft amendment.

Response *Response Status* **W**

ACCEPT. (dup of comments 5, 138, 375, 260, 263)

Cl **01** *SC* **1.3** *P* **20** *L* **7** # 371

Remein, Duane — Huawei Technologies

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

Should not reference draft documents

SuggestedRemedy

Add editors note that these two references will be updated before the end of sponsor ballot when the specifications are released.

Response *Response Status* **W**

ACCEPT IN PRINCIPLE.

Add editor's note to be included consistent with other IEEE copper standards pointing to ISO/IEC references e.g., 802.3ba. Editorial license to implement.

Cl **30** *SC* **30.2.5** *P* **29** *L* **7** # 372

Remein, Duane — Huawei Technologies

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

While the Edition Instruction indicate there are changes in the COLUMN HEADER (which should be marked) of Table 30-1e there are none apparent.
Also the Table has some Bold borders which are not in the original Table and should be removed.

SuggestedRemedy

Change the Editing Instruction to more accurately describe the change or remove the Editing Instruction and Table 30-1e.

Response *Response Status* **W**

ACCEPT IN PRINCIPLE.
Change editing instruction to read "Change column header of '10GBASE-T Operating Margin Package…' to read '10G/40GBASE-T Operating Margin Package…' as shown "
Check borders and align with current table in revision draft

Cl **A** *SC* **n/a** *P* **21** *L* **1** # 373

Remein, Duane — Huawei Technologies

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

Annex A should not be included if there are no changes to it.

SuggestedRemedy

Remove Annex A

Response *Response Status* **W**

ACCEPT IN PRINCIPLE. Dup of comments 232, 256, 213, 54.
See comment 256

Cl **28** *SC* **28.3** *P* **23** *L* **5** # 374

Remein, Duane — Huawei Technologies

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

28 instances of "as appropriate" are inappropriate. You need to tell the staff editors what they are to do and not do what they think is appropriate.

SuggestedRemedy

Change "as appropriate" to "as shown below" or "as follows" or similar wording that does not leave it to the editor's desecration.

Response *Response Status* **W**

ACCEPT. See comment 409.
The editor shall not desecrate the standard.

Cl **28A** *SC* **n/a** *P* **25** *L* **1** # 375

Remein, Duane — Huawei Technologies

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

If there are no changes (as indicated by Editors Instructions) then the clause should be excluded from the draft. If you anticipate changes then why are you in WG Ballot when you are clearly not technically complete?

SuggestedRemedy

Remove Annex 28A from Draft.

Response *Response Status* **W**

ACCEPT. (dup of comments 5, 138, 248, 260, 263)

Cl **45** *SC* **45** *P* **37** *L* **3** # 376

Remein, Duane — Huawei Technologies

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

Strike the bracketed text as indicate by the following note in the template:
"[Notes for editors (not to be included in the published draft - not even D1.0!)"

SuggestedRemedy

per comment

Response *Response Status* **W**

ACCEPT.

Cl **45** *SC* **45.2.1.12.10** *P* **40** *L* **2** # 377

Remein, Duane — Huawei Technologies

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

Subclause number is incorrect:
45.2.1.12.10 40GBASE-T ability (1.13.6)

SuggestedRemedy

Change to 45.2.1.12.9a in heading and Editing Instruction.
(See P802_3xx_D0p1_version_2p3 pg 15 ln 31 for conventions)

Response *Response Status* **W**

ACCEPT.

Cl **45** *SC* **45.2.1.12** *P* **39** *L* **37** # 378

Remein, Duane — Huawei Technologies

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

Are you change rows or inserting rows (only one row is shown in the table)?
"Change and insert rows in Table 45–16 as appropriate."

SuggestedRemedy

Change Editing Instruction to read:
"Change row in Table 45–16 as shown."

Response *Response Status* **W**

ACCEPT.

Cl **45** *SC* **45.2.1.62.1** *P* **40** *L* **26** # 379

Remein, Duane — Huawei Technologies

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

Editing instruction is very confusing
"Change title and rows and insert row in Table 45–54 as appropriate."

SuggestedRemedy

Change to read:
"Change title in Table 45–54 as shown.
Might also want to drop the actual table which is not being changed as has been done in subsequent sections.

