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

Anslow, Pete   Ciena

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

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
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 **113**   *SC* **113.6.1.2**   *P* **170**   *L* **5**   # 105

Lo, William   Marvell Semiconductor

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

40GBASE-T fast retrain bit not defined in Auto-Negotiation page

SuggestedRemedy

See Lo_3bq_01_0515.pdf for alternate scheme and McClellan_3bq_01_0515.pdf for proposed text.
Recommend fast retrain and EEE bits to be exchanged in InfoField during training instead of during Auto-Negotiation

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Task Force to consider presentation consider along with comments 92 & 81

Cl **113**   *SC* **113.6.1**   *P* **168**   *L* **37**   # 417

Zimmerman, George   CME Consulting

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

autonegotiation doesn't determine whether the local PHY performs or supports a capability, it is either to ADVERTISE whether the local PHY performs or supports, or, alternatively whether the REMOTE PHY performs or supports, or, alternatively, whether the local PHY perfomrs these functions, not whether it supports them...

SuggestedRemedy

change "determine" to "advertise" in items c, d, and e.

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
Usage of 'support' is consistent with other clauses of IEEE Std. 802.3

Cl **28D**   *SC* **28D.8**   *P* **28**   *L* **10**   # 10

Hajduczenia, Marek   Bright House Networks

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

Newly added text in 28D.8 contains many statements about mandatory and required functions. It is not clear whether these are expected to be testable (and have PICS) or not.

SuggestedRemedy

Consider making statements about mandatory / required features into "shall" statements, if they are not covered elsewhere. Add PICS if new "shall" statements are added.
For example: "Auto-Negotiation is mandatory for 40GBASE-T" might be converted into "A 40GBASE-T PHY shall use Auto-Negotion per XXX", where XXX contains reference where Auto-Negotion is defined.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. New text is consistent with existing text for 10GBASE-T which states substantially the same mandatory and required functions, resulting in no confusion.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic

Topic **Autoneg**   Page 1 of 94
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Cl **113**	*SC* **113.6.1.2**	*P* **170**	*L* **20**	*#* 79

Kim, Yong   Broadcom

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

Presumed 10G values, U20 LD PMA traning reset request, U19 Fast re-train ability, U18 PHY Short reach mode, and U17 loop timing ability, should add "10GBASE-T " in their Name (description) to be clearer to the readers that those bits are for 10GBASE-T, and not 40GBASE-T (and not 1000BASE-T, 100BASE-TX, etc). Note: Fast re-train for 40G needs to added (the ability being per-PHY ability), and separate comment is submited for that.

SuggestedRemedy

Add the word "10BASE-T" to U20, U19, U18, and U17 Names.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Task Force to discuss autonegotiation of features and whether bits are joint for 10G/40G or separate.

Cl **113**	*SC* **113.6.1.2**	*P* **170**	*L* **41**	*#* 80

Kim, Yong   Broadcom

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

U13 - Port Type bit (1 = Multiport device, 0 = single-port device) -- following all the references to 45.2.7.10.3 and 40.5.1.1 and few other references, there is no clarity on what Multiport device is when: Multiport device supports a two technology ability. 40.5.1.1 is clear in the context of 1000BASE-T and solely for 1000BASE-T. 10GBASE-T duplicates these bits and make no clarification on how definition changes (or NOT change) when mixed 1000BASE-T and 10GBASE-T are implemented in the device. Addition of 40GBASE-T to this mix without clarification would be confusing., i.e. if a device has two ports, one 1G/10GBASE-T and one 10G/40GBASE-T only port(for example), and the 10G/40GBASE-T negotiates at 40GBASE-T on one port, does it set multiport? Also the definition from the 1000BASE-T conveys "PREFERNECE" context, and that is not present in this section (unless you follow nested references). The intent is was to allow favoring multiport device to be MASTER, if so desired. So clarify that, no technical change, and move forward re-using this bit for 40G (or any other ability).

============== for easy reference, 40.5.1.1 copied here ======
(1000BASE-T) 40.5.1.1 table entry states:
Bit 9.10 is to be used to indicate the preference to operate as MASTER (multiport device) or as SLAVE (single-port device) if the MASTER-SLAVE Manual Configuration Enable bit, 9.12, is not set.
Usage of this bit is described in 40.5.2

1=Multiport device
0=single-port device"

SuggestedRemedy

Either a) delete "1= multiport device, and 0 = single-port device) and replace it with direct reference to 40.5.1.1 (and leave the 45.2.7.10.3 reference as is), OR,
b) copy the text from bit 9.10 of 40.5.1.1 for U13.

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
A multiport device is still clearly a multiport device, whether the ports are the same type or different types. Practice of multiport 10GBASE-T/1000BASE-T devices has not caused confusion.

Existing text already clearly indicates the meaning that a multiport device has preference as a master, See pg 113.6.2 MASTER-SLAVE configuration resolution, "the prefererred relationship is for the multiport device to be the MASTER PHY and the single-port device to be the SLAVE."

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic

Topic **Autoneg**   Page 2 of 94
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Cl **113**   *SC* **113.6.1**   *P* **170**   *L* **5**   # 81
Kim, Yong   Broadcom

Comment Type **T**   *Comment Status* **D**   *Autoneg*
In anticipation of 25GBASE-T being added to .3bq project, and allocating two AN bits for
40GBASE-T not currently in D2.0 (fast retrain and repeat train - separate comments to D2.0)
and respective AN bits for 25G (4), MC9 would be full (no spare bits). Consider taking a new
message code and define AN bits that may be more friendly to modern higher speed PHY
types, e.g. 10G/25G/40GBASE-T. Note: Not a part of this comment, but if the comment is
accepted, then consider coordinating the effort with overlapping project 802.3bz anticipated
PHY types of 2.5G and 5G that may serve 1G/2.5G/5G/10GBASE-T.

SuggestedRemedy
Define a new extended message code (other than MC9) that serves 40GBASE-T AN
requirements, along with 10G, 1G, and anticipated 25GBASE-T inclusion.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. Task force to consider proposal along with comments
92 & 105

Cl **113**   *SC* **113.6.1.2**   *P* **170**   *L* **5**   # 83
Kim, Yong   Broadcom

Comment Type **TR**   *Comment Status* **D**   *Autoneg*
Fast re-train for 40GBASE-T needs to added (the ability being per-PHY ability).

SuggestedRemedy
Please do so (add a 40GBASE-T Fast re-train ability).

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. See comment 79, Task Force to discuss
autonegotiation of features and whether bits are joint for 10G/40G or separate.

Cl **28B**   *SC* **28B.3**   *P* **26**   *L* **9**   # 390
Remein, Duane   Huawei Technologies

Comment Type **E**   *Comment Status* **D**   *Autoneg*
Why are you not placing this at the end of the list so that the staff editor does not have to
"renumber other bullets"?

SuggestedRemedy
Make the addition item "k)" and remove the instruction to renumber.

Proposed Response   *Response Status* **W**
PROPOSED REJECT.
List is the priority order of technologies, highest speeds go first.

Cl **113**   *SC* **113.6.1.2**   *P* **170**   *L* **6**   # 92
McClellan, Brett   Marvell

Comment Type **TR**   *Comment Status* **D**   *Autoneg*
Advertisement of 40GBASE-T EEE should be moved from the xGBASE-T technology
message extended next page exchange to an Infofield message exchange during link training.
See presentations: Lo_3bq_01_0515.pdf and McClellan_3bq_01_0515.pdf
EEE capability exchange is not necessary prior to the start of link training.
Similary 40G fast retrain capability should be part of an Infofield message exchange. By moving
these capability exchanges to the Infofield we can free up enough bits in the xGBASE-T
technology message to advertise 25G, 2.5G and 5G speeds. Without this change a new
technology message will be required for 25G, 2.5G and 5G.

SuggestedRemedy
See presentations for text and figure changes: Lo_3bq_01_0515.pdf and
McClellan_3bq_01_0515.pdf
text changes required are as follows:

page 48 line 42
change"Bit 7.32.3 is used to select whether or not Auto-Negotiation advertises the ability to
support 40GBASE-T fast retrain."
to "Bit 7.32.3 is used to select whether or not the 40GBASE-T PHY advertises the ability to
support 40GBASE-T fast retrain. Fast retrain ability is exchanged during link training. See
113.4.2.5.10."

page 51 line 9 Clause 45.2.7.13
change "113.6.1; U21" to "113.4.2.5.10; Infofield Octet 12 bit 7"

page 51 line 32 Clause 45.2.7.14
change "28.2.3.4.128; U3 / 113.6.1;U24" to "113.4.2.5.10; Infofield Octet 12 bit 7"
NOTE: 28.2.3.4.128 does not exist

page 71 line 26 Clause 113.1
change "Configurations wishing to disable fast retrain on the link may do so by advertising
lack of support in Clause 28 AutoNegotiation,thus preventing the link partner from attempting
fast retrain and potentially dropping the link."
to "Configurations wishing to disable fast retrain on the link may do so by advertising
lack of support in register 7.32, thus preventing the link partner from attempting fast retrain
and potentially dropping the link. See 45.2.7.10."

page 78 line 16 Clause 113.1.3.3
change "Support for the EEE capability is advertised during Auto-Negotiation."
to "Support for the EEE capability is advertised in the Infofield (Octect 12 bit 7) during the
PMA_PBO_Exch state.

page 134 Clause 113.4.2.5
line 4
change "Reserved" to "Reserved / Ability"

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic

Topic **Autoneg**   Page 3 of 94
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line 26
change "LPI Disable Time" to "Reserved / Ability / LPI Disable Time"

page 137 line 20 Clause 113.4.2.5.10
change
"113.4.2.5.10 Reserved Field
All InfoField fields denoted Reserved in Figure 113–24, Figure 113–25, and Figure 113–26 are reserved for future use. This includes octets Oct11 and Oct12 when Coeff_exchange<2>=0, Oct9<3:2> when transition counter is announced and [Oct9<3:0>, Oct10<7:0>] when no transition is announced and no coefficients are
exchanged."
to
"113.4.2.5.10 Ability Field
Ability field (1 octet). Represented by the octet Oct12{EEE Ability<7>, THP Bypass Request<6>,Fast Retrain<5>, Reserved<4:0>}. Used to advertise the abilities of the PHY during the PMA_PBO_Exch state when Message<7:6> = 01.
For every other state, this octet is set to zero and ignored by the link partner. The Ability bits are defined as follows:
Oct12<4:0> = Reserved
Oct12<5> = Fast Retrain
0 = Fast Retrain not supported
1 = Fast Retrain supported
Oct12<6> = THP Bypass Request in PMA_Coeff_Exchstate
0 = Local device requests link partner not to bypass THP during fast retrain
1 = Local device requests link partner to bypass THP during fast retrain
Oct12<7> = EEE Ability
0 = EEE not supported
1 = EEE supported

113.4.2.5.11 Reserved
All InfoField fields denoted Reserved in Figure 113–24, Figure 113–25, and Figure 113–26 are reserved for future use. This includes octets Oct11 and Oct12 when Coeff_exchange<2>=0 and Message<7:6>~= 01, Oct9<3:2> when transition
counter is announced and [Oct9<3:0>, Oct10<7:0>] when no transition is announced and no coefficients are exchanged."

page 139 line 6 Clause 113.4.2.5.14
change "minwait_timer expires. In the PMA_PBO_Exch state,"
To "minwait_timer expires. In the PMA_PBO_Exch state while Infoield Message<7:6> = 01, the PHY advertises EEE and Fast Retrain capability in octet 12 of the Infofield. When both the local device and remote device advertise EEE capability then EEE is supported. When both the local device and remote device advertise Fast Retrain capability then Fast Retrain is supported. In the PMA_PBO_Exch state,"

page 141 line 5 Clause 113.4.2.5.15
change "After completing the link failure signal the PHY shall transition to the PMA_Coeff_Exch state, keep its THP turned on with its previously exchanged coefficients, and send PAM2 signaling within a time period equivalent to 9 LDPC frame periods."
to "After completing the link failure signal the PHY shall transition to the PMA_INIT_FR state

followed immediately by the PMA_Coeff_Exch state. If the link partner requested THP bypass for fast retrain the PHY will bypass the THP (or set THP coefficients to zero). Otherwise the PHY will keep its THP turned on with its previously exchanged coefficients, and send PAM2 signaling within a time period equivalent to 9 LDPC frame periods."

page 168 line 39 Clause 113.6.1
delete items d) and e)
page 170 line 6 Clause 113.6.1.2
set U25 to "Reserved, transmit as 0"   (was EEE ability)

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Consider with Comments 105 & 81
Task Force to consider presentations

Cl **113**   *SC* **113.6.1.3**   *P* **171**   *L* **15**   *#* 96

McClellan, Brett   Marvell

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

Somehow this paragraph originally from Clause 40 lost some important information in the Clause 55 and 113 versions.
Original:
"40.5.1.3 Sending Next Pages
Implementers who do not wish to send additional Next Pages (i.e., Next Pages in addition to those required to perform PHY configuration as defined in this clause) can use Auto-Negotiation as defined in Clause 28 and the Next Pages defined in 40.5.1.2. Implementers who wish to send additional Next Pages are advised to consult Annex 40C."
Also note the change in "implementer" per Maintenance draft 2.1

SuggestedRemedy

change text from
"113.6.1.3 Sending Next Pages
Implementors who do not wish to send additional Next Pages (i.e., Next Pages in addition to those required to perform PHY configuration as defined in this clause) can use Auto-Negotiation as defined in Clause 28."
to
"113.6.1.3 Sending Next Pages
Implementers who do not wish to send additional Extended Next Pages (i.e., Extended Next Pages in addition to those required to perform PHY configuration as defined in this clause) can use Auto-Negotiation as defined in Clause 28. Implementers who wish to send additional Extended Next Pages may do so using the AN XNP transmit registers. See 45.2.7.8."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
In addition to suggested remedy, editor to scrub draft for instances of "implementor"

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic

Topic **Autoneg**   Page 4 of 94
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Cl **28C**   *SC* **28C.11**   *P* **27**   *L* **21**   # 454

Frazier, Howard   Broadcom Corporation

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

It appears that the 802.3bz 2.5G/5G project may also use XNP, so this text change should be coordinated with 802.3bz to avoid conflicting editing instructions.

SuggestedRemedy

Coordinate with 802.3bz on text for 28C.11.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Editor will keep track of changes in 802.3bz when any are adopted as text.

Cl **113**   *SC* **113.5.4.6.2**   *P* **163**   *L* **25**   # 304

Hidaka, Yasuo   Fujitsu Laboratories of

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

Return loss is not defined for f < 10.

SuggestedRemedy

Change "10 <= f <= 25" on line 25, page 163 with "1 <= f <= 25".

This is consistent with TR42.7-2015-04-04x, Draft 3.1, Table 53, page 52.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.5.4.6.1**   *P* **163**   *L* **15**   # 303

Hidaka, Yasuo   Fujitsu Laboratories of

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

2dB on line 15, page 163 is inconsistent with 3dB defined in TR42.7-2015-04-04x, Draft 3.1, section 6.4.2, line 1444, page 53.

SuggestedRemedy

Change the line 15 as follows:

Calculations that result in insertion loss values less than 3 dB shall revert to a requirement of 3dB maximum.

This is consistent with TR42.7-2015-04-04x, Draft 3.1, Section 6.4.2, line 1444, page 53.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.5.4.6.1**   *P* **163**   *L* **13**   # 302

Hidaka, Yasuo   Fujitsu Laboratories of

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

B has large discontinuity at f = 500.
Also, the definition of B for f > 500 is inconsistent with TR42.7-2015-04-04x.

SuggestedRemedy

Change "- 0.000605 x sqrt(f)" with "+ 0.000605 x f".

This is consistent with TR42.7-2015-04-04x, Draft 3.1, Table 96, page 79.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.5.4**   *P* **160**   *L* **49**   # 425

Zimmerman, George   CME Consulting

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

113.7 does not specify patch cabling and interconnecting hardware. It specifies the link segment as a whole. Cabling specifications describe the patch cabling and interconnecting hardware. (same issue exists in clause 55)

SuggestedRemedy

Change "using patch cabling and interconnecting hardware that is within the limits specified in 113.7" to "through link segments that are within the limits specified in 113.7".
(consider maintenance request to clause 55 as well).

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change: …..that is within the limits
specified in 113.7.
To:…….that are consistent with the limits
specified in 113.7.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **Cabling**   Page 5 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:01 PM
SORT ORDER: Topic

Cl **113**   *SC* **113.7.1**   *P* **173**   *L* **51**   *#* **479**
Thompson, Geoff   GraCaSI S.A.

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

The text is incorrect. What is required is not 4 cables of a single twisted pair each. that is implied from the text. What is required is cabling constructed with four pair balance twisted pair cable.

SuggestedRemedy

Change the text: "4 pairs of balanced cabling" to "4 pair balance cabling"

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
Text consistent with definition.

1.4.x 40GBASE-T: IEEE 802.3 Physical Layer specification for a 40 Gb/s LAN using four pairs of category
8, Class I, or Class II balanced copper cabling. (See IEEE Std 802.3, Clause 113.)

Cl **113**   *SC* **113.1**   *P* **71**   *L* **13**   *#* **478**
Thompson, Geoff   GraCaSI S.A.

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

There is no category of cabling mentioned as being required, it would seem that the text should call out Category 8 cabling should be called out.