Response *Response Status* **W**

ACCEPT IN PRINCIPLE.
Change to read "Change title in Table 45-54 as shown."
Delete table, and show only title

Cl **45** *SC* **45.2.7.10** *P* **48** *L* **30** # 380

Remein, Duane — Huawei Technologies

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

Editing Instructions pointing to incorrect subclauses and headers missing section numbers:
"Insert new paragraph after 45.2.7.10.3 ..."
"40GBASE-T capability (7.32.11)"

"Insert new paragraph after 45.2.7.10.6 ..."
40GBASE-T Fast retrain ability (7.32.3)

"Change title 45.2.7.10.6. Re-number to 45.2.7.10.8."
10GBASE-T Fast retrain ability (7.32.1)
10GBASE-T Fast retrain ability (7.32.1)

SuggestedRemedy

Change to:
"Insert new paragraph after 45.2.7.10.4 as shown."
"45.2.7.10.4a 40GBASE-T capability (7.32.11)"
bla bla bla

"45.2.7.10.4b 40GBASE-T Fast retrain ability (7.32.3)"
bla bla bla

"Change title 45.2.7.10.6. (renumbered due to above);"
45.2.7.10.6 10GBASE-T Fast retrain ability (7.32.1)

Response *Response Status* **W**

ACCEPT.

Cl **81** *SC* **81.3.4.2** *P* **68** *L* **46** # 383

Remein, Duane — Huawei Technologies

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

The combination of Editing Instruction and included figure are confusing.
"Change 81.3.4.2 State Diagram to include Link Interruption under conditions for variable link_fault"
Is the figure changed or not? It doesn't look like it.

SuggestedRemedy

Change Editing Instruction to read:
"Change the text of 81.3.4.2 to include Link Interruption under conditions for variable link_fault as shown."

Remove is unchanged Figure 81–11

Response *Response Status* **W**

ACCEPT.

Cl **113** *SC* **113.1** *P* **71** *L* **8** # 384

Remein, Duane — Huawei Technologies

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

We finally get "CSMA/CD out of the standard title and yet we need it here?
Note that later clauses of Section 6 only use this phrase in the LAN Model figures.

SuggestedRemedy

Unless you can demonstrate Carrier Sense Multiple Access/Carrier Detect functionality strike this phrase.

Response *Response Status* **W**

ACCEPT.
Recommend commenter submit maintenance or similar comment to Clause 55 on revision draft

---

Cl **113** *SC* **113.1** *P* **71** *L* **13** # 385

Remein, Duane — Huawei Technologies

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

Is some augmentation specified in 113 not "appropriate"?

SuggestedRemedy

Remove "appropriate"

Response *Response Status* **W**

ACCEPT IN PRINCIPLE.

Delete: with appropriate augmentation as specified in 113.7.
Remove period: Page 71 L12 between "cabling as"

Cl **113** *SC* **113.3.6.2** *P* **115** *L* **20** # 386

Remein, Duane — Huawei Technologies

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

Constants, variables and functions should be using paragraph tag (style) DefinitionList
"For the lists of constants, variables, functions, counters, timers, etc. use the Paragraph Tag DefinitionList."

SuggestedRemedy

Use the proper paragraph styles per the current template.

Response *Response Status* **W**

ACCEPT.
Editor to review draft for proper paragraph styles prior to publication.
(checked w/802.3bx, VariableList style is consistent, not DefinitionList)

Cl **113** *SC* **113.3.6.2.3** *P* **117** *L* **44** # 387

Remein, Duane — Huawei Technologies

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

Stray colon:
"lfer_timer:"
^

This appears to be a common error through the draft; some counters have the colon some do not.

SuggestedRemedy

Strike all stray colons
Regardless of the accepted remedy be consistent throughout the draft.

Response *Response Status* **W**

ACCEPT.

Cl **00** *SC* **0** *P* **1** *L* **54** # 388

Remein, Duane — Huawei Technologies

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

Copyright date is not 201x

SuggestedRemedy

Change to 2015

Response *Response Status* **W**

ACCEPT. Dup of comment 118

Cl **113** *SC* **3** *P* **99** *L* # 403

Wang, Zhongfeng — Broadcom Corp.