SuggestedRemedy

Change the text: "category" in this line to "Category 8".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 385 for a more complete remedy

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Cl **113**   *SC* **113.5.4.6.14**   *P* **168**   *L* **14**   *#* **219**
Shariff, Masood   CommScope

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

Equation 113-25 needs to be updated to match TIA-568-C.2-1 draft 3.1

SuggestedRemedy

Change equation 113-25 to

$PSAACRF => 61-20\log(f/100)$

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.4.5.11**   *P* **166**   *L* **36**   *#* **218**
Shariff, Masood   CommScope

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

Delay skew does not match Category 8 specs in draft 3.1

SuggestedRemedy

Change: shall not exceed 2.9 ns at all frequencies from 2 MHz to 2000 MHz. It is a further functional requirement that, once installed, the skew between any two of the four duplex channels due to environmental conditions shall not vary more than 3 ns within the above requirement.

To: shall not exceed 4.8 ns at all frequencies from 2 MHz to 2000 MHz. It is a further functional requirement that, once installed, the skew between any two of the four duplex channels due to environmental conditions shall not vary more than 0.5 ns within the above requirement.

The value 4.8 is calculated as follows: 13.5*5/30+2*1.25=4.8

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

To: shall not exceed 4.8 ns at all frequencies from 2 MHz to 2000 MHz. It is a further functional requirement that, once installed, the skew between any two of the four duplex channels due to environmental conditions shall not vary more than 0.5 ns within the above requirement.

Not necessary to add:
The value 4.8 is calculated as follows: 13.5*5/30+2*1.25=4.8

Cl **113**   *SC* **113.5.4.6.1**   *P* **163**   *L* **12**   *#* **301**
Hidaka, Yasuo   Fujitsu Laboratories of

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

B is not defined for f less than 10 MHz.

SuggestedRemedy

Change "10 <= f <= 500" on line 12 with "1 <= f <= 500".

This is consistent with TR42.7-2015-04-04x, Draft 3.1, Table 96, page 79.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **Cabling**   Page 6 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:01 PM
SORT ORDER: Topic

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

Thompson, Geoff   GraCaSI S.A.

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

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
I understand the line could be interpeted as commentor suggests but same terminology has been used to indicate that star topologies are used to connect point-to-point PHY entities (e.g., 10GBASE-T, 40GBASE-T).

55.7.1.
a) 10GBASE-T uses a star topology with Class E or Class F balanced cabling used to connect PHY entities.

For committee discussion

Cl **113**   *SC* **113.5.4.6.9**   *P* **166**   *L* **18**   # 440

Zimmerman, George   CME Consulting

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

Description of PSACRF in terms of pair-to-pair ELFEXT is redundant

SuggestedRemedy

Minimize redundancies in 113.5.4.6.x sections.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
(1)See comment#472 to correct 113-21
(response to remedy)PSACRF is limit (113-20) and 113-21 is calculation of impairmants to compare against the limit.
 Response to add clarification and remove subclause 113.5.4.6.9 (which may be considered a redundancy)
(3-1)Delete subclause text "113.5.4.6.9 Multiple disturber power sum equal level far-end crosstalk (PS ACRF)"
(3-2)Move equation 113-21 before 113-20
(3-3)Move text "PS ACRF is determined by summing the power of the three individual pair-to-pair differential ACRF values over the frequency range 1 MHz to 2000 MHz as follows in Equation (113–21) after sentence "To ensure
the total FEXT coupled into a duplex channel is limited, multiple disturber ACRF is specified as the power
sum of the individual ACRF disturbers.

Cl **113**   *SC* **113.1**   *P* **71**   *L* **13**   # 86

Maguire, Valerie   Siemon

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

Standards names and the publication date are not needed in body text if the document is referenced in the Bibliography.

SuggestedRemedy

Delete, "-201x Addendum 1: Specification for 100ohm Category Cabling"

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
The cited references are not in the bibliography, referenced standards are usually normative references.
Existing 802.3 standard includes the names of similar normative references in body text.

Cl **01**   *SC* **1.4**   *P* **20**   *L* **29**   # 245

HESS, DAVE   CORD DATA

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

Use correct references in definitions:
"category n" refers to a cabling component, whereas "class N" refers to the cabling.

SuggestedRemedy

change:
"1.4.x Category 8.2 balanced cabling: Balanced 100 Ù cables and associated connecting hardware whose transmission characteristics are specified up to 2,000 MHz ..."
to:
"1.4.x Category 8.2 balanced cabling components: Balanced 100 Ù cables and associated connecting hardware, used in Class II cabling, whose transmission characteristics are specified up to 2,000 MHz ..."

Proposed Response   *Response Status* **W**

change:
"1.4.x Category 8.2 balanced cabling: Balanced 100 Ù cables and associated connecting hardware whose transmission characteristics are specified up to 2,000 MHz ..."
to:to:1.4.x Category 8.2 balanced cabling components: Balanced 100 Ω cables and associated connecting hardware used in ISO/IEC 11801-1 Edition 3 Class I cabling specified to 2,000 MHz.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic

Topic **Cablingrefs**   Page 7 of 94
4/29/2015 2:42:01 PM

Cl **113**   *SC* **113.7**   *P* **173**   *L* **36**   # 477
Thompson, Geoff   GraCaSI S.A.

Comment Type **ER**   *Comment Status* **D**   *Cablingrefs*
through line 45.
The third and fourth sentence of this paragraph are confusing and are an unnecessary addition to the standard global definition in clause 1.4.

SuggestedRemedy
Remove sentences 3 and 4

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE.
See comment#247

Cl **113**   *SC* **113.7**   *P* **173**   *L* **44**   # 87
Maguire, Valerie   Siemon

Comment Type **T**   *Comment Status* **D**   *Cablingrefs*
A "casual" reference to the Standard title should not appear here.

SuggestedRemedy
Delete, "Category 8 Cabling".

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. Provide full name of referenced standard

---

Cl **113**   *SC* **113.1**   *P* **71**   *L* **13**   # 214
Shariff, Masood   CommScope

Comment Type **E**   *Comment Status* **D**   *Cablingrefs*
Addendum 1 is already encoded into the number ANSI/TIA-568-C.2-1 where -1 means addendum 1. Adding addendum to this implies and addendum to this addendum. Also added Category 8 to the title

SuggestedRemedy
Change: Addendum 1: Specification for 100 ohm Category Cabling with appropriate augmentation as specified in 113.7.

To: Specification for 100 ohm Category 8 Cabling with appropriate augmentation as specified in 113.7.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. See comment 123.

Cl **113**   *SC* **113.7**   *P* **173**   *L* **42**   # 88
Maguire, Valerie   Siemon

Comment Type **T**   *Comment Status* **D**   *Cablingrefs*
Refering to the ISO/IEC/TR 11801-9901 guidelines is problematic in that the channel performance information in this document is only described to 1.6GHz and, thus, is incompatible with the link segment characteristics defined in 113.7. ISO/IEC/TR 11801-9901 guildeines are anticipated to be rolled into ISO/IEC 11801-1 Edition 3 and will be correctly referenced to 2GHz.

SuggestedRemedy
Replace, "ISO/IEC/TR 11801-9901: Information technology - Generic cabling for customer premises - Part 9901: Guidance for balanced cabling in support of at least 40 Gbit/s data transmission," with "ISO/IEC 11801-1 Edition 3".

And, delete Editor's note on lines 46 and 47.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. See comment#230 for consistency of ISO/IEC updates.

Cl **01**   *SC* **1.3**   *P* **20**   *L* **8**   # 228
Booth, Brad   Microsoft

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

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. See comment 230

Cl **01**   *SC* **1.4**   *P* **20**   *L* **20**   # 230
Booth, Brad   Microsoft

Comment Type **TR**   *Comment Status* **D**   *Cablingrefs*
Both Category 8.1 and 8.2 definitions have an editor's note stating that these definitions are forward-looking. There should not be any forward-looking definitions in the draft. The draft must only reference existing information in standards or draft standards.

SuggestedRemedy
Correct these definitions to eliminate any requirement for the editor's note.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE.
Reference draft specifications (ISO/IEC 11801-1 Edition 3, and ANSI/TIA 568C.2-1 (Category 8)) expected to finalize prior to publication.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic   *Topic* **Cablingrefs**   Page 8 of 94
4/29/2015 2:42:02 PM

Cl **113**	*SC* **113.7.3.2**	*P* **180**	*L* **45**	# 243

HESS, DAVE   CORD DATA

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

Some uses of "ISO" should be "ISO/IEC"

SuggestedRemedy

Replace "ISO" with "ISO/IEC"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Resolve with comment#230 for consistency.

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

Frazier, Howard   Broadcom Corporation

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

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Edition 3 is an EDITION. It is the draft revision to ISO/IEC 11081:2002 that is in process reported in several liaison reports.
Resolve with comment#230

Cl **113**	*SC* **113.7.2**	*P* **174**	*L* **19**	# 89

Maguire, Valerie   Siemon

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

The layout of Table 113-22 is not harmonized with the layout of Table 55-17. As a result, users familiar with the 10GBASE-T table may look at the 40GBASE-T table and mistakeningly believe that only one grade of cabling supports 40GBASE-T. Eliminate this potential for confusion by revising the table to show separate rows for "Class I / Category 8" and "Class II". In addition, the cabling references in column 3 should be updated to align with the name of the reference Standard.

SuggestedRemedy

Column 1:
    Cabling
    Class I / Category 8
    Class II

Column 2:
    Supported link segment distances
    30 m
    30 m

Column 3:
     Cabling references
     ISO/IEC 11801-1 Edition 3 / ANSI/TIA-568-C.2-1-201x
     ISO/IEC 11801-1 Edition 3

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
No requirement to harmonize table layouts.
Table 113–22 Cabling types and distances content agreed to after much debate in previous draft review.

Cl **01**	*SC* **1.4**	*P* **20**	*L* **29**	# 476

Thompson, Geoff   GraCaSI S.A.

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

This entire paragraph is a duplicate of the text above and is unnecessary

SuggestedRemedy

Remove paragraph and associated editor's note.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
See comment#245

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic

Topic **Cablingrefs**   Page 9 of 94
4/29/2015 2:42:02 PM

Cl **01**   *SC* **1.4**   *P* **20**   *L* **20**   # **475**
Thompson, Geoff   GraCaSI S.A.

Comment Type **ER**   *Comment Status* **D**   *Cablingrefs*
The text: "Category 8.1" is incorrect

SuggestedRemedy
Replace "Category 8.1" with "Category 8"

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

See comment#244

Cl **01**   *SC* **1.4**   *P* **20**   *L* **20**   # **244**
HESS, DAVE   CORD DATA

Comment Type **ER**   *Comment Status* **D**   *Cablingrefs*
Use correct references in definitions:
"Category n" refers to a cabling component, whereas "Class N" refers to the cabling.

SuggestedRemedy
change:
"1.4.x Category 8.1 balanced cabling: Balanced 100 Ù cables and associated connecting hardware whose transmission characteristics are specified up to 2,000 MHz ..."
to:
"1.4.x Category 8.1 balanced cabling components: Balanced 100 Ù cables and associated connecting hardware, used in Class I cabling, whose transmission characteristics are specified up to 2,000 MHz ..."

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. change:
"1.4.x Category 8.1 balanced cabling: Balanced 100 Ù cables and associated connecting hardware whose transmission characteristics are specified up to 2,000 MHz ..."
to:1.4.x Category 8.1 balanced cabling components: Balanced 100 Ω cables and associated connecting hardware used in ISO/IEC 11801-1 Edition 3 Class I cabling specified to 2,000 MHz.

Cl **01**   *SC* **1.4.x**   *P* **20**   *L* **26**   # **78**
Mark, Laubach   Broadcom Corporation

Comment Type **ER**   *Comment Status* **D**   *Cablingrefs*
Lines 26 and 34. These EN's aren't clear to me. Do they relate to the EN on Page 173 Line 46 about a future ISO/IEC document revision? Is this a warning that these definitions are going to be updated in the future or that they will become representative of TIA and ISO documents after some future date or documentation release? Will these EN's be removed prior to publication?

SuggestedRemedy
Consider removal or update with "(to be removed prior to publication)" and fix clarity/purpose issues.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. See comments 407, 230

Cl **01**   *SC* **1.3**   *P* **20**   *L* **7**   # **371**
Remein, Duane   Huawei Technologies

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

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. See comment 230

Cl **113**   *SC* **113.7**   *P* **173**   *L* **41**   # **247**
HESS, DAVE   CORD DATA

Comment Type **ER**   *Comment Status* **D**   *Cablingrefs*
Update ISO/IEC standard.

SuggestedRemedy
change:
"ISO/IEC/TR 11801-9901: Information technology - Generic cabling for customer premises - Part 9901: Guidance for balanced cabling in support of at least 40 Gbit/s data transmission,"
to:
"ISO/IEC 11801-1 Edition 3: Information technology - Generic cabling for customer premises - Part 1: General requirements,"

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE.
See comment#230 for consistency of ISO/IEC updates.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic

Topic **Cablingrefs**   Page 10 of 94
4/29/2015 2:42:02 PM

Cl **113** *SC* **113.5.4.3** *P* **161** *L* **22** # 246
HESS, DAVE   CORD DATA

Comment Type **ER** *Comment Status* **D**   *Cablingrefs*
 Include all cabling standards designations

SuggestedRemedy
 change:
 "Category 8 channel"
 to:
 "ISO/IEC Class I / ISO/IEC Class II / TIA Category 8 channel"

Proposed Response *Response Status* **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 Delete Category 8 so that it reads "a plug-terminated channel that meets the requirements of
 113.7"

Cl **01** *SC* **1.3** *P* **20** *L* **11** # 229
Booth, Brad   Microsoft

Comment Type **T** *Comment Status* **D**   *Cablingrefs*
 Reference to ISO/IEC specification is incorrect. This draft specification must reference an
 existing specification or draft specification, not a pending specification.

SuggestedRemedy
 Provide the correct reference.

Proposed Response *Response Status* **W**
 PROPOSED ACCEPT IN PRINCIPLE. See comment 230

Cl **113** *SC* **113.7** *P* **173** *L* **47** # 91
Mark, Laubach   Broadcom Corporation

Comment Type **TR** *Comment Status* **D**   *Cablingrefs*
 The Editors note mentions "pending". This raises the question to me of: do we need to pause
 on 802.3bq until ISO/IEC publication or can we proceed, and if so how far? What is the
 technical dependency of Table 113-22 with respect to the planned date of the publication of the
 ISO/IEC document?

SuggestedRemedy
 Please give some reviewers some guidance and update the editors note.

Proposed Response *Response Status* **W**
 PROPOSED ACCEPT IN PRINCIPLE. See comment 230

Cl **01** *SC* **1.4** *P* **20** *L* **20** # 341
Lusted, Kent   Intel

Comment Type **E** *Comment Status* **D**   *Cablingrefs*
 The difference between the definition of Categyory 8.1 balanced cabling and Category 8.2
 balanced cabling isn't obvious to the casual reader. It looks to me to be the same definition two
 times.

SuggestedRemedy
 Consider adding some text to each that helps the reader understand the difference between the
 two cablings.

Proposed Response *Response Status* **W**
 PROPOSED REJECT. Although the differences may be straighforward to state they may not
 help the casual reader better understand unless supplemented with text of tutorial nature more
 appropriate for an Annex.

Cl **113** *SC* **113.7.3.1.1** *P* **180** *L* **1** # 423
Zimmerman, George   CME Consulting

Comment Type **T** *Comment Status* **D**   *Cablingrefs*
 Annex 55B does not provide information on the PSANEXT calculation.

SuggestedRemedy
 Delete "Annex 55B provides additional information on identifying the number of adjacent link
 segments to consider in the PSANEXT calculation."

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

 Change: "Annex 55B provides additional information on identifying the number of adjacent link
 segments to consider in the PSANEXT calculation."

 To: Annex 55B provides additional information on alien crosstalk mitigation enabling reduction
 of the number of adjacent link segments to consider in the PSANEXT calculation.

Cl **113** *SC* **113.5.4.3** *P* **161** *L* **22** # 85
Maguire, Valerie   Siemon

Comment Type **E** *Comment Status* **D**   *Cablingrefs*
 "Category" is usually not capitalized when used mid-sentence.

SuggestedRemedy
 Replace "Category" with "category"

Proposed Response *Response Status* **W**
 PROPOSED ACCEPT IN PRINCIPLE.
 Resolve with comment#246.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general *Topic* **Cablingrefs** Page 11 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:02 PM
SORT ORDER: Topic

Cl **113** *SC* **113.7.4** *P* **181** *L* **32** # 413

Zimmerman, George   CME Consulting

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

Use of the ambiguous term "channel"

SuggestedRemedy

Change "on the same channel." to "on the same balanced twisted pair."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change "on the same channel." to "on the same link segment".

Cl **113** *SC* **113.5.4.6.14** *P* **168** *L* **1** # 240

HESS, DAVE   CORD DATA

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

Some uses of "ISO" should be "ISO/IEC"

SuggestedRemedy

Replace "ISO" with "ISO/IEC"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Editor to check all other instances and apply remedy
consistently.

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

Remein, Duane   Huawei Technologies

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

Is some augmentation specified in 113 not "appropriate"?

SuggestedRemedy

Remove "appropriate"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Change: 40GBASE-T signaling requires
four pairs of balanced cabling, as specified in ISO/IEC 11801-1 Edition 3 and ANSI/TIA-568-
C.2-1-201x
Addendum 1: Specification for 100ohm Category Cabling with appropriate augmentation as
specified in
113.7.
To: 40GBASE-T signaling requires
four pairs of balanced cabling, as specified in ISO/IEC 11801-1 Edition 3 and ANSI/TIA-568-
C.2-1-201x Addendum 1: Specification for 100 ohm Category 8 Cabling.
See comment 123 for use of capital omega in place of "ohm" in Category 8 title.

Cl **78** *SC* **78.1.3.3.1** *P* **57** *L* **48** # 56

McDermott, Thomas   Fujitsu

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

This wording is confusing, it is difficult to determine which modes are optional and required for
the various different interface types and speeds.

SuggestedRemedy

Recommended text: For Base-T PHYs with an operating speed of 10Gb/s or less that
implement the optional EEE capability, two modes of LPI operation may be supported: deep
sleep and fast wake...

Then insert: For Base-T PHYs with an operating speed of 40Gb/s or greater that implement the
optional EEE capability, LPI deep sleep is optional and fast wake is mandatory ... or whatever
was intended.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
No BASE-T PHYs currently support fast wake. Intent was 40GBASE-T is exempted from that
requirement in 78.1.3.3.1

Change page 57, line 48: from:
"Except for BASE-T<For> PHYs with an operating speed of 40 Gb/s or greater that implement
the optional EEE capability, two modes of LPI operation may be supported: deep sleep and fast
wake."

To:
"Except for BASE-T PHYs, for PHYs with an operating speed of 40 Gb/s or greater that
implement the optional EEE capability, two modes of LPI operation may be supported: deep
sleep and fast wake."

Insert "Except for 40GBASE-T", on page 58, line 4 so it reads: "Except for 40GBASE-T, fast
wake support is mandatory for PHYs with an operating speed of 40Gb/s or greater that
implement EEE."

See comments 78, 486

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general *Topic* **EEE** Page 12 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn 4/29/2015 2:42:02 PM
SORT ORDER: Topic

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

Frazier, Howard   Broadcom Corporation

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

Proposed Response   *Response Status* **W**

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

Cl **113**	*SC* **113.3.7.2**	*P* **126**	*L* **40**	*#* 368

Remein, Duane   Huawei Technologies

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

Figure 113-20, Figure 113–21, Figure 113–33 have no dashed line while Figure 113-18 does.
All are only for EEE. Presentation should be consistent

SuggestedRemedy

Add a dashed box to Figure 113-20, Figure 113–21, & Figure 113–33

Proposed Response   *Response Status* **W**

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

Cl **113**	*SC* **113.1.3**	*P* **73**	*L* **19**	*#* 277

Hidaka, Yasuo   Fujitsu Laboratories of

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

"to signal an end to the LPI mode" seems wrong.

SuggestedRemedy

Change "to signal an end to the LPI mode" on line 19 with
"to signal an end of the LPI mode".

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
Text is clear as is and is consistent with 802.3

Cl **113**	*SC* **113.1.3**	*P* **75**	*L* **24**	*#* 363

Remein, Duane   Huawei Technologies

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

What is the meaning of the dotted boxes in Figure 113-3?
Same issue with Figure 113-4 pg 82, Figure 113–5 pg 89

SuggestedRemedy

Explain what these boxes mean or remove.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Note 2 explains these are only used if EEE or fast retrain options are enabled.
Insert text at end of Note 2:
"These are indicated by dotted boxes".

Cl **78**	*SC* **78.1**	*P* **57**	*L* **48**	*#* 486

Brown, Matt   APM

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

Missing a comma. Also, "for" should not be delete without altering the rest of the sentence.

SuggestedRemedy

Change:
Except for BASE-T<For> PHYs with an operating speed of 40 Gb/s or greater that implement
the optional EEE capability, two modes of LPI operation may be supported: deep sleep and fast
wake.

To:
"Except for BASE-T PHYs, for PHYs with an operating speed of 40 Gb/s or greater that
implement the optional EEE capability, two modes of LPI operation may be supported: deep
sleep and fast wake."

Or alternately #1:
For PHYs with an operating speed of 40 Gb/s or greater, with the exception of the 40GBASE-T
PHY, that implement the optional EEE capability, two modes of LPI operation may be
supported: deep sleep and fast wake.

Or alternately #2:
For BASE-R PHYs with an operating speed of 40 Gb/s or greater that implement the optional
EEE capability, two modes of LPI operation may be supported: deep sleep and fast wake.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
(see comments 56, 397)

LATE COMMENT - TASK FORCE TO VOTE ON CONSIDERING

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EEE**   Page 13 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:02 PM
SORT ORDER: Topic

Cl **113** *SC* **113.3.2.3** *P* **108** *L* **37** # 295

Hidaka, Yasuo   Fujitsu Laboratories of

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

7 LDPC frames is not consistent with 6 LDPC frames on line 51, page 106.
lpi_tx_sleep_timer also has duration of 6 LDPC frame periods.

SuggestedRemedy

Change "7 LDPC frames" with "6 LDPC frames" on line 37, page 108.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
SLEEP was changed to 6 LDPC frame periods in adoption of graba_3bq_01_0714.pdf

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Cl **78** *SC* **78.1.3.3.1** *P* **57** *L* **48** # 397

Remein, Duane   Huawei Technologies

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

This wording seems excessively broad and may lead to problems in the future:
"Except for BASE-T PHYs with an operating speed of 40 Gb/s ..."

SuggestedRemedy

Change to:
"Except for 40GBASE-T, PHYs with an operating speed of 40 Gb/s ..."
(don't forget to include the stricken "For")

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. (see comment 56)

Cl **78** *SC* **78.1.3.3.1** *P* **57** *L* **48** # 326

Hidaka, Yasuo   Fujitsu Laboratories of

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

The distinction of optional or mandatory support for deep sleep and fast weke is very confusing and not clear.

For instance, for the first sentence, changing "For PHYs with an operating speed of 40 Gb/s or greater that implement the optional EEE capability" with "Except for BASE-T PHYs with an operating speed of 40 Gb/s or greater that implement EEE capability" may be wrong, because the qualifier is changed in a wrong way.

SuggestedRemedy

Change the first sentence of the paragraph starting on line 48, page 57 as follows:

Except for BASE-T PHYs, PHYs with an operating speed of 40Gb/s or greater that implement the optional EEE capability may support two modes of LPI operation: deep sleep and fast wake.

Add two columns to Table 78-1 to indicate whether the deep sleep support and the fast wake support are mandatory or optional for each PHY or interface type.

Unfortunately, I am not familiar enough with EEE to give specific changes to Table 78-1, but I believe it helps to make it clear.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comments 56 & 397

Since this is the only exception to the deep sleep rule, a table would be redundant and not add value to the existing content. Further, all EEE is optional so there are no mandatory capabilities, a table with optional and mandatory capabilities if an optional capability were implemented would likely add confusion.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general *Topic* **EEE** Page 14 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn 4/29/2015 2:42:02 PM
SORT ORDER: Topic

Cl **113**   *SC* **113.4.2.5**   *P* **134**   *L* **26**   # 106
Lo, William   Marvell Semiconductor

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

Figure 113-26 LPI Disable Time
There is no text to describe this variable.
Page 115 line 2 references this but does not contain sufficient details.
There should at least be some description specifying the PCS behavior when host concurrently
exits and re-enters LPI while the LPI disable mechanism is active

SuggestedRemedy

Propose deletion of this feature as detailed behavior is not specified.
1) Change LPI Disable Time in Figure 113-26 back to reserved
2) Delete "with the exception that the InfoField consists
of a sequence of 128 zeros except when the PHY wishes to signal the link partner to leave LPI
mode. " in line 33-34 page 114.
3) Delete lines 1, 2, 3 page 115.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Task Force to discuss whether to define variable and any other text necessary to fully
implement change, or delete feature, which is new to 40GBASE-T.

Cl **00**   *SC* **0**   *P* **3**   *L* **1**   # 114
Anslow, Pete   Ciena

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

As correctly indicated on Page 1, this will be an amendment to IEEE Std 802.3-201x (the
outcome of the 802.3bx revision) rather than IEEE Std 802.3-2012.
The headers in the draft incorrectly say "Draft Amendment to IEEE Std 802.3-2012"

Also, the header for the frontmatter is missing the "P" from "P802.3bq"

SuggestedRemedy

Change all of the headers to say "Draft Amendment to IEEE Std 802.3-201x"
Change the frontmatter headers from:
"IEEE 802.3bq 40GBASE-T Task Force" to:
"IEEE P802.3bq 40GBASE-T Task Force".

This can be done by changing the odd and even page headers in the Clause 1 file to say
"201x", then with that file open, in the left hand pane highlight all of the other files in the book
and use File, Import, Formats, Deselect All, Page layouts, Import.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **00**   *SC* **0**   *P*   *L*   # 117
Anslow, Pete   Ciena

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

All ocurrences of "ordered_set" have been changed to "ordered set" in 802.3bx draft D3.0

SuggestedRemedy

Change all instances of "ordered_set" to "ordered set" throughout the draft.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **Annex**   *SC* **28D.8**   *P* **28**   *L* **10**   # 112
Cibula, Peter   Intel Corporation

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

Punctuation - The title of the subclause is missing a space.

SuggestedRemedy

Change "28D.8Extensions required for Clause 113(40GBASE-T)" to "28D.8 Extensions
required for Clause 113(40GBASE-T)", inserting a space between "28D.8" and "Extensions"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **00**   *SC* **0**   *P* **1**   *L* **32**   # 118
Anslow, Pete   Ciena

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

The copyright year should be "2015" not "201x", "2014", or "2012" as it is in the various parts of
the draft.

SuggestedRemedy

Change the variable "copyright_year" to "2015" in one of the Framemaker files, then with that
file open, in the left hand pane highlight all of the other files in the book and use File, Import,
Formats, Deselect All, Variable definitions, Import.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Dup of comment 388

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 15 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:02 PM
SORT ORDER: Topic

Cl **00**   *SC* **0**   *P* **65**   *L* **49**   # 113

Cibula, Peter   Intel Corporation

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

Punctuation - double periods/full stops at the end of various sentences. Locations include:
Page 65, Line 49
Page 66, Line 36
Page 67, Line 14
Page 76, Line 14
Page 172, Line 1

SuggestedRemedy

Change the occurrences of ".." at the end of the sentences noted above to ".."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **01**   *SC* **1.4**   *P* **20**   *L* **15**   # 119

Anslow, Pete   Ciena

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

Provide the information as to where in 1.4 the various new definitions should be inserted.
Change the editing instruction accordingly

SuggestedRemedy

Change:
"1.4.x 40GBASE-T:..." to: "1.4.72a 40GBASE-T:..."
"1.4.x Category 8.1 balanced ..." to "1.4.131a Category 8.1 balanced ..."
"1.4.x Category 8.2 balanced ..." to "1.4.131b Category 8.2 balanced ..."
Replace the single editing instruction: "Insert the following new definitions into the list, in alphanumerical order:" to:
"Insert the following new definition into the list after 1.4.72 40GBASE-SR4:" before 1.4.72a and:
"Insert the following new definitions into the list after 1.4.131 Category 7A balanced cabling:"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **00**   *SC* **0**   *P* **11**   *L* **9**   # 115

Anslow, Pete   Ciena

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

Amendments to 802.3 are usually ordered with all of the clauses first and the Annexes second.

SuggestedRemedy

Move all of the Annexes to be after Clause 113

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.2.1.6**   *P* **38**   *L* **13**   # 153

Anslow, Pete   Ciena

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

The changes to Table 45-7 are not shown correctly.
The base standard (P802.3bx D3.0) has:
1 0 0 1 1 x = reserved for future use
1 0 0 1 0 1 = 40GBASE-ER4 PMA/PMD

SuggestedRemedy

Change the draft to show:
1 0 0 1 1 x1 = reserved for future use
where the x is in strikethrough and the following 1 is underlined

1 0 0 1 1 0 = 40GBASE-T PMA/PMD
all underlined

1 0 0 1 0 1 = 40GBASE-ER4 PMA/PMD
in normal font

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **00**   *SC* **0**   *P* **1**   *L* **29**   # 252

Grow, Robert   RMG Consulting

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

Didn't edit the bracketed text

SuggestedRemedy

Replace bracketed text with: for Working Group balloting

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Dup of comments 405, 474, 208

Cl **80**   *SC* **80.1.3**   *P* **61**   *L* **11**   # 381

Remein, Duane   Huawei Technologies

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

No indication that Figure 80-1 is new.

SuggestedRemedy

Add editing instruction before figure: "Replace Figure 80-1 with the following."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Dup of comment 61

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 16 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:02 PM
SORT ORDER: Topic

Cl **80**   *SC* **80.1.5**   *P* **62**   *L* **16**   # 382
Remein, Duane   Huawei Technologies

Comment Type   **ER**   *Comment Status* **D**   *EZ*
This Editing Instruction is unclear at best and possible misleading:
"Insert the following row after 40GBASE-LR4 and rightmost end column to Table 80-2 (existing PHY entries in new column are blank)"
Note that the "row after 40GBASE-LR4" is 40GBASE-ER4 NOT 40GBASE-T!

SuggestedRemedy
Change to read:
"Insert a bottom row and rightmost end column to Table 80-2 (existing PHY entries in new column are blank)"
Remove unchanged rows in table OR use Mark-up text in table.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE.
See comment 201

Cl **81**   *SC* **81.3.4.2**   *P* **68**   *L* **46**   # 383
Remein, Duane   Huawei Technologies

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

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

Cl **113**   *SC* **113.1**   *P* **71**   *L* **8**   # 384
Remein, Duane   Huawei Technologies

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

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT.
Recommend commenter submit maintenance or similar comment to Clause 55 on revision draft

Cl **113**   *SC* **113.3.6.2**   *P* **115**   *L* **20**   # 386
Remein, Duane   Huawei Technologies

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

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT.
Editor to review draft for proper paragraph styles prior to publication.

Cl **113**   *SC* **113.3.6.2.3**   *P* **117**   *L* **44**   # 387
Remein, Duane   Huawei Technologies

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

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

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 17 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:03 PM
SORT ORDER: Topic

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

Remein, Duane Huawei Technologies

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

Copyright date is not 201x

SuggestedRemedy

Change to 2015

Proposed Response *Response Status* **W**

PROPOSED ACCEPT. Dup of comment 118

Cl **45** *SC* **45.2.1.12.10** *P* **40** *L* **1** # 158

Anslow, Pete Ciena

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

Because of the large number of simultaneous amendments being done to 802.3 at any one time re-numbering clauses is a bad idea.
Also, the only editing instruction that uses underline or strikethrough font is "Change"

SuggestedRemedy

Change the editing instruction to:
"Insert 45.2.1.12.9a after 45.2.1.12.9 as follows:"
Remove the underline from the new subclause and change it to be 45.2.1.12.9a

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **30** *SC* **30.3.2.1** *P* **31** *L* **42** # 391

Remein, Duane Huawei Technologies

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

Subclause reference in editors instruction is incorrect:
"Change text of 30.3.2.1.2a include 40GBASE-T."

Similar problem in "Change text of 30.3.2.1.3a include 40GBASE-T."

SuggestedRemedy

Change instructions to:
"Change text of 30.3.2.1.2 to include 40GBASE-T as shown"
"Change text of 30.3.2.1.3 to include 40GBASE-T as shown"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **45** *SC* **45.2.1.78** *P* **42** *L* **16** # 163

Anslow, Pete Ciena

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

The title of Table 45-58 in the base standard is: "10GBASE-T skew delay register bit definitions" so the "definitions" has got lost

SuggestedRemedy

add "definitions" in normal font to the end of the title for Table 45-58

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **45** *SC* **45.2.1.6** *P* **38** *L* **48** # 154

Anslow, Pete Ciena

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

Footnote a to Table 45-7 is "aR/W = Read/Write, RO = Read only" not as shown.

SuggestedRemedy

Change footnote a to:
"aR/W = Read/Write, RO = Read only"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **45** *SC* **45.2.1.7.4** *P* **38** *L* **53** # 155

Anslow, Pete Ciena

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

The editing instructions for Table 45-9, Table 45-10 , and Table 45-12 are unclear. The place the new rows are to be inserted should be included.
Also, the only editing instruction that uses underline or strikethrough font is "Change"

SuggestedRemedy

Change the editing instructions to:
"Insert a row for 40GBASE-T below the row for 40GBASE-FR in Table 45-9 as follows (unchanged rows not shown):"
"Insert a row for 40GBASE-T below the row for 40GBASE-FR in Table 45-10 as follows (unchanged rows not shown):"
"Insert a row for 40GBASE-T below the row for 40GBASE-FR in Table 45-12 as follows (unchanged rows not shown):"
, respectively.
Remove the underline from the new rows.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general *Topic* **EZ** Page 18 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn 4/29/2015 2:42:03 PM
SORT ORDER: Topic

Cl **45**　　*SC* **45.2.1.8.1**　　　*P* **39**　　*L* **23**　　　# 156
Anslow, Pete　　　　　　　　　　Ciena

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

The draft includes a heading for 45.2.1.8.1 above the editing instruction for Table 45-12. However, this table is in 45.2.1.8 and not 45.2.1.8.1, so the heading is not required.

SuggestedRemedy

Remove the heading for 45.2.1.8.1

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **45**　　*SC* **45.2.1.12**　　　*P* **39**　　*L* **37**　　　# 157
Anslow, Pete　　　　　　　　　　Ciena

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

The editing instruction is: "Change and insert rows in Table 45–16 as appropriate." but there is no inserted row

SuggestedRemedy

Change the editing instruction to:
"Change the row for 1.13.6 in Table 45–16 as follows (unchanged rows not shown):"

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **45**　　*SC* **45.2.1.62**　　　*P* **40**　　*L* **13**　　　# 159
Anslow, Pete　　　　　　　　　　Ciena

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

This is showing a change from:
"The assignments of in the 10GBASE-T status register is shown in Table 45–54."
to:
"The assignments of bits in the 10G/40GBASE-T status registers are shown in Table 45–54."
However, the change to "registers are" is not appropriate as there is still only one register.
Same issue in 45.2.1.65, 45.2.7.10 (without change being shown in underline), 45.2.7.11.