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

Table 113-2
title: Trancoded bocks including control blocks (without leading 0).

Given the trancoding operation shown in Table 113-2, we always move control blocks to the top and dmove ata blocks to the bottom. Since data blocks in original 512B block can be in any row, this operation will involve muxing logic for all 64 bits for every data and control block, which casue extra hardware. In addition, at the receiver side, we need wait until entire 513B data is received before finishing reverse trancoding.

SuggestedRemedy

1) We only need swap location of first byte for each data or control block.
This leads to much reduced muxing logic.
2) We transmit the first bytes of each data and control block immediately after leading 0. Then we transmit the rest 7 bytes for each data and control block. This will save signiifcant processing latency at receiver side.

The aboves changes fully maintain data mapping of original trancoding operation for each data byte. Only data reordering is involved. So there is no performance hurt.

Please see wang's contributions for detailed description.

Response *Response Status* **U**

REJECT.
Attempt at accept-in-principle:

Make changes documented in Text-comments-40G-T-transcoding.pdf, with the following changes:
give Editor license to connect text edit (3) in "comments…" correctly to referenced 'above case with pure data blocks'.

Straw Poll: Y: 8 N: 11

No consensus to make change

Cl **113** *SC* **113.4.6.1** *P* **149** *L* **8** # 441

Frazier, Howard — Broadcom Corporation

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

In Figure 113-29, the entry tag "I" should not appear on the arc going from the PCS_Data state to the INIT_MAXWAIT_TIMER state but must instead have it's own arc that goes directly into the top of the INIT_MAXWAIT_TIMER state. I realize that this is a crowded diagram.

SuggestedRemedy

Give the entry tag "I" its own arc into INIT_MAXWAIT_TIMER.

Response *Response Status* **W**

ACCEPT.
Figure is identical to Figure in Clause 55, and in the revision draft, without comment, commenter may wish to address with comments on revision or maintenance.

Cl **113** *SC* **113.4.6.1** *P* **149** *L* **37** # 442

Frazier, Howard — Broadcom Corporation

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

In Figure 113-29, all arcs must enter the top of the state and exit from the bottom of the state, but this was not done for the state PMA_INIT_FR.

SuggestedRemedy

Change the arcs so that they enter the top and exit from the bottom of the state PMA_INIT_FR.

Response *Response Status* **W**

ACCEPT.
Figure is identical to that in clause 55, as well as similar in style to many updated at the same time in 802.3az (Clause 78) - commenter may wish to file maintenance or comments on revision currently in process

Cl **113** *SC* **113.5.4.3** *P* **161** *L* **32** # 445

Frazier, Howard — Broadcom Corporation

Comment Type **TR** *Comment Status* **A** *PMA*

If the editor's note is correct, then this draft was not ready for WG ballot.

SuggestedRemedy

If the editor's note is incorrect, then remove it. If the editor's note is correct, then "confirm the source-adjustment criteria, measurement points, and levels used with the clamp methodology in this subclause" and restart the WG ballot.

Response *Response Status* **W**

ACCEPT IN PRINCIPLE.
Remove editor's note.
•Include the proposed text in cibula_3bq_02a_0515.pdf as an informative Annex
•Update 113.5.4.3 to reference the informative Annex as shown on slide 16 of cibula_3bq_02a_0515.pdf

Including editors notes to highlight technical issues is consistent with 802.3 practice in working group ballots.

Cl **113** *SC* **113.5.4.5** *P* **162** *L* **37** # 446

Frazier, Howard — Broadcom Corporation

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

Subject/verb agreement problem in the sentence: "The short reach link segment meeting the transmission requirements in 113.5.4.6 are specified to support up to 5 meters."

SuggestedRemedy

Delete this sentence, and add change the text of 113.5.4.6 to read:
"The short reach cable assembly contains balanced twisted-pair terminated in a connector at each end for use as a short reach link segment of up to 5 meters in length between MDIs."