SuggestedRemedy

Leave the text as "register is" in 45.2.1.62, 45.2.1.65, 45.2.7.10, and 45.2.7.11
Also, leave as "All the bits in the 10G/40GBASE-T AN status register are read only..." in 45.2.7.11

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change "registers" to "register" as in comment.
Verb remains "are" because subject of sentence is not "register", but is "assignments" (assignments ARE shown).

Cl **45**　　*SC* **45.2.1.62.1**　　　*P* **40**　　*L* **15**　　　# 160
Anslow, Pete　　　　　　　　　　Ciena

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

Editing instructions usually use the term "paragraph" only when particular paragraphs are being modified.
Same issue for 45.2.1.64, 45.2.1.66, 45.2.1.67, 45.2.3.1.2, 45.2.3.13, 45.2.3.13.1, 45.2.3.13.4, 45.2.3.13.5, 45.2.3.14.1, 45.2.3.14.2, 45.2.3.14.3, 45.2.7.10, 45.2.7.11.1, 45.2.7.11.2

SuggestedRemedy

Change the editing instruction for 45.2.1.62.1 to:
"Change text of 45.2.1.62.1 to include 40GBASE-T."

Likewise, change "paragraph" to "text" in the editing instructions for 45.2.1.64, 45.2.1.66, 45.2.1.67, 45.2.3.1.2, 45.2.3.13, 45.2.3.13.1, 45.2.3.13.4, 45.2.3.13.5, 45.2.3.14.1, 45.2.3.14.2, 45.2.3.14.3, 45.2.7.10, 45.2.7.11.1, 45.2.7.11.2

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **45**　　*SC* **45.2.1.62.1**　　　*P* **40**　　*L* **26**　　　# 161
Anslow, Pete　　　　　　　　　　Ciena

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

The editing instruction is "Change title and rows and insert row in Table 45–54 as appropriate."
The table shows only one of the two rows of Table 45-54 and this is the same as in the base standard.

The title in the base standard is "10GBASE-T status register bit definitions", so the underlined space between "10G/40GBASE-T" and "status" is not correct.

SuggestedRemedy

Change the editing instruction to:
"Change the title of Table 45–54 as follows:"
Leave the title with changemarks and remove the body of the table.
Remove the underline from the space between "10G/40GBASE-T" and "status"

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general　　　　*Topic* **EZ**　　Page 19 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn　　　　4/29/2015 2:42:03 PM
SORT ORDER: Topic

Cl **45**   *SC* **45.2.1.64.1**   *P* **41**   *L* **13**   # 162

Anslow, Pete   Ciena

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

Space missing in "... are defined in 113.4.2.5and ..."

SuggestedRemedy

Change to "... are defined in 113.4.2.5 and ..."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.2.1.62.1**   *P* **40**   *L* **18**   # 389

Remein, Duane   Huawei Technologies

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

Disagreement in bit designation:
Header: 45.2.1.62.1 "... (1.129.0)"
Text" "bit 1.129.1"
Table 45-54 "1.129.0"

SuggestedRemedy

Change text to "1.129.0" so it agrees with header and table.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.2.7**   *P* **47**   *L* **37**   # 175

Anslow, Pete   Ciena

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

The editing instruction for Table 45-200 is unclear.
Also, the entries in the subclause column need fixing

SuggestedRemedy

Change the editing instruction to:
"Change the identified rows in Table 45–200 as follows (unchanged rows not shown):"
Remove the spurious forest green text from the row for 7.32
Make 45.2.7.11 in the 7.33 row a cross-reference

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.3.2.2.8**   *P* **96**   *L* **33**   # 126

Anslow, Pete   Ciena

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

The note is not formatted correctly.
"40Gbps" should be "40 Gb/s"
"zeroes" should be "zeros"
(See http://www.ieee802.org/3/WG_tools/editorial/requirements/words.html)
"Transmission" should be "transmission"
"64 bit alignment" should be 64-bt alignment"

SuggestedRemedy

Change "Note: " to "NOTE—" where "—" is an em dash (Ctrl-q Shft-q).
Apply the paragraph Tag "Note" (9 pt font).
Change:
"For 40Gbps Transmission, 64 bit alignment ..." to:
"For 40 Gb/s transmission, 64-bit alignment ..."
Change "zeroes" to "zeros"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.2.1**   *P* **37**   *L* **17**   # 150

Anslow, Pete   Ciena

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

All of the entries in the "Subclause" column of Table 45-3 are in forest green but they should be cross-references.
Also, the subclause numbers for register 1.134 through to the end are incorrect. 45.2.1.71 to 45.2.1.83 should be 45.2.1.67 to 45.2.1.79, respectively.

SuggestedRemedy

Make all of the entries in the "Subclause" column of Table 45-3 cross-references.
Correct the subclause numbers for register 1.134 through to the end.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 20 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:03 PM
SORT ORDER: Topic

Cl **45**　　*SC* **45.2.3**　　　　　*P* **42**　　　*L* **44**　　　# `164`
Anslow, Pete　　　　　　　　　　　Ciena

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

The editing instruction for Table 45-119 is unclear.

SuggestedRemedy

Change the editing instruction to:
"Change the rows for registers 3.32 and 3.33 in Table 45–119 as follows (unchanged rows not shown):"

Proposed Response　　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **45**　　*SC* **45.2.3**　　　　　*P* **42**　　　*L* **50**　　　# `165`
Anslow, Pete　　　　　　　　　　　Ciena

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

Both of the entries in the "Subclause" column of Table 45-119 are in forest green but they should be cross-references.
Also, the subclause numbers are incorrect.
Register 3.32 is defined in 45.2.3.13
Register 3.33 is defined in 45.2.3.14

SuggestedRemedy

Make both of the entries in the "Subclause" column of Table 45-119 cross-references to the correct subclause numbers

Proposed Response　　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **45**　　*SC* **45.2.3.1.2**　　　*P* **43**　　　*L* **7**　　　# `166`
Anslow, Pete　　　　　　　　　　　Ciena

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

The IEEE Editorial Style Manual includes:
"In a series of three or more terms, use a comma immediately before the coordinating conjunction (usually and, or, or nor)."

Consequently, "... the 40GBASE-T, 10GBASE-T or the 10GBASE-R mode ..." should have an extra comma after "10GBASE-T"

SuggestedRemedy

Change:
"... the 40GBASE-T, 10GBASE-T or the 10GBASE-R mode ..." to:
"... the 40GBASE-T, 10GBASE-T, or the 10GBASE-R mode ..."
with the added comma in underline font.

Proposed Response　　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **45**　　*SC* **45.2.3.7**　　　　*P* **43**　　　*L* **29**　　　# `167`
Anslow, Pete　　　　　　　　　　　Ciena

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

The heading for 45.2.3.7 appears just above Table 45-123, but Table 45-123 (related to the PCS control 2 register) is in 45.2.3.6

SuggestedRemedy

Insert the heading:
45.2.3.6 PCS control 2 register (Register 3.7)
and move Table 45-123 to be below the new heading, leaving Table 45-124 in 45.2.3.7

Proposed Response　　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **45**　　*SC* **45.2.3.7**　　　　*P* **43**　　　*L* **49**　　　# `168`
Anslow, Pete　　　　　　　　　　　Ciena

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

The editing instruction for Table 45-124 is unclear.

SuggestedRemedy

Change the editing instruction to:
"Change the identified reserved row in Table 45–124 and insert a new row for bit 3.8.6 below it as follows (unchanged rows not shown):"
Remove the underline from the new row as it is associated with an "insert" editing instruction.

Proposed Response　　　　*Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general　　　　*Topic* **EZ**　　　Page 21 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn　　　　4/29/2015 2:42:03 PM
SORT ORDER: Topic

Cl **45**　　　*SC* **45.2.3.7**　　　　　*P* **43**　　　*L* **51**　　　# 169　

Anslow, Pete　　　　　　　　　　　Ciena

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

Correctly formatted tables do not allow the table title to be on a different page from the table body.

SuggestedRemedy

Use the correct IEEE table format (in the Table Designer pod, set "Title" to "Above Table").
Check that this is the case for all Clause 45 tables.

Proposed Response　　　*Response Status*　**W**

PROPOSED ACCEPT.

Cl **45**　　　*SC* **45.2.3.7.6**　　　　*P* **44**　　　*L* **10**　　　# 170　

Anslow, Pete　　　　　　　　　　　Ciena

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

Because of the large number of simultaneous amendments being done to 802.3 at any one time re-numbering clauses is a bad idea.
Also, the only editing instruction that uses underline or strikethrough font is "Change"

SuggestedRemedy

Change the editing instruction to:
"Insert 45.2.3.7.5a after 45.2.3.7.5 as follows:"
Remove the underline from the new subclause and change it to be 45.2.3.7.5a

Proposed Response　　　*Response Status*　**W**

PROPOSED ACCEPT.

Cl **45**　　　*SC* **45.2.3.9**　　　　　*P* **44**　　　*L* **19**　　　# 171　

Anslow, Pete　　　　　　　　　　　Ciena

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

The editing instruction for Table 45-125 is unclear.
"3.20.7" and "RO" are not changed, so should not be underlined

SuggestedRemedy

Change the editing instruction to:
"Change the identified reserved row in Table 45–125 as follows (unchanged rows not shown):"
Remove the underline from "3.20.7" and "RO"

Proposed Response　　　*Response Status*　**W**

PROPOSED ACCEPT.

Cl **45**　　　*SC* **45.2.3.13**　　　　*P* **45**　　　*L* **1**　　　# 172　

Anslow, Pete　　　　　　　　　　　Ciena

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

The editing instruction for Table 45-128 is unclear.
Also, the table title has been changed

SuggestedRemedy

Change the editing instruction to:
"Change the title and identified rows in Table 45–128 as follows (unchanged rows not shown):"

Proposed Response　　　*Response Status*　**W**

PROPOSED ACCEPT.

Cl **45**　　　*SC* **45**　　　　　　　*P* **37**　　　*L* **3**　　　# 148　

Anslow, Pete　　　　　　　　　　　Ciena

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

This editor's note from the 802.3 template should not have been included in the draft.

SuggestedRemedy

Remove the editor's note.

Proposed Response　　　*Response Status*　**W**

PROPOSED ACCEPT.

Cl **45**　　　*SC* **45.2.3.14**　　　　*P* **46**　　　*L* **20**　　　# 174　

Anslow, Pete　　　　　　　　　　　Ciena

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

The editing instruction for Table 45-129 is unclear.
Also, the insertion in the table title has not been underlined

SuggestedRemedy

Change the editing instruction to:
"Change the title and identified rows in Table 45–129 as follows (unchanged rows not shown):"
show "/40G" in the table title in underline font.

Proposed Response　　　*Response Status*　**W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic

Topic　**EZ**　　　Page 22 of 94
4/29/2015 2:42:03 PM

Cl **30**　　　　*SC* **30.3.2.1.2**　　　　*P* **32**　　　*L* **9**　　　　# 147

Anslow, Pete　　　　　　　　　　　　　Ciena

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

In several of the changed subclauses in Clause 30 there is text shown in forest green which should be cross-references

SuggestedRemedy

Make the following cross-references:
page 32, line 9 "Clause 55"
page 32, line 49 "Clause 55"
page 33, line 29 "Clause 45"
page 33, line 30 "45.2.1.66"
page 33, line 43 "Clause 45"
page 33, line 44 "45.2.1.67"
page 34, line 2 "Clause 45"
page 34, line 3 "45.2.1.68"
page 34, line 15 "Clause 45"
page 34, line 16 "45.2.1.69"
page 34, line 29 "45.2.1.79.2"
page 34, line 42 "45.2.1.79.1"
page 35, line 7 "30.2.5"
page 35, line 16 "Annex 28B"
page 35, line 18 "Annex 28B"
page 35, line 20 "Annex 28B"
page 35, line 30 "Clause 55"
page 35, line 47 "Clause 28"

Proposed Response　　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **45**　　　　*SC* **45.2.7.10**　　　　*P* **48**　　　*L* **9**　　　　# 176

Anslow, Pete　　　　　　　　　　　　　Ciena

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

The editing instruction for Table 45-207 is unclear.
Also, the text in the reserved row has been changed in 802.3bx D3.0

SuggestedRemedy

Change the editing instruction to:
"Change the reserved row and the row for 7.32.1 in Table 45–207 and insert new rows for 7.32.11 and 7.32.3 above and below the reserved row, respectively as follows (unchanged rows not shown):"
Delete ", writes ignored" from the reserved row.
Remove the underline from the two new rows (insert editing instruction).

Proposed Response　　　　*Response Status* **W**

PROPOSED ACCEPT. See comment 28

Cl **45**　　　　*SC* **45.2.7.10.4**　　　　*P* **48**　　　*L* **30**　　　　# 177

Anslow, Pete　　　　　　　　　　　　　Ciena

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

Because of the large number of simultaneous amendments being done to 802.3 at any one time re-numbering clauses is a bad idea.
"after 45.2.7.10.3" should be "after 45.2.7.10.4"
The new subclause titles should match the name in Table 45-207.
"Bit 7.32.11 is to be used ..." is inappropriate wording.
The new subclause for bit 7.32.3 goes immediately below that for bit 7.32.11.
Also, the only editing instruction that uses underline or strikethrough font is "Change"

SuggestedRemedy

Change the first editing instruction to:
"Insert 45.2.7.10.4a and 45.2.7.10.4a after 45.2.7.10.4 as follows:"
Remove the underline from the new subclauses.
Change the first new subclause title to be:
"45.2.7.10.4a 40GBASE-T ability (7.32.11)"
Change ""Bit 7.32.11 is to be used ..." to ""Bit 7.32.11 is used ..."
Delete the editing instruction:
"Insert new paragraph after 45.2.7.10.6 and re-number remaining clauses accordingly."
Change the second new subclause title to be:
"45.2.7.10.4b 40GBASE-T Fast retrain ability (7.32.3)"

Proposed Response　　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **45**　　　　*SC* **45.2.7.10.6**　　　　*P* **48**　　　*L* **46**　　　　# 178

Anslow, Pete　　　　　　　　　　　　　Ciena

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

Because of the large number of simultaneous amendments being done to 802.3 at any one time re-numbering clauses is a bad idea.

SuggestedRemedy

Change the editing instruction to:
"Change the title of 45.2.7.10.6 as follows:"
add "45.2.7.10.6" to the beginning of the modified title.

Proposed Response　　　　*Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general　　　*Topic* **EZ**　　　Page 23 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected　　　RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn　　　4/29/2015 2:42:03 PM
SORT ORDER: Topic

Cl **45**   *SC* **45.2.7.11**   *P* **49**   *L* **20**   # 179

Anslow, Pete   Ciena

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

In the row for bit 7.33.0 in Table 45-208, "7.33.0" and "RO" have not changed, so should not be underlined. Also, ", writes ignored" has been removed in 802.3bx D3.0

SuggestedRemedy

Remove the underline from "7.33.0" and "RO"
Remove the strikethtough text ", writes ignored"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.2.7.11.1**   *P* **49**   *L* **34**   # 180

Anslow, Pete   Ciena

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

"for 40GBASE-T in contained" should be "for 40GBASE-T is contained"

SuggestedRemedy

Change "for 40GBASE-T in contained" to "for 40GBASE-T is contained"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Dup of comment 433

Cl **45**   *SC* **45.2.7.11.2**   *P* **49**   *L* **49**   # 181

Anslow, Pete   Ciena

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

The text of 45.2.7.11.2 is truncated

SuggestedRemedy

Reinstate the remainder of the text

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.2.7.11.9**   *P* **50**   *L* **7**   # 183

Anslow, Pete   Ciena

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

Bit 7.33.0 should come after bit 7.33.1 in the draft.
Because of the large number of simultaneous amendments being done to 802.3 at any one time re-numbering clauses is a bad idea.

SuggestedRemedy

Change the editing instruction to:
"Insert 45.2.7.11.9 after 45.2.7.11.8 as follows:"
Remove the underline from the new subclause and move both the editing instruction and subclause below "10GBASE-T Fast retrain ability (7.33.1)"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment 32

Cl **81**   *SC* **81.1**   *P* **65**   *L* **33**   # 489

Brown, Matt   APM

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

Figure 81-1, many notes are not visible as it appears line line spacing was change to 3x instead of 1x.
Also spacing between stacks is not equal.

SuggestedRemedy

Fix note spacing.
Fix spacing between each of the PHY stacks such that they appear equal.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

LATE COMMENT - TASK FORCE TO VOTE ON CONSIDERING

Cl **45**   *SC* **45.2.7.13**   *P* **50**   *L* **29**   # 185

Anslow, Pete   Ciena

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

Spurious "." at the start of the text.

SuggestedRemedy

Change ".This" to "This"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Dup of comments 34, 101

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic

Topic **EZ**

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4/29/2015 2:42:03 PM

Cl **45**   *SC* **45.2.7.13**   *P* **51**   *L* **1**   # 186

Anslow, Pete   Ciena

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

The editing instruction for Table 45-210 is unclear.
Also, the text in the reserved row has been changed in 802.3bx D3.0

SuggestedRemedy

Change the editing instruction to:
"Change the row for 7.60.9 in Table 45–210 as follows (unchanged rows not shown):"
Delete ", writes ignored" in strikethrough font from the reserved row.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.2.7.13.10**   *P* **51**   *L* **70**   # 187

Anslow, Pete   Ciena

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

Because of the large number of simultaneous amendments being done to 802.3 at any one time re-numbering clauses is a bad idea.
Bit 7.60.9 should be described after bit 7.60.10 (45.2.7.13.4)

SuggestedRemedy

Change the editing instruction to:
"Insert 45.2.7.13.4a after 45.2.7.13.4 as follows:"
Remove the underline from the new subclause and change it to be 45.2.7.13.4a

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.2.3.9.8**   *P* **44**   *L* **33**   # 173

Anslow, Pete   Ciena

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

Because of the large number of simultaneous amendments being done to 802.3 at any one time re-numbering clauses is a bad idea.
Also, the only editing instruction that uses underline or strikethrough font is "Change"

SuggestedRemedy

Change the editing instruction to:
"Insert 45.2.3.9.7a after 45.2.3.9.7 as follows:"
Remove the underline from the new subclause and change it to be 45.2.3.9.7a

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

Cl **28**   *SC* **28.5**   *P* **23**   *L* **28**   # 136

Anslow, Pete   Ciena

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

Editing instruction does not say where the new row is to be inserted.
It is usual to show the heading row of tables being changed.
Also, the only editing instruction that uses underline or strikethrough font is "Change"

SuggestedRemedy

Change the editing instruction to:
"Insert a row for *40G at the end of the table in 28.5.3 as follows (unchanged rows not shown):"
Show the heading row for the table.
Remove the underline from the new row.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **01**   *SC* **1.5**   *P* **20**   *L* **40**   # 121

Anslow, Pete   Ciena

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

Either include some abbreviations to be added to 1.5 or remove it from the draft

SuggestedRemedy

Either include some abbreviations to be added to 1.5 and remove:
ABBR expanded version
[abbreviations use paragraph tag AcrList,ac]
or remove 1.5 from the draft entirely

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Add abbreviation to 1.5:
ACRF Attenuation to Crosstalk Ratio - Far End
Delete ABBR abbreviation.

Cl **113**   *SC* **113**   *P* **71**   *L* **24**   # 122

Anslow, Pete   Ciena

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

There are many pieces of text in Clause 113 that are shown green that should be cross-references (for example "Clause 78" (2 instances) and "Clause 28" on page 71 and the five green items on page 73)

SuggestedRemedy

Review every piece of green text in Clause 113 and convert those that exist in the draft to cross-references.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 25 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:03 PM
SORT ORDER: Topic

Cl **113**   *SC* **113.1**   *P* **71**   *L* **13**   # 123

Anslow, Pete   Ciena

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

"100ohm" should be "100", space, capital omega

SuggestedRemedy

Change "100ohm" to "100", space, capital omega

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment 385

Cl **113**   *SC* **113.3.2.2.16**   *P* **99**   *L* **24**   # 127

Anslow, Pete   Ciena

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

Table 113-2 has no heading row to clarify what the columns contain

SuggestedRemedy

Add an appropriate heading row

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.8.2.2**   *P* **183**   *L* **42**   # 109

Cibula, Peter   Intel Corporation

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

In subclause 113.8.2.2, the 1st instance of the mixed-mode parameter is correctly defined as "Sdc11". The other two instances (found in Line 42 and Line 46), referring to the reciprocal S-parameter "Scd11", appear to be in error and are inconsistent with the 1st instance.

SuggestedRemedy

As indicated in the recommended text on Page 12 of cibula_3bq_02_0115.pdf, change the two instances of "Scd11" in subclause 113.8.2.2 from "Scd11" to "Sdc11."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.3.2.2.16**   *P* **99**   *L* **41**   # 128

Anslow, Pete   Ciena

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

Table 113-3 is not formatted correctly.
The heading row does not have the correct format (is it actually a body row?)
The part of Table 113-3 that is on page 100 should have (continued) in italic font at the end of the title.
The rows are centred on page 99, but left aligned on page 100

SuggestedRemedy

Correct the formatting of the heading row.
Place the cursor at the end of table title on page 99. Then click on the Variables Tab and insert "Table Continuation" variable. This will add the (continued) on page 100.
Make all rows centred.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.3.2.2.20**   *P* **103**   *L* **45**   # 129

Anslow, Pete   Ciena

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

"zeroes" should be "zeros"
(See http://www.ieee802.org/3/WG_tools/editorial/requirements/words.html)

SuggestedRemedy

change "zeroes" to "zeros"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.12**   *P* **186**   *L* **2**   # 130

Anslow, Pete   Ciena

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

The text after "Clause 113" in the title of 113.12 should match the Clause 113 title.

SuggestedRemedy

Change:
"Protocol implementation conformance statement (PICS) proforma for Clause 113—Physical Coding Sublayer (PCS), Physical Medium Attachment (PMA) sublayer and baseband medium, type 40GBASE-T" to:
"Protocol implementation conformance statement (PICS) proforma for Clause 113—Physical Coding Sublayer (PCS), Physical Medium Attachment (PMA) sublayer, Physical Medium Dependent (PMD) sublayer, and baseband medium, type 40GBASE-T"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 26 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:04 PM
SORT ORDER: Topic

Cl **113**	*SC* **113.2**	*P* **186**	*L* **10**	# 131

Anslow, Pete   Ciena

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

The tables that should be on the first page of the PICS have moved to page 187

SuggestedRemedy

Move the tables down to the "Date of Statement" row back on to page 186.
(It may be that "Keep With Next Pgf" is checked for the heading 113.12.1.2 Protocol summary.
If so, uncheck it (you have to click the check mark twice) and if may fix this.)

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT.

Cl **113**	*SC* **113.12.2**	*P* **187**	*L* **37**	# 132

Anslow, Pete   Ciena

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

*LT Support of loop timing is mandatory, so there shouldn't be a "No [ ]" box

SuggestedRemedy

Remove the "No { }"

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT.

Cl **28**	*SC* **28.5.4.8**	*P* **23**	*L* **43**	# 133

Anslow, Pete   Ciena

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

"28.3.2" should be a cross-reference

SuggestedRemedy

Make "28.3.2" a cross-reference

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT.

Cl **45**	*SC* **45.2.1**	*P* **37**	*L* **12**	# 149

Anslow, Pete   Ciena

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

The editing instruction for Table 45-3 is unclear.

SuggestedRemedy

Change the editing instruction to:
"Change the identified rows in Table 45–3 as follows (unchanged rows not shown):"

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT.

Cl **28**	*SC* **28.3.2**	*P* **23**	*L* **14**	# 135

Anslow, Pete   Ciena

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

Editing instruction is not clear.

SuggestedRemedy

Change the editing instruction to:
"Change the indicated row in Table 28–9 as follows (unchanged rows not shown):

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic*   **EZ**   Page 27 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:04 PM
SORT ORDER: Topic

Cl **01**   *SC* **1.4.x**   *P* **20**   *L* **21**   # 120

Anslow, Pete   Ciena

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

The IEEE style manual includes:
13.3.2 Numerical values
Digits should be separated into groups of three, counting from the decimal point toward the left and right. The groups should be separated by a space, and not a comma, period, or dash. If the magnitude of the number is less than one, the decimal point should be preceded by a zero. In numbers of four digits, the space is not necessary, unless four-digit numbers are grouped in a column with numbers of five digits or more.

Consequently, "2,000 MHz" should be "2000 MHz" on line 21 and on line 30.
(Note, a comment has been submitted against 802.3bx D3.0 to remove the comma from 1.4.131)

Also, "Clause 55" should be a cross-reference rather than forest green text on line 23 and line 32.

SuggestedRemedy

Change "2,000 MHz" to "2000 MHz" on line 21 and on line 30
Make "Clause 55" a cross-reference on line 23 and line 32

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment 1

Cl **28**   *SC* **28.5.4.8**   *P* **23**   *L* **39**   # 137

Anslow, Pete   Ciena

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

Editing instruction is not clear.
There are no paragraphs in the subclause.
It is usual to show the heading row of tables being changed

SuggestedRemedy

Change the editing instruction to:
"Change the row for SD11 in the table in 28.5.4.8 as follows (unchanged rows not shown):"
Show the heading row for the table.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.**   *P* **96**   *L* **36**   # 76

Mark, Laubach   Broadcom Corporation

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

Looking in latest 802.3bx draft, I think the cross-reference should be to Figure 81-4.

SuggestedRemedy

Correct crossref if needed.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Figure is 82-4 in bx draft 3.0

Cl **28A**   *SC* **28A**   *P* **25**   *L* **1**   # 138

Anslow, Pete   Ciena

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

There are no editing instructions shown for Annex 28A and there are no changes shown

SuggestedRemedy

Either add editing instructions and show changes or remove Annex 28A from the draft.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Remove Annex 28A (dup of comments 5, 375, 248, 260, 263)

Cl **28B**   *SC* **28B**   *P* **26**   *L* **5**   # 139

Anslow, Pete   Ciena

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

The title of Annex 28B is missing

SuggestedRemedy

Add the title of Annex 28B:
"IEEE 802.3 Selector Base Page definition"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 28 of 94

COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:04 PM

SORT ORDER: Topic

Cl **28B**	*SC* **28B.3**	*P* **26**	*L* **9**	# 140

Anslow, Pete   Ciena

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

To use a "change" editing instruction would require the rest of the list to be included in the draft

SuggestedRemedy

Change the editing instruction to:
"Insert a new item a) "40GBASE-T full duplex" at the top of the list in 28B.3 as follows and renumber the other items:"
Remove the underline from the new item.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **28C**	*SC* **28C.11**	*P* **27**	*L* **21**	# 141

Anslow, Pete   Ciena

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

"Clause 55" should be a cross-reference

SuggestedRemedy

Make "Clause 55" a cross-reference

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **28C**	*SC* **28C.11**	*P* **27**	*L* **22**	# 142

Anslow, Pete   Ciena

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

The IEEE Editorial Style Manual includes:
"In a series of three or more terms, use a comma immediately before the coordinating conjunction (usually and, or, or nor)."

Consequently, "... that 40GBASE-T, 10GBASE-T and 1000BASE-T abilities..." should have an extra comma after "10GBASE-T"

SuggestedRemedy

Change:
"... that 40GBASE-T, 10GBASE-T and 1000BASE-T abilities..." to:
"... that 40GBASE-T, 10GBASE-T, and 1000BASE-T abilities..."
with the added comma in underline font.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Dup of 8

Cl **28D**	*SC* **28D.8**	*P* **28**	*L* **8**	# 143

Anslow, Pete   Ciena

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

28D.8 is not a paragraph
Also, the only editing instruction that uses underline or strikethrough font is "Change"

SuggestedRemedy

Change the editing instruction to:
"Insert 28D.8 after 28D.7 as follows:"
Remove the underline from the new subclause.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **28D**	*SC* **28D.8**	*P* **28**	*L* **24**	# 144

Anslow, Pete   Ciena

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

"45.2.7" on line 24 and "28.3.1" on line 26 should be cross-references

SuggestedRemedy

Make "45.2.7" on line 24 and "28.3.1" on line 26 cross-references

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **30**	*SC* **30.3.2.1**	*P* **31**	*L* **42**	# 145

Anslow, Pete   Ciena

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

Editing instruction is "Change text of 30.3.2.1.2a include 40GBASE-T."
The referenced subclause has a spurious "a" at the end.

Same issue for 30.3.2.1.3

SuggestedRemedy

Remove the spurious "a" from the subclause references on page 31 line 42 and also on page 32 line 27

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 29 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:04 PM
SORT ORDER: Topic

Cl **30**   *SC* **30.3.2.1.2**   *P* **31**   *L* **42**   *#* 146

Anslow, Pete   Ciena

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

The editing instructions for 30.3.2.1.2, 30.3.2.1.3, 30.5.1.1.19, 30.5.1.1.20, 30.5.1.1.21, 30.5.1.1.22, 30.5.1.1.24, and 30.5.1.1.25 are all:
"Change text of 30.x.x.x.x include 40GBASE-T." which should be "to include" rather than "include"

SuggestedRemedy

In the editing instructions for 30.3.2.1.2, 30.3.2.1.3, 30.5.1.1.19, 30.5.1.1.20, 30.5.1.1.21, 30.5.1.1.22, 30.5.1.1.24, and 30.5.1.1.25 change:
"include" to "to include"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **28**   *SC* **28.3**   *P* **23**   *L* **6**   *#* 134

Anslow, Pete   Ciena

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

State where the new variable should be inserted.
Also, the only editing instruction that uses underline or strikethrough font is "Change"

SuggestedRemedy

Change the editing instruction to:
"Insert new variable definition into 28.3.1 below 10GigT as follows:"
Remove the underline from the new text.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment 409

Cl **45**   *SC* **45.2.1**   *P* **37**   *L* **14**   *#* 38

Hajduczenia, Marek   Bright House Networks

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

With the addition of 40GBASE-T, middle column "register name" has multiple rows spanning two lines, e.g. "10G/40GBASE-T SNR operating margin channel A", where just a single letter is placed in the second line

SuggestedRemedy

Extend the width of the middle column to make sure that "10G/40GBASE-T SNR operating margin channel A" (for example)
Also, consider checking font for "10G/40GBASE-T" - it seems to be larger than anything else in the table.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.2.7**   *P* **47**   *L* **46**   *#* 27

Hajduczenia, Marek   Bright House Networks

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

Subclause 45.2.7.11 exists in this draft and should be marked in black.

SuggestedRemedy

Mark "45.2.7.11" in black and make link live.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.2.7.10**   *P* **48**   *L* **9**   *#* 28

Hajduczenia, Marek   Bright House Networks

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

Editorial instruction "Change title and rows and insert rows in Table 45–207 as appropriate." is not precise enough

SuggestedRemedy

Change "Change title and rows and insert rows in Table 45–207 as appropriate." to read "Change rows 7.32.11:3 and 7.32.11.1 in Table 45–207 as shown below."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 176

Cl **45**   *SC* **45.2.7.10**   *P* **48**   *L* **32**   *#* 29

Hajduczenia, Marek   Bright House Networks

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

Missing numbers for headings on page 48, lines: 32, 39, 50,

SuggestedRemedy

Insert number 45.2.7.10.3a on page 48, like 32
Insert number 45.2.7.10.5a on page 48, like 39 (7.32.3 goes before 7.32.2 and not after it)
Change editorial instruction "Change title 45.2.7.10.6. Re-number to 45.2.7.10.8." to read "Change title 45.2.7.10.6 as shown below"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 30 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:04 PM
SORT ORDER: Topic

Cl **45** *SC* **45.2.7.11**   *P* **49**   *L* **6**   # 30

Hajduczenia, Marek   Bright House Networks

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

Editorial instruction ".Change title and rows in Table 45–208 as appropriate." is not precise enough.

SuggestedRemedy

Change ".Change title and rows in Table 45–208 as appropriate." to "Change title of Table 45-208 and definition of rows 7.33.8:2, 7.33.1, and 7.33.0 as shown below."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment 352

Cl **45** *SC* **45.2.7.11.7**   *P* **50**   *L* **1**   # 31

Hajduczenia, Marek   Bright House Networks

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

Subclause 45.2.7.11.7 should be 45.2.7.11.6a - any renumbering necessary is typically done by staff editor when merging with base document

SuggestedRemedy

Change 45.2.7.11.7 to 45.2.7.11.6a in editorial instruction (page 49, line 51) and in title - page 50, line 1

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comments 353, 184

Cl **45** *SC* **45.2.7.11.9**   *P* **50**   *L* **7**   # 32

Hajduczenia, Marek   Bright House Networks

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

Editorial instruction "Insert new paragraph after 45.2.7.11.7 and re-number remaining clauses accordingly and in consideration with newly inserted 45.7.11.7." is not precise enough.

SuggestedRemedy

Since we are inserting a new subclause at the end covering register 7.33.0, instruction ought to read as follows: "Insert new paragraph 45.2.7.11.9 as shown below." - anything else is unnecessary

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 183

Cl **45** *SC* **45.2.7.11.10**   *P* **50**   *L* **16**   # 33

Hajduczenia, Marek   Bright House Networks

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

Editorial instruction "Change paragraph 45.2.7.11.8 and re-number to 45.2.7.11.10 in consideration of newly inserted 45.7.11.7
and 45.2.7.11.9." is incorrect

SuggestedRemedy

Change "Change paragraph 45.2.7.11.8 and re-number to 45.2.7.11.10 in consideration of newly inserted 45.7.11.7 and 45.2.7.11.9." to read "Change title and content of 45.2.7.11.8 as shown below."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comments 353, 184

Cl **45** *SC* **45.2.7.13**   *P* **50**   *L* **29**   # 34

Hajduczenia, Marek   Bright House Networks

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

Unnecessary "." at beginnng of page 50, line 29

SuggestedRemedy

Remove "."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Dup of comments 185, 101

Cl **45** *SC* **45.2.7.13**   *P* **51**   *L* **1**   # 35

Hajduczenia, Marek   Bright House Networks

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

Imprecise editorial instruction "Change rows in Table 45–210 as appropriate.."