Response *Response Status* **W**

ACCEPT IN PRINCIPLE.
Implement with comment#97

Cl **113** *SC* **113.5.4.6** *P* **162** *L* **43** # 447

Frazier, Howard — Broadcom Corporation

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

Use of the term "direct attach cable assembly" will cause confusion in the industry. The industry generally regards a DAC cable as being constructed of two twin-axial cables, not a short segment of 4 twisted pair.

SuggestedRemedy

Change the subclause heading to be "Short reach cable assembly" and change the text of the subclause to read:
"The short reach cable assembly contains balanced twisted-pair terminated in a connector at each end for use as a short reach link segment of up to 5 meters in length between MDIs."

Response *Response Status* **W**

REJECT.
Direct attach subclause to remain;
Direct attach usage consistent with definitions in specifications for 100 Ω Category 8 Cabling (TR42.7-2015-04-04x-Category-8_d3.1_Copyright.pdf) direct attach: A reduced channel definition that includes plug connectors at the beginning and end of the channel and does not contain connecting hardware within the channel.

Cl **113** *SC* **113.5.4.6** *P* **162** *L* **43** # 448

Frazier, Howard — Broadcom Corporation

Comment Type **TR** *Comment Status* **A** *Shortreach*

The description of the short reach cable assembly should not be a subclause of the receiver electrical specifications. Instead, it should be a subclause of 113.7 Link segment characteristics.

SuggestedRemedy

Move all of 113.5.4.6 and its subclauses under 113.7.

Response *Response Status* **W**

ACCEPT.
See comment 97.

Cl **99** *SC* **0** *P* **3** *L* **1** # 449

Frazier, Howard — Broadcom Corporation

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

I believe that we agreed that this would be an amendment to IEEE Std 802.3-201x.

SuggestedRemedy

Change year of base standard in the header to be 201x.

Response *Response Status* **W**

ACCEPT.

Cl **99** *SC* **0** *P* **3** *L* **13** # 450

Frazier, Howard — Broadcom Corporation

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

Missing title of amendment.

SuggestedRemedy

Provide complete title of amendment in the boxed text "This introduction is not part of..."

Response *Response Status* **W**

ACCEPT.

Cl **01** *SC* **1.3** *P* **20** *L* **10** # 452

Frazier, Howard — Broadcom Corporation

Comment Type **TR** *Comment Status* **A** *Cablingrefs*

The base standard lists ISO/IEC 11801:2002 Amendment 1:2008 and Amendment 2:2010, but this draft lists ISO/IEC 11801-1 Edition 3. Is the latest an Amendment or an Edition?

SuggestedRemedy

Check and correct if necessary.

Response *Response Status* **W**

ACCEPT IN PRINCIPLE.
Not to change. Edition 3 is an EDITION. It is the draft revision to ISO/IEC 11081:2002 that is in process reported in several liaison reports.

Cl **00** *SC* **0** *P* **25** *L* **54** # 453

Frazier, Howard — Broadcom Corporation

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

Copyright year is incorrect.

SuggestedRemedy

Change to 2015.

Response *Response Status* **W**

ACCEPT. See comment 118

Cl **28D** *SC* **28D.9** *P* **28** *L* **10** # 455

Frazier, Howard — Broadcom Corporation

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

The practice that was introduced by 100BASE-T2 of providing a long list of extensions for each new BASE-T PHY is getting out of hand, and will become worse with the future additions of 25G, 2.5G and 5G. Many of the extensions apply to all of the BASE-T PHYs introduced starting with 100BASE-T2. Rather than instantiating a new long list of extensions for 40GBASE-T, it would be better to present this information in tabular form.

SuggestedRemedy

Replace 28D.4, 28D.5, 28D.6 and 28D.8 with a new subclause 28D.4 that presents all of the extensions for BASE-T PHYs in a table that is easily extensible to include future BASE-T PHYs.

Response *Response Status* **W**

REJECT.
Text is consistent with existing base standard style and practices. Practice describes what capabilities the new PHY requires for those unfamiliar with older PHYs, which is useful.
Commentor fails to provide replacement text.
Commenter may wish to address this on a full 802.3 scale through maintenance or 802.3bx.

Cl **113** *SC* **113.1.1** *P* **71** *L* **31** # 457

Frazier, Howard — Broadcom Corporation

Comment Type **TR** *Comment Status* **A** *Format*

We seem to have a new convention in the 802.3 WG of not including the project objectives in the amendment, so this subclause must be deleted.