SuggestedRemedy

Change "Change rows in Table 45–210 as appropriate.." to read "Change row 7.60.9 in Table 45-210 as shown below."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 186

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 31 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:04 PM
SORT ORDER: Topic

Cl **81**　　　*SC* **81.3.4.1**　　　　　*P* **67**　　　*L* **1**　　　　# 50
Hajduczenia, Marek　　　　　　　　Bright House Networks

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

In 81.3.4.1, only fault_sequence, last_seq_type, link_fault, and seq_type are modified - the rest stays the same.

SuggestedRemedy

Change editorial instruction from "Change 81.3.4.1 to include Link Interruption in fault_sequence, last_seq_type, link_fault, and seq_type
variables" to "Change definitions of variables: fault_sequence, last_seq_type, link_fault, and seq_type in 81.3.4.1 as shown below."
Remove all variables apart from fault_sequence, last_seq_type, link_fault, and seq_type

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **45**　　　*SC* **45.2.7.13.10**　　　*P* **51**　　　*L* **23**　　　　# 37
Hajduczenia, Marek　　　　　　　　Bright House Networks

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

Incorrect editorial instruction "Change rows in Table 45–211 as appropriate."

SuggestedRemedy

Change "Change rows in Table 45–211 as appropriate. to read "Change row 7.61.9 in Table 45-211 as shown below."

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 188

Cl **45**　　　*SC* **45.2.3.14**　　　　*P* **46**　　　*L* **22**　　　　# 23
Hajduczenia, Marek　　　　　　　　Bright House Networks

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

"Change title and rows in Table 45–129 as appropriate." - no change in title is shown.

SuggestedRemedy

Show change in title of Table 45-129

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **45**　　　*SC* **45.2.1.7**　　　　*P* **37**　　　*L* **52**　　　　# 39
Hajduczenia, Marek　　　　　　　　Bright House Networks

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

".PMA/PMD status 2 register (Register 1.8)" contains "." at the beginning of heading

SuggestedRemedy

Remove "." in the heading.
Also, remove "." at the start of editorial instruction on page 38 line 53, page 39 line 21

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **78**　　　*SC* **78.5**　　　　　*P* **59**　　　*L* **10**　　　　# 40
Hajduczenia, Marek　　　　　　　　Bright House Networks

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

Stray ":"

SuggestedRemedy

Remove stray ":"

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **78**　　　*SC* **78.1**　　　　　*P* **57**　　　*L* **8**　　　　# 41
Hajduczenia, Marek　　　　　　　　Bright House Networks

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

Text "For operation over twisted-pair cabling systems, EEE supportsmay be supported by the 100BASE-TX PHY, the 1000BASE-T PHY, the10GBASE-T PHY, and the 40GBASE-T PHY." does not exist in 802.3bx D3.0

SuggestedRemedy

Where does this text come from? It is not part of P802.3bx text that is being balloted.

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Text was removed during revision process.
Remove cited text to align with 802.3bx D3.0

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general　　　　*Topic* **EZ**　　　Page 32 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn　　　4/29/2015 2:42:04 PM
SORT ORDER: Topic

Cl **78**　　*SC* **78.1.3.3.1**　　　*P* **57**　　　*L* **11**　　　# 42

Hajduczenia, Marek　　　　　　Bright House Networks

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

Text in 78.1.3.3.1 is modified only in line 48 - if there are no other changes, remove all unmodified text and updat editorial instructions accordingly.

SuggestedRemedy

Per comment

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 358 for more complete remedy

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Cl **78**　　*SC* **78.1.4**　　　*P* **58**　　　*L* **34**　　　# 43

Hajduczenia, Marek　　　　　　Bright House Networks

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

TExt inserted intl Table 78-1 seems to be a different font style than the remainder of the table.

SuggestedRemedy

Apply proper font style to Table 78-1.
Same issue applies to Table 78-2 and in Table 78-5

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 195 for a more complete response

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Cl **80**　　*SC* **80.1.3**　　　*P* **61**　　　*L* **6**　　　# 45

Hajduczenia, Marek　　　　　　Bright House Networks

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

No editorial instructions for changes to Figure 80–1—Architectural positioning of 40 Gigabit and 100 Gigabit Ethernet

SuggestedRemedy

Insert editorial instruction above Figure 80-1 as follows "Replace Figure 80-1 with the figure shown below"

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
See comments 61, 381

Cl **80**　　*SC* **80.1.5**　　　*P* **62**　　　*L* **46**　　　# 46

Hajduczenia, Marek　　　　　　Bright House Networks

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

Row with 40GBASE-T in Table 80–2 shoudl nbe marked with underline.

SuggestedRemedy

Per comment
The same observation applies to Table 80–5, Table 80-1

Proposed Response　　*Response Status* **W**

PROPOSED REJECT.
Table 80-2 is now replaced, so no underline.
See comment 134 for use of underline, only "change" uses that. Table 80-1 is an insert instruction, as is Table 80-5.

Cl **81**　　*SC* **81.1**　　　*P* **65**　　　*L* **6**　　　# 47

Hajduczenia, Marek　　　　　　Bright House Networks

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

Editorial instruction is unclear "Change Figure 81-1 as follows:" - there are no changes marked in Figure 81-1.

SuggestedRemedy

Change editorial note from "Change Figure 81-1 as follows:" to "Replace Figure 81-1 with figure shown below" or explicitly show changes (in red) in Figure 81-1 and then leave the editorial note alone.

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 204

Cl **81**　　*SC* **81.1.7.3**　　　*P* **65**　　　*L* **46**　　　# 48

Hajduczenia, Marek　　　　　　Bright House Networks

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

Editorial note is incorrect: "Change 81.1.7.3 for carrier indication definition:"

SuggestedRemedy

Change "Change 81.1.7.3 for carrier indication definition:" to "Change 81.1.7.3 as follows"

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic

Topic **EZ**

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Cl **45**	*SC* **45.2.1.6**	*P* **37**	*L* **50**	*#* 151

Anslow, Pete   Ciena

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

The editing instruction for Table 45-7 is unclear.

SuggestedRemedy

Change the editing instruction to:
"Change the identified row in Table 45–7 as follows (unchanged rows not shown):"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**	*SC* **45.2.7.13.10**	*P* **51**	*L* **16**	*#* 36

Hajduczenia, Marek   Bright House Networks

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

Editorial instruction "Insert new paragraph after 45.2.7.13.9 and re-number remaining clauses accordingly." is imprecise

SuggestedRemedy

Change "Insert new paragraph after 45.2.7.13.9 and re-number remaining clauses accordingly." to read "Insert new paragraph after 45.2.7.13.4 as shown below."
Change 45.2.7.13.4 to 45.2.7.13.4a

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 355 for more complete remedy

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Cl **45**	*SC* **45.2.1.7.4**	*P* **38**	*L* **53**	*#* 11

Hajduczenia, Marek   Bright House Networks

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

Editorial instruction "Insert row in Table 45–9 as appropriate." is not precise enough.

SuggestedRemedy

Change editorial instruction to read: "Insert row in Table 45–9 under 40GBASE-FR entry"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **80**	*SC* **80.1.5**	*P* **62**	*L* **16**	*#* 73

Mark, Laubach   Broadcom Corporation

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

Update editing directive for better clarity, as multiple rows are being inserted as well a the single right most column.

SuggestedRemedy

Change: "Insert the following row after 40GBASE-LR4 and rightmost end column to Table 80-2 (existing PHY entries in new column are blank)"
to: "Change: "Insert the following rows after 40GBASE-LR4 and rightmost single end column to Table 80-2 (existing PHY entries in new column are blank)""

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
See comment 201

Cl **113**	*SC* **113.2.1.2.1**	*P* **80**	*L* **28**	*#* 71

Slavick, Jeff   Avago Technologies

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

PMA_LINK.indication(link_status) states that READY is a value it can take on. But then states that READY is not used by 40GBASE-T

SuggestedRemedy

Removed READY from the list of values link_status can PMA_LINK.indication can take on.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment 485 for a complete remedy

Cl **78**	*SC* **78.1.3.3.1**	*P* **57**	*L* **33**	*#* 74

Mark, Laubach   Broadcom Corporation

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

"<XREF>" text present:
Page 57 Line 33
Page 57 Line 51
Page 58 Line 2

SuggestedRemedy

Resolve or remove.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment 194

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 34 of 94
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SORT ORDER: Topic

Cl **81**   *SC* **81.3.4.2**   *P* **67**   *L* **46**   # 75

Mark, Laubach   Broadcom Corporation

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

I went and pulled out the latest 802.3bx Section 6 draft to review if Figure 81-11 has any changes. I didn't see any. If that is the case, perhaps updating the editing directive to focus on paragraph text only?

SuggestedRemedy

As per comment.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Editing instruction to focus on text per comment.
See comment 51 for a more complete remedy

Cl **28**   *SC* **28.3**   *P* **23**   *L* **6**   # 3

Hajduczenia, Marek   Bright House Networks

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

"Insert row in clause 28.3.1 as appropriate." should not reference "clause", we typically reference subclauses just by number

SuggestedRemedy

Strike "clause" in line 6

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment 409

Cl **28**   *SC* **28.3**   *P* **23**   *L* **6**   # 4

Hajduczenia, Marek   Bright House Networks

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

Editorial instruction should be more precise: "Insert row in clause 28.3.1 as appropriate."

SuggestedRemedy

Change to read: "Insert row in 28.3.1 under ."10GigT;"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment 409

Cl **28A**   *SC* **28A**   *P* **25**   *L* **1**   # 5

Hajduczenia, Marek   Bright House Networks

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

There are no chanegs in Annex 28A

SuggestedRemedy

Remove Annex 28A or implement changes required to support 40GBASE-T

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Remove Annex 28A (dup of comments 138, 375, 248, 260, 263)

Cl **28C**   *SC* **28C.11**   *P* **27**   *L* **21**   # 7

Hajduczenia, Marek   Bright House Networks

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

Unnecessary serial comma in "Clause 55 (10GBASE-T), and Clause 113"

SuggestedRemedy

Remove serial comma in "Clause 55 (10GBASE-T), and Clause 113"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **30**   *SC* **30.2.5**   *P* **29**   *L* **13**   # 70

Marris, Arthur   Cadence

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

Column heading not completely vusuble

SuggestedRemedy

Correct:
10G/40GBASE-T Operating Margin package (condi-

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 35 of 94
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SORT ORDER: Topic

Cl **28C**   *SC* **28C.11**   *P* **27**   *L* **22**   # **8**
Hajduczenia, Marek   Bright House Networks

Comment Type **E**   *Comment Status* **D**   *EZ*
Missing serial comma in "40GBASE-T, 10GBASE-T and 1000BASE-T"

SuggestedRemedy
Change "40GBASE-T, 10GBASE-T and 1000BASE-T" to "40GBASE-T, 10GBASE-T>>,<< and 1000BASE-T"

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Dup of 142

Cl **45**   *SC* **45.2.7**   *P* **47**   *L* **43**   # **26**
Hajduczenia, Marek   Bright House Networks

Comment Type **E**   *Comment Status* **D**   *EZ*
Register 7.32 in Table 45–200 seems to have multiple subclause references "45.2.7.1045. 2.7.1045.2.7.
10"
which are repeated entries for "45.2.7.10"

SuggestedRemedy
Replace existing subclause reference with "45.2.7.10" marked in black and make it live.

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

Cl **28D**   *SC* **28D.8**   *P* **28**   *L* **10**   # **69**
Marris, Arthur   Cadence

Comment Type **E**   *Comment Status* **D**   *EZ*
Missing space

SuggestedRemedy
28D.8 Extensions required for Clause 113 (40GBASE-T)

rather than:
28D.8Extensions required for Clause 113 (40GBASE-T)

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Dup of 262

Cl **45**   *SC* **45.2.3.14.4**   *P* **47**   *L* **30**   # **25**
Hajduczenia, Marek   Bright House Networks

Comment Type **E**   *Comment Status* **D**   *EZ*
missing "for" in newly added text "and in 113.3.6.2 40GBASE-T"

SuggestedRemedy
Change "and in 113.3.6.2 40GBASE-T" to "and in 113.3.6.2 >>for<< 40GBASE-T"

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

Cl **45**   *SC* **45.2.1.7.5**   *P* **39**   *L* **10**   # **12**
Hajduczenia, Marek   Bright House Networks

Comment Type **E**   *Comment Status* **D**   *EZ*
Editorial instruction "Insert row in Table 45–10 as appropriate." is not precise enough.

SuggestedRemedy
Change editorial instruction to read: "Insert row in Table 45–10 under 40GBASE-FR entry"

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

Cl **45**   *SC* **45.2.1.8.1**   *P* **39**   *L* **25**   # **13**
Hajduczenia, Marek   Bright House Networks

Comment Type **E**   *Comment Status* **D**   *EZ*
Editorial instruction "Insert row in Table 45–12 as appropriate." is not precise enough.

SuggestedRemedy
Reconcile Change editorial instruction to read: "Insert row in Table 45–12 under 40GBASE-FR entry"

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

Cl **45**   *SC* **45.2.1.12**   *P* **39**   *L* **37**   # **14**
Hajduczenia, Marek   Bright House Networks

Comment Type **E**   *Comment Status* **D**   *EZ*
Editorial instruction in line 37 is not precise enough.

SuggestedRemedy
Change "Change and insert rows in Table 45–16 as appropriate." to "Change definition of bit 1.13.6 as shown below"

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

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 36 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:05 PM
SORT ORDER: Topic

Cl **45**   *SC* **45.2.1.12.10**   *P* **40**   *L* **3**   # 15

Hajduczenia, Marek   Bright House Networks

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

New subclause 45.2.1.12.10 should be marked as 45.2.1.12.9a and inserted after 45.2.1.12.9 that exists today. Renumbering is done later on by the staff editor when documents are merged.

SuggestedRemedy

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment 477

Cl **45**   *SC* **45.2.1.64.1**   *P* **41**   *L* **13**   # 16

Hajduczenia, Marek   Bright House Networks

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

Missing space "are defined in 113.4.2.5and 113.4.5.1"

SuggestedRemedy

Change "are defined in 113.4.2.5and 113.4.5.1" to "are defined in 113.4.2.5>> <<and 113.4.5.1"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.2.3.7**   *P* **43**   *L* **49**   # 18

Hajduczenia, Marek   Bright House Networks

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

Eitorial instruction "Change row and insert row in Table 45–124 as appropriate." is not precise enough

SuggestedRemedy

Change "Change row and insert row in Table 45–124 as appropriate." to read "Change definition of bits 3.8.9:7 in Table 45-124 as show below"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.2.3.7.6**   *P* **44**   *L* **12**   # 19

Hajduczenia, Marek   Bright House Networks

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

New subclause 45.2.3.7.6 should be marked as 45.2.3.7.5a and inserted after 45.2.3.7.5 that exists today. Renumbering is done later on by the staff editor when documents are merged.

SuggestedRemedy

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.2.3.9**   *P* **44**   *L* **20**   # 20

Hajduczenia, Marek   Bright House Networks

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

Eitorial instruction "Change rows in Table 45–125 as appropriate." is not precise enough

SuggestedRemedy

Change "Change rows in Table 45–125 as appropriate." to read "Change definition of bit 3.20.7 in Table 45-125 as shown below"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.2.3.9.8**   *P* **44**   *L* **35**   # 21

Hajduczenia, Marek   Bright House Networks

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

New subclause 45.2.3.9.8 should be marked as 45.2.3.9.7a and inserted after 45.2.3.9.7 that exists today. Renumbering is done later on by the staff editor when documents are merged.

SuggestedRemedy

Update the editorial instruction accordingly.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 37 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:05 PM
SORT ORDER: Topic

Cl **81** *SC* **81.3.4.2** *P* **67** *L* **48** # 51

Hajduczenia, Marek · Bright House Networks

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

Text on page 67 ,lines 49-53 has not been modifed and should not be shown.

SuggestedRemedy

Remove text n page 67, lines 49-53
Show changes in Figure 81–11 in red.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **28D** *SC* **28D.8** *P* **28** *L* **24** # 9

Hajduczenia, Marek · Bright House Networks

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

Reference to 45.2.7 and 28.3.1 should be made live and not marked in green.

SuggestedRemedy

Make links to 45.2.7 and 28.3.1 live, and make sure they are marked in black.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **45** *SC* **45.2.3.14.3** *P* **47** *L* **16** # 108

Cibula, Peter · Intel Corporation

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

Punctuation - The title of the subclause is missing a space.

SuggestedRemedy

Change "45.2.3.14.3 BER(3.33.13:8)" to "45.2.3.14.3 BER (3.33.13:8)", inserting a space between "BER" and "(3.33.13:8)"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **113** *SC* **113.5.4.6.9** *P* **166** *L* **18** # 472

DiMinico, Christopher · MC Communications

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

Change variable name El to ACRF to align with parameter name

SuggestedRemedy

Change variable name El to ACRF and in equation 113-21

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **113** *SC* **113.7.2.4.6** *P* **178** *L* **47** # 473

DiMinico, Christopher · MC Communications

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

subclause heading incorrect

SuggestedRemedy

Change: 113.7.2.4.6 Multiple disturber power sum equal level far-end crosstalk (PS ACRF)
To:113.7.2.4.6 Multiple disturber power sum attenuation to crosstalk ratio, far-end (PS-ACRF)

Proposed Response *Response Status* **W**

PROPOSED ACCEPT. Dup of 411

Cl **99** *SC* **0** *P* **1** *L* **29** # 474

Thompson, Geoff · GraCaSI S.A.

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

The text "[review/balloting stage]" is intended to be edited for each draft to actually indicate what the use is of this particular draft.

SuggestedRemedy

"[review/balloting stage]" to read: "Working Group 1st recirculation." for the next draft.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT. Dup of comments 405, 252, 208

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

Marris, Arthur · Cadence

Comment Type **TR** *Comment Status* **D** *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."

Proposed Response *Response Status* **W**

PROPOSED 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

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic

Topic **EZ**

Page 38 of 94
4/29/2015 2:42:05 PM

Cl **113** *SC* **113.1**   *P* **71**   *L* **13** # 64

Marris, Arthur   Cadence

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

100ohm

SuggestedRemedy

Use correct format for "100ohm"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comments 123 & 385

Cl **45** *SC* **45.2.7.11.10**   *P* **50**   *L* **16** # 184

Anslow, Pete   Ciena

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

Because of the large number of simultaneous amendments being done to 802.3 at any one time
re-numbering clauses is a bad idea.
"55.4.2.5.15" should be in forest green.

SuggestedRemedy

Leave the numbering of 45.2.7.11.8 as it is.
Change the editing instruction to:
"Change the title and text of 45.2.7.11.8 as follows:"
Apply character tag "External" to "55.4.2.5.15"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comments 353, 31, 33

Cl **45** *SC* **45.2.7.14**   *P* **51**   *L* **24** # 188

Anslow, Pete   Ciena

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

Table 45-211 is in 45.2.7.14 but this heading is missing.
The editing instruction for Table 45-210 is unclear.
When "Reserved" is deleted, the Name column will be blank.
The text in the reserved row has been changed in 802.3bx D3.0
"28.2.3.4.128" does not exist
Footnote a should be "RO = Read only"

SuggestedRemedy

Add a heading for 45.2.7.14.
Change the editing instruction to:
"Change the row for 7.61.9 in Table 45–211 as follows (unchanged rows not shown):"
Add "40GBASE-T EEE" to the Name column
Delete ", writes ignored" in strikethrough font from the reserved row.
Correct the cross-reference to Clause 28
Change footnote a to "RO = Read only"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113** *SC* **113.3.6.2.2**   *P* **117**   *L* **31** # 481

Zhang, Jin   Marvell

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

The indentation for fr_sigtype does not match other variables.

SuggestedRemedy

Indent fr_sigtype and its definition as per the other variables.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 296 for more detailed remedy

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Cl **45** *SC* **45.2.3.9**   *P* **44**   *L* **18** # 100

McClellan, Brett   Marvell

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

extra period before EEE

SuggestedRemedy

delete extra period before EEE

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 39 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:05 PM
SORT ORDER: Topic

Cl **81**　　*SC* **81.3.4**　　　　*P* **66**　　*L* **6**　　　# 49

Hajduczenia, Marek　　　　　　　Bright House Networks

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

Editorial instruction imprecise: "Change 81.3.4 add Link Interruption Sequence ordered_set definition:"

SuggestedRemedy

Change "Change 81.3.4 add Link Interruption Sequence ordered_set definition:" to "Insert a new pagaraph after paragraph number 4 in 81.3.4, as shown below."

Insert a new editorial instruction above Table 81–5 as follows: "Change Table 81-5 by adding a new row for Link Interruption, as shown below."

Remove teh rest of text from 81.3.4.

Proposed Response　　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **78**　　*SC* **78.1**　　　　*P* **57**　　*L* **9**　　　# 104

McClellan, Brett　　　　　　　Marvell

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

missing space after 'the'

SuggestedRemedy

add missing space after 'the'

Proposed Response　　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 41

Cl **113**　　*SC* **113.5.4.6.14**　　*P* **167**　　*L* **12**　　　# 469

DiMinico, Christopher　　　　　　MC Communications

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

Correct text: Change PSANEXT to PSAACRF

SuggestedRemedy

Replace PSANEXT with PSAACRF in sentetnce: When the computed PSAACRF value at a certain frequency exceeds 75 dB, the PSANEXT result at that frequency is for information only.

Proposed Response　　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **113**　　*SC* **113.7.2**　　　　*P* **122**　　*L* **0**　　　# 72

Slavick, Jeff　　　　　　　Avago Technologies

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

Figure 113-16 has variable lfer_timer_done and lfer_time_not_done neither of these are defined.

SuggestedRemedy

Add to the following to the lfer_timer definition:
When the timer reaches it's terminal count it will set lfer_timer_done = TRUE

Change the lfer_timer_not_done to !lfer_timer_done in the Figure

Proposed Response　　　　*Response Status* **W**

PROPOSED ACCEPT.
Same defect exists in Clause 55 for 125us_timer states. Commenter is encouraged to consider maintenance or comments on revision for Clause 55

Cl **45**　　*SC* **45.2.3.9**　　　　*P* **44**　　*L* **18**　　　# 111

Cibula, Peter　　　　　　　Intel Corporation

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

Punctuation - There is a stray period/full stop in the subclause title.

SuggestedRemedy

Change "45.2.3.9 .EEE control and capability (Register 3.20)" to "45.2.3.9 EEE control and capability (Register 3.20)", removing the period before EEE.

Proposed Response　　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **45**　　*SC* **45.2.1.7**　　　　*P* **37**　　*L* **52**　　　# 152

Anslow, Pete　　　　　　　Ciena

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

The title of 45.2.1.7 starts with a "."
Same issue for 45.2.1.8 and 45.2.3.9
(from the autonumber format?)

SuggestedRemedy

Remove the spurious "." from the titles of 45.2.1.7, 45.2.1.8, and 45.2.3.9

Proposed Response　　　　*Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general　　　　*Topic* **EZ**　　Page 40 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn　　　　4/29/2015 2:42:05 PM
SORT ORDER: Topic

Cl **30**   *SC* **30.3.2.1.2**   *P* **31**   *L* **47**   # 267
Healey, Adam   Avago Technologies

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

Use paragraph style consistent with IEEE P802.3/D3.0 for all attributes changed in this clause.

SuggestedRemedy

Contact the Editor-in-Chief of IEEE P802.3 (IEEE 802.3bx) for the paragraph style information and reformat accordingly.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.2.1.7**   *P* **37**   *L* **52**   # 268
Healey, Adam   Avago Technologies

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

Superfluous "." in the heading. Similar issue for 45.2.1.8 (p39/l21).

SuggestedRemedy

Remove extra ".".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.1.1**   *P* **71**   *L* **40**   # 269
Healey, Adam   Avago Technologies

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

Clause 28 and 78 are amended by this draft and hence are not external cross-references.

SuggestedRemedy

Point the "Clause 28" and "Clause 78" text to the appropriate cross-reference markers.

This occurs several other times throughout the draft (other examples include but are not limited to 113.1, 113.1.3, 113.1.3.1, 113.2, 113.2.1, 113.2.1.2). It is suggested that the external cross-references in the draft be checked and updated as appropriate.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.3.2.2.16**   *P* **98**   *L* **51**   # 270
Healey, Adam   Avago Technologies

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

Red font appears in "65-bit".

SuggestedRemedy

Revert to default font color (black).

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **78**   *SC* **78.1.4**   *P* **58**   *L* **35**   # 271
Healey, Adam   Avago Technologies

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

Per IEEE P802.3/D3.0, the title of Table 78-1 is "Clauses associated with each PHY or interface type" and the heading of the first column is "PHY or interface type". The font of the inserted body row should be changed to match to table it will be added to.

SuggestedRemedy

Update the table per the comment.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment 195 for a more complete response

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Cl **78**   *SC* **78.2**   *P* **58**   *L* **44**   # 272
Healey, Adam   Avago Technologies

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

Per IEEE P802.3/D3.0, the title of Table 78-2 is "Summary of the key EEE parameters for supported PHYs or interfaces" and the heading of the first column is "PHY or interface type". The font of the inserted body rows should be changed to match to table it will be added to.

SuggestedRemedy

Update the table per the comment.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment 195 for a more complete response

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TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 41 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:05 PM
SORT ORDER: Topic

Cl **113**   *SC* **113.1**   *P* **71**   *L* **16**   # 274

Hidaka, Yasuo   Fujitsu Laboratories of

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

The phrase "the type 40GBASE-T PCS, 40GBASE-T PMA, type 40GBASE-T PMD sublayer" is redundant.

SuggestedRemedy

Change "the type 40GBASE-T PCS, 40GBASE-T PMA, type 40GBASE-T PMD sublayer" on line 16 with "the type 40GBASE-T PCS, PMA, and PMD sublayer".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change as commenter describes, except "sublayer" should be "sublayers", per comment 361.
Delete reference to PMD per comment 347 if it is accepted.

Cl **45**   *SC* **45.2.7.13**   *P* **50**   *L* **29**   # 101

McClellan, Brett   Marvell

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

extra period before 'This'

SuggestedRemedy

delete extra period before 'This'

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Dup of comments 34, 185

Cl **113**   *SC* **113.12.2**   *P* **187**   *L* **37**   # 98

McClellan, Brett   Marvell

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

Loop timing is required, not an option. There is no need to list loop timing under Major capabilities/options. Also several PIC line items need to be corrected.

SuggestedRemedy

delete row "*LT Support of loop timing"

page 155 line 16
loop timing is required
delete "(if loop timing is supported)"
page 159 line 16
delete "For a PHY that can operate in loop timing mode,"
page 172 line 40
delete "and both devices have the same loop timing support,"
page 173 line 15
delete "and identical loop timing support"
page 193 line 21
delete rows containing MF9 and MF10
page 194 line 43
delete "Applicable only if loop timing is supported"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **81**   *SC* **81.3.4.2**   *P* **68**   *L* **36**   # 52

Hajduczenia, Marek   Bright House Networks

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

Editorial instruction is missing for text pn page 68

SuggestedRemedy

Insert the following editorial instruction on page 68, line 35: "Change second and third paragraph in 81.3.4.2, as shown below."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 42 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:05 PM
SORT ORDER: Topic

Cl **99**	*SC* **99**	*P* **6**	*L* **14**	#	53

Hajduczenia, Marek   Bright House Networks

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

Name of Chair and Chief Editor for the project are known I assume?

SuggestedRemedy

Fill in the names for the Chair and Chief Editor for the project

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Dup of comments 211, 227, 406

Cl **A**	*SC* **A**	*P* **21**	*L* **1**	#	54

Hajduczenia, Marek   Bright House Networks

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

There is no reason to have Annex A if there are not entries

SuggestedRemedy

Remove Annex A - there is no content.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Dup of comments 232, 256, 213, 373.
See comment 256

Cl **81**	*SC* **81.1.7.3**	*P* **65**	*L* **48**	#	58

McDermott, Thomas   Fujitsu

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

Double negative text is confusing.

SuggestedRemedy

Recommend revising to :

40 Gb/s and 100 Gb/s operation supports full duplex operation only. The RS never generates this primitive for PHYs unless they support either EEE or Link Interruption. ...

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **78**	*SC* **78.1.3.3.1**	*P* **57**	*L* **34**	#	59

Marris, Arthur   Cadence

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

Fix cross reference

SuggestedRemedy

Delete "<XREF>" and elsewhere in the document

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comments 74, 194.
Editor to search pdf for remaining XREFS after implementing fix.

Cl **45**	*SC* **45.2.1.62.1**	*P* **40**	*L* **26**	#	60

Marris, Arthur   Cadence

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

Editing instruction is wrong as only the table's title has ben changed.

SuggestedRemedy

Change
Change title and rows and insert row in Table 45–54 as appropriate.
To
Change title of Table 45–54 as follows.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

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

Marris, Arthur   Cadence

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

No editing instruction for Figure 80.1

SuggestedRemedy

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

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Dup of comment 381

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 43 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:05 PM
SORT ORDER: Topic

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

Marris, Arthur   Cadence

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

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT.

Cl **81**   *SC* **81.1.7.3**   *P* **65**   *L* **49**   # 63

Marris, Arthur   Cadence

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

Text should be reworded for clarity and there is an extra full stop.

SuggestedRemedy

Change
"The RS never generates this primitive for PHYs that do not support either EEE or Link
Interruption.."
To
"The RS never generates this primitive for PHYs that support neither EEE nor Link Interruption."

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 58

Cl **45**   *SC* **45.2.1**   *P* **37**   *L* **11**   # 90

Mark, Laubach   Broadcom Corporation

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

"as appropriate" does not give explicit instructions to the IEEE editors.

SuggestedRemedy

Replace all uses of "as appropriate" in this clause with explicit instruction to the IEEE editors.

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.7.3.2.1**   *P* **180**   *L* **30**   # 471

DiMinico, Christopher   MC Communications

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

Change variable name EI to AACRF to align with parameter name

SuggestedRemedy

Change variable name EI to AACRF and in equation 113-42

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.1.3**   *P* **72**   *L* **42**   # 67

Marris, Arthur   Cadence

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

Change "10000 Mb/s" to "10 Gb/s"

SuggestedRemedy

Change "10000 Mb/s" to "10 Gb/s"

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT. Dup of comment 362

Cl **113**   *SC* **113.7.2.4.5**   *P* **178**   *L* **28**   # 470

DiMinico, Christopher   MC Communications

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

Change variable name EI to ACRF to align with parameter name

SuggestedRemedy

Change variable name EI to ACRF and in equation 113-38

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.2.1.8**   *P* **39**   *L* **21**   # 99

McClellan, Brett   Marvell

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

extra period before 'PMD'

SuggestedRemedy

remove extra period before 'PMD'

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 44 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:06 PM
SORT ORDER: Topic

Cl **99**   *SC* **0**   *P* **3**   *L* **1**   # 449
Frazier, Howard   Broadcom Corporation

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

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

Cl **99**   *SC* **0**   *P* **3**   *L* **13**   # 450
Frazier, Howard   Broadcom Corporation

Comment Type   **ER**   *Comment Status* **D**   *EZ*
Missing title of amendment.

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

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

Cl **99**   *SC* **0**   *P* **18**   *L* **28**   # 451
Frazier, Howard   Broadcom Corporation

Comment Type   **E**   *Comment Status* **D**   *EZ*
Missing space between subclause number and subclause heading in table of contents at line 28 and below on this page.

SuggestedRemedy
Insert space.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. See comment 255

Cl **00**   *SC* **0**   *P* **25**   *L* **54**   # 453
Frazier, Howard   Broadcom Corporation

Comment Type   **ER**   *Comment Status* **D**   *EZ*
Copyright year is incorrect.

SuggestedRemedy
Change to 2015.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. See comment 118

Cl **113**   *SC* **113.1.2**   *P* **72**   *L* **7**   # 66
Marris, Arthur   Cadence

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

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

Cl **78**   *SC* **78.1**   *P* **57**   *L* **8**   # 456
Frazier, Howard   Broadcom Corporation

Comment Type   **E**   *Comment Status* **D**   *EZ*
Missing space in "the10GBASE-T PHY".

SuggestedRemedy
Change to "the 10GBASE-T PHY".

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. See comment 41

Cl **99**   *SC* **99**   *P* **6**   *L* **1**   # 467
Law, David   HP

Comment Type   **E**   *Comment Status* **D**   *EZ*
Please include the working group balloter list supplied in the file <IEEE_P802d3bq_WG_names.pdf>.

SuggestedRemedy
See comment.

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

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 45 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:06 PM
SORT ORDER: Topic

Cl **113**   *SC* **113.5.4.6.5**   *P* **64**   *L* **27**   # 468

DiMinico, Christopher   MC Communications

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

Correct table 113-18 heading

SuggestedRemedy

Change: NEXT loss TO: MDNEXT loss

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.1**   *P* **71**   *L* **17**   # 275

Hidaka, Yasuo   Fujitsu Laboratories of

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

The "the" before "PMD sublayer" on line 17 is not needed.

SuggestedRemedy

Renive "the" before "PMD sublayer" on line 17.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Delete reference to PMD sublayer in entirety if 347 is accepted.

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

Marris, Arthur   Cadence

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

Proposed Response   *Response Status* **W**

PROPOSED 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 **45**   *SC* **45.2.1.79.1**   *P* **42**   *L* **30**   # 420

Zimmerman, George   CME Consulting

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

Missing reference for fr_rx_counter and fr_tx_counter in 40GBASE-T, clause 113

SuggestedRemedy

insert after 55.4.5.1 references in both line 30 (45.2.1.79.1) and 38 (45.2.1.79.2): "for 10GBASE-T, and 113.4.5.4 for 40GBASE-T."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.8.2.2**   *P* **183**   *L* **31**   # 414

Zimmerman, George   CME Consulting

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

transmission condition is on the relationship, not on the frequency in MHz

SuggestedRemedy

Move "when the transmitter is transmitting random or pseudo random data." to line 21, so it reads "When the transmitter is transmitting random or pseudo random data, the common-mode-to-differential mode..... (eq 113-46) ... where f is the frequency in MHz. Test mode 5..."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.12.1.2**   *P* **187**   *L* **20**   # 308

Hidaka, Yasuo   Fujitsu Laboratories of

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

"Clause 98" should be "Clause 113".

SuggestedRemedy

Change "Clause 98" on line 20, page 187 with "Clause 113".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 46 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:06 PM
SORT ORDER: Topic

Cl **45**   *SC* **45.2.1.64.1**   *P* **41**   *L* **13**   # 430

Zimmerman, George   CME Consulting

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

missing space between 113.4.2.5 and "and"

SuggestedRemedy

insert space after "113.4.2.5"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **28C**   *SC* **28C.11**   *P* **27**   *L* **21**   # 310

Hidaka, Yasuo   Fujitsu Laboratories of

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

"Clause 55" is followed by "(10GBASE-T)", but "Clause 113" is not followed by "(40GBASE-

SuggestedRemedy

Insert "(40GBASE-T)" after "Clause 113".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Dup of comment 410

Cl **30**   *SC* **30.2.5**   *P* **29**   *L* **12**   # 311

Hidaka, Yasuo   Fujitsu Laboratories of

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

The updated cell in the header row of Table 30-1e which contains "10G/40GBASE-T Operating Margin package (condi-" is not big enough, and some texts are not visible.