SuggestedRemedy

Delete 113.1.1 Objectives.

Response *Response Status* **W**

ACCEPT.

Cl **113** *SC* **113.3.6.4** *P* **123** *L* **27** # 460

Frazier, Howard — Broadcom Corporation

Comment Type **TR** *Comment Status* **A** *EEE*

In Figure 113-17 there is a entry tag "E" into the state TX_E, but I can't find an exit tag "E" in either part a or part b of the state diagram. (I note that there is an "E" exit tag in part b of the receive diagram.)

SuggestedRemedy

Remove the tag "E" from the entry conditions to the state TX_E in Figure 113-17.

Response *Response Status* **W**

ACCEPT.
Commenter may wish to pursue comment as maintenance to Clause 55 or as a comment on 802.3bx. This appears to have been introduced in 802.3az-2010, and gone unnoticed until now.

Cl **113** *SC* **113.3.6.4** *P* **125** *L* **34** # 461

Frazier, Howard — Broadcom Corporation

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

In Figure 113-19, two of the arcs exiting from the RX_E state are missing a space in "C+". In fact, this whole state diagram has several instances where a space is missing between an operator and operand. Look for "C+" and "T*".

SuggestedRemedy

Look for "C+" and "T*" and change to "C +" and "T *".

Response *Response Status* **W**

ACCEPT.
Figure is identical to that in clause 55 - commenter may wish to file maintenance or comments on revision currently in process

Cl **113** *SC* **113.3.6.4** *P* **125** *L* **1** # 462

Frazier, Howard — Broadcom Corporation

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

My sympathies to the editor who drew the state diagrams. I know it isn't easy. I observe that the state diagrams look somewhat crowded, with transition conditions overlapping arcs. I think that the diagrams would benefit from being expanded in both dimensions to reduce crowding.

SuggestedRemedy

Expand state diagrams in both dimensions to reduce crowding.

Response *Response Status* **W**

ACCEPT IN PRINCIPLE.
Editor to review diagram to expand vertically but keep within a single page.

Note that state diagrams are consistent with style and density of 802.3 standard in other clauses. These particular state diagrams are identical to those in clause 55, and are less crowded than others in IEEE Std. 802.3

Cl **113** *SC* **113.8.1** *P* **183** *L* **3** # 466

Lackner, Hans — QoSCom GmbH

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

IEC 60603-7-51/81 is not suitable for all applications. It should be possible to use as alternative connector IEC 61076-3-110 or 60603-7-82.

SuggestedRemedy

If backward compatibility offered with IEC 60603-7-81 is not required, the interface specified in IEC 61076-3-110 or 60603-7-82 may be used.

Response *Response Status* **U**

REJECT.

Motion: To implement suggest remedy "If backward compatibility offered with IEC 60603-7-81 is not required, the interface specified in IEC 61076-3-110 or 60603-7-82 may be used."
M: Val Maguire
S: Yakov Belopolsky
Y:6
N:16
A:2

IEC 60603-7-51/81 shall be used. 113.8.1 MDI connectors
Eight-pin connectors meeting the requirements of IEC 60603-7-51 (published) with the improved characteristics and frequency extensions specified in IEC 60603-7-81 shall be used as the mechanical interface to the balanced cabling. The plug connector shall be used on the balanced cabling and the jack on
the PHY.

Cl **113** *SC* **113.7.1** *P* **174** *L* **3** # 480

Thompson, Geoff — GraCaSI S.A.

Comment Type **TR** *Comment Status* **A** *Cabling*

It says in this line that 40GBASE-T uses "star topology". That is untrue. It uses point-to-point topology as do ALL 802.3 devices which utilize "Link Segments".

SuggestedRemedy

Replace "star" with "point-to-point"

Response *Response Status* **U**

ACCEPT IN PRINCIPLE.

Change: a) 40GBASE-T uses a star topology with balanced cabling listed in Table 113–22 used to connect PHY
entities.

To: a) 40GBASE-T uses balanced cabling listed in Table 113–22 in a star topology to connect PHY entities.