Same problem in page 30 and 31.

SuggestedRemedy

Make the header row taller to include the whole text.

Apply same changes to page 30 and 31 as well.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.2.1**   *P* **37**   *L* **26**   # 312

Hidaka, Yasuo   Fujitsu Laboratories of

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

Subclause numbers 45.2.1.71 thru 45.2.1.83 for register 1.134 through 1.147 in Table 45-3 are not correct.

SuggestedRemedy

Change subclause numbers as follows:
Register subclause
1.134 45.2.1.67
1.135 45.2.1.68
1.136 45.2.1.69
1.137 45.2.1.70
1.138 45.2.1.71
1.139 45.2.1.72
1.140 45.2.1.73
1.141 45.2.1.74
1.142 45.2.1.75
1.143 45.2.1.76
1.144 45.2.1.77
1.145 through 1.146 45.2.1.78
1.147 45.2.1.79

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **30**   *SC* **30.5.1.1.24**   *P* **34**   *L* **29**   # 429

Zimmerman, George   CME Consulting

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

Missing reference to clause 113 40GBASE-T fast retrains, same issue on lines 29 (30.5.1.1.24) and 42 (30.5.1.1.25)

SuggestedRemedy

replace "and 55.4.5.1" with "55.4.5.1 and 113.4.5.4" in two places.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic

Topic **EZ**   Page 47 of 94
4/29/2015 2:42:06 PM

Cl **45**	*SC* **45.5.3.2**	*P* **52**	*L* **4**	*#* 189

Anslow, Pete · Ciena

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

Headings in 45.5 are missing and table heading rows are not shown

SuggestedRemedy

Add headings for:
45.5.3
45.5.3.2
45.5.3.6
45.5.3.7
45.5.3.9
Show the heading rows for the various tables.

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

PROPOSED ACCEPT.

Cl **30**	*SC* **30.5.1.1.19**	*P* **33**	*L* **28**	*#* 428

Zimmerman, George · CME Consulting

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

Text reads for the 10/40GBASE-T PMA, as though the PMA defined does both rates. Meaning should be 10GBASE-T or 40GBASE-T PMA. occurs in 30.5.1.1.19, 20, 21, 22.

SuggestedRemedy

Replace "10/40GBASE_T PMA" with "10G or 40GBASE-T PMA" in 4 places.

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

PROPOSED ACCEPT.

Cl **113**	*SC* **113.8.2.1**	*P* **183**	*L* **12**	*#* 306

Hidaka, Yasuo · Fujitsu Laboratories of

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

The range of f in equation (113-45) is not aligned.

SuggestedRemedy

Aligh the range of f in equation (113-45).

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

PROPOSED ACCEPT.

Cl **45**	*SC* **45.2.1.64.1**	*P* **41**	*L* **13**	*#* 315

Hidaka, Yasuo · Fujitsu Laboratories of

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

A white space is missing between "113.4.2.5" and "and".

SuggestedRemedy

Change "113.4.2.5and" with "113.4.2.5 and".

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

PROPOSED ACCEPT.

Cl **113**	*SC* **113.7.2.3**	*P* **175**	*L* **3**	*#* 305

Hidaka, Yasuo · Fujitsu Laboratories of

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

"10" of "log10" should be subscript.

SuggestedRemedy

Use subscript for "10" of "log10" in the following locations:

2 locations in equation (113-27), line 3, page 175
2 locations in equation (113-28), line 28, page 175
2 locations in equation (113-29), line 40, page 175
2 locations in equation (113-30), line 2, page 176
2 locations in equation (113-31), line 28, page 176
2 locations in equation (113-32), line 40, page 176
2 locations in equation (113-33), line 3, page 177
2 locations in equation (113-37), line 15, page 178
2 locations in equation (113-38), line 37, page 178

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

PROPOSED ACCEPT.

Cl **80**	*SC* **80.1.5**	*P* **62**	*L* **25**	*#* 336

Hidaka, Yasuo · Fujitsu Laboratories of

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

Vertical border line in the header row of Table 80-2 between columns 89 and 113 is thick.

SuggestedRemedy

Use thin line for the vertical border line in the header row of Table 80-2 between columns 89 and 113.

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

PROPOSED ACCEPT IN PRINCIPLE. See comment 201

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic

Topic **EZ**

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4/29/2015 2:42:06 PM

Cl **80**　　　*SC* **80.4**　　　　　*P* **63**　　　*L* **17**　　　# `337`
Hidaka, Yasuo　　　　　　Fujitsu Laboratories of

Comment Type **E**　　*Comment Status* **D**　　　　　*EZ*
Reference to 1.4.110 is updated in P802.3bx.

SuggestedRemedy
Change reference to "1.4.110" on line 17 with "1.4.117".

Proposed Response　　*Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. See comment 203 for a more complete remedy

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Cl **113**　　*SC* **113.6.2**　　　　*P* **172**　　　*L* **40**　　# `418`
Zimmerman, George　　　　　CME Consulting

Comment Type **E**　　*Comment Status* **D**　　　　　*EZ*
Loop timing support is mandatory in 40GBASE-T. "both devices have the same loop timing support" is text left over from 10GBASE-T.

SuggestedRemedy
Delete: "and both devices have the same loop timing support"

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

Cl **81**　　　*SC* **81.1.7.3**　　　　*P* **65**　　　*L* **52**　　# `339`
Hidaka, Yasuo　　　　　　Fujitsu Laboratories of

Comment Type **E**　　*Comment Status* **D**　　　　　*EZ*
Reference to Figure 81-10a is not correct.

SuggestedRemedy
Change reference to "Figure 81-10a" on line 52 with "Figure 81-13".

Proposed Response　　*Response Status* **W**
PROPOSED ACCEPT. See comment 205 for a more complete remedy

Cl **81**　　　*SC* **81.5.3.7**　　　　*P* **69**　　　*L* **5**　　# `340`
Hidaka, Yasuo　　　　　　Fujitsu Laboratories of

Comment Type **E**　　*Comment Status* **D**　　　　　*EZ*
The clause numbers on line 5 are not correct.

SuggestedRemedy
Change the description on line 5 as follows:

Insert the new subclause 81.5.3.7 for Link Interruption after 81.5.3.6

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

Cl **113**　　*SC* **113.3.2.2.16**　　*P* **98**　　　*L* **51**　　# `342`
Lusted, Kent　　　　　　Intel

Comment Type **E**　　*Comment Status* **D**　　　　　*EZ*
There is a red letter "5". I think it should be black text per the IEEE style guide.

SuggestedRemedy
Fix if necessary

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

Cl **113**　　*SC* **113.5.3.2**　　　　*P* **158**　　*L* **38**　　# `343`
Lusted, Kent　　　　　　Intel

Comment Type **E**　　*Comment Status* **D**　　　　　*EZ*
Title of 113.5.3.2 has a lower case first letter.

SuggestedRemedy
Change "transmitter nonlinear distortion" to "Transmitter nonlinear distortion"

Proposed Response　　*Response Status* **W**
PROPOSED ACCEPT. Dup of comment 416

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic

Topic **EZ**

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4/29/2015 2:42:06 PM

Cl **113**	*SC* **113.5.3.2**	*P* **158**	*L* **37**	#	416

Zimmerman, George   CME Consulting

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

missing capitalization in title

SuggestedRemedy

replace "transmitter" with "Transmitter"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT. Dup of comment 343

Cl **113**	*SC* **113.3.2.2.5**	*P* **94**	*L* **30**	#	281

Hidaka, Yasuo   Fujitsu Laboratories of

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

Lower left part of Figure 113-8 is blurred.

SuggestedRemedy

Use a higher resolution to import the lower left part of Figure 113-8.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Editor to redraw and generally clean up figure 113-8.
See comments 125 and 437

Cl **45**	*SC* **45.2.7.11.7**	*P* **49**	*L* **51**	#	182

Anslow, Pete   Ciena

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

Because of the large number of simultaneous amendments being done to 802.3 at any one time
re-numbering clauses is a bad idea.
"after 45.2.7.11.6" should be "after 45.2.7.11.7"
Also, the only editing instruction that uses underline or strikethrough font is "Change"

SuggestedRemedy

Change the editing instruction to:
"Insert 45.2.7.11.7a after 45.2.7.11.7 as follows:"
Remove the underline from the new subclause and change it to be 45.2.7.11.7a

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**	*SC* **113.3.2.2.21**	*P* **105**	*L* **24**	#	292

Hidaka, Yasuo   Fujitsu Laboratories of

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

A white space is missing between "output)" and "LDPC-coded bits" on line 24, page 105.

SuggestedRemedy

Add a white space between "output)" and "LDPC-coded bits" on line 24, page 105.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**	*SC* **113.3.2.2.16**	*P* **101**	*L* **1**	#	438

Zimmerman, George   CME Consulting

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

Clean up figure 113-10, removing visible edges of boxes.

SuggestedRemedy

Clean up figure.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**	*SC* **113.3.2.2.5**	*P* **94**	*L* **3**	#	437

Zimmerman, George   CME Consulting

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

Clean up format of figure 113-8, including aligning with text to show first encoding in 64/65b
frames, then 512/513b transcoding, aligning boxes and lines, and pointing to RS parity bits

SuggestedRemedy

Redraw figure with suggested corrections.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**	*SC* **113.3.2.2.16**	*P* **98**	*L* **38**	#	284

Hidaka, Yasuo   Fujitsu Laboratories of

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

There are eight 65-bit blocks.

SuggestedRemedy

Change "four 65-bit blocks" on line 38, page 98 with "eight 65-bit blocks".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 50 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:06 PM
SORT ORDER: Topic

Cl **113**   *SC* **113.3.2.2.16**   *P* **98**   *L* **41**   # 285
Hidaka, Yasuo   Fujitsu Laboratories of

Comment Type **T**   *Comment Status* **D**   *EZ*
"tx_coded<512:0>" on line 41 should be "tx_xcoded<512:0>".

SuggestedRemedy
Change "tx_coded<512:0>" on line 41, page 98 with "tx_xcoded<512:0>".

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

Cl **113**   *SC* **113.3.2.2.16**   *P* **100**   *L* **3**   # 286
Hidaka, Yasuo   Fujitsu Laboratories of

Comment Type **E**   *Comment Status* **D**   *EZ*
Header row is missing in Table 113-3 in page 100.
Texts are not at the center in Table 113-3 in page 100.

SuggestedRemedy
Add a header row to Table 113-3 in page 100.
Center the texts for both of left and right columsn of Table 113-3 in page 100.

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

Cl **113**   *SC* **113.3.2.2.16**   *P* **100**   *L* **17**   # 287
Hidaka, Yasuo   Fujitsu Laboratories of

Comment Type **E**   *Comment Status* **D**   *EZ*
")" is used where "}" should be used.

SuggestedRemedy
Change ")" in the following locations with "}":

Page 100, line 17
Page 100, line 31
Page 100, line 40

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

Cl **45**   *SC* **45.2.1.63**   *P* **40**   *L* **39**   # 314
Hidaka, Yasuo   Fujitsu Laboratories of

Comment Type **E**   *Comment Status* **D**   *EZ*
The text above title of 45.2.1.63 refers to 45.2.1.67.

SuggestedRemedy
Change the reference to "45.2.1.67" with a reference to "45.2.1.63".

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

Cl **113**   *SC* **113.3.2.2.18**   *P* **102**   *L* **43**   # 288
Hidaka, Yasuo   Fujitsu Laboratories of

Comment Type **E**   *Comment Status* **D**   *EZ*
A period "." is missing.

SuggestedRemedy
Add a period "." at the end of line 43, page 102.

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

Cl **45**   *SC* **45.5**   *P* **52**   *L* **14**   # 435
Zimmerman, George   CME Consulting

Comment Type **E**   *Comment Status* **D**   *EZ*
Missing references on AM61 and AM62

SuggestedRemedy
Insert cross references to 45.2.7.10, 10G/40GBASE-T AN control register.

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

Cl **113**   *SC* **113.8.2.2**   *P* **183**   *L* **25**   # 307
Hidaka, Yasuo   Fujitsu Laboratories of

Comment Type **E**   *Comment Status* **D**   *EZ*
The range of f in equation (113-46) is not aligned.

SuggestedRemedy
Aligh the range of f in equation (113-46).

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

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 51 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:06 PM
SORT ORDER: Topic

Cl **113**   *SC* **113.3.2.2.20**   *P* **103**   *L* **36**   # 291

Hidaka, Yasuo   Fujitsu Laboratories of

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

")" is used where ">" should be used.

SuggestedRemedy

Change "<(185-i)8 + j)" with "<(185-i)8 + j>".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.7.3.2.1**   *P* **181**   *L* **5**   # 412

Zimmerman, George   CME Consulting

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

Text says PSANEXT, but is obviously about PSAACRF.

SuggestedRemedy

Change, "the PSANEXT result at that frequency is for information only." with "the PSAACRF result at that frequency is for information only."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.2.7.11.7**   *P* **50**   *L* **3**   # 434

Zimmerman, George   CME Consulting

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

typo "in is"

SuggestedRemedy

delete "in"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 193

Cl **45**   *SC* **45.2.7.11**   *P* **49**   *L* **34**   # 433

Zimmerman, George   CME Consulting

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

typo - "in" shoiuld be "is"

SuggestedRemedy

change "40GBASE-T in contained" to "40GBASE-T is contained"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Dup of comment 180

Cl **45**   *SC* **45.2.3.14.3**   *P* **47**   *L* **19**   # 432

Zimmerman, George   CME Consulting

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

Missing reference to clause 113.

SuggestedRemedy

Change, "lfer_count variable in 55.3.6.2 for 10G/40GBASE-T." to "lfer_count variable in 55.3.6.2 for 10GBASE-T and in 113.3.6.2.2 for 40GBASE-T."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 366

Cl **113**   *SC* **113.3.2.3**   *P* **108**   *L* **9**   # 294

Hidaka, Yasuo   Fujitsu Laboratories of

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

The XLGMII and PMA sublayer data rate ratio should be 25:128.

SuggestedRemedy

Change "25:64" on line 9, page 108 with "25:128".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.3.6.2.2**   *P* **117**   *L* **31**   # 296

Hidaka, Yasuo   Fujitsu Laboratories of

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

Indentation is not correct for line 31 through line 38 in page 117.

SuggestedRemedy

Add the following indentation:

One level to line 31, page 117.
Two levels to line 33, page 117.
Three levels to line 35 through 38, page 117.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment 481

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic

Topic **EZ**

Page 52 of 94
4/29/2015 2:42:06 PM

Cl **113**	*SC* **113.3.7.2**	*P* **123**	*L* **19**	#	297

Hidaka, Yasuo   Fujitsu Laboratories of

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

Dashed lines in Figure 113-17 at the middle left and the bottom left are inconsistent with the bottom right and not clear.

SuggestedRemedy

Use the same dashed line at the middle left and the bottom left in Figure 113-17 ad the bottom right.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 367 for more complete remedy

Cl **113**	*SC* **113.4.2.5.6**	*P* **136**	*L* **5**	#	298

Hidaka, Yasuo   Fujitsu Laboratories of

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

The right most column of Table 113-10 is narrow to fit the header row in two lines.

SuggestedRemedy

Increase the width of the right most column of Table 113-10.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**	*SC* **45.2.3.13**	*P* **45**	*L* **10**	#	431

Zimmerman, George   CME Consulting

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

Table 45-128 description of bit 3.32.12 should insert new text before "PCS", not after.

SuggestedRemedy

Change "0 - BASE-R or 10GBASE-T PCS or 40GBASE-T receive..." to
""0 - BASE-R or 10GBASE-T or 40GBASE-T PCS receive..."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**	*SC* **113.5.4.6.1**	*P* **163**	*L* **2**	#	300

Hidaka, Yasuo   Fujitsu Laboratories of

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

The outer most "(" and ")" of equation (113-13) are not necessary.

SuggestedRemedy

Remove the outer most "(" and ")" of equation (113-13).

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**	*SC* **113.3.2.2.20**	*P* **103**	*L* **21**	#	290

Hidaka, Yasuo   Fujitsu Laboratories of

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

The coefficient g_6 of x^6 is missing in equation (113-3).

It is not necessary, because g_6 is always 1.

However, it is recommended to include for consistency with figure 113-12.

SuggestedRemedy

Add coefficient g_6 in front of x^6 in equation (113-3).

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

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

Remein, Duane   Huawei Technologies

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

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 53 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:07 PM
SORT ORDER: Topic

Cl **113**   *SC* **113.5.2**   *P* **155**   *L* **2**   # 415

Zimmerman, George   CME Consulting

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

Name of register 1.132 is incorrect relative to clause 45 register name

SuggestedRemedy

Change "(40GBASE-T Control Register)" to "(10G/40GBASE-T test mode register)"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.1.3.1**   *P* **76**   *L* **4**   # 364

Remein, Duane   Huawei Technologies

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

Clause 81 cross reference should be live (Cl 81 is included in the draft) and not forest green.
Same issue for pg 76 ln 44

SuggestedRemedy

Per Comment

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.1.4**   *P* **78**   *L* **49**   # 365

Remein, Duane   Huawei Technologies

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

Why are you using an indirect cross reference here.
"See the PCS reference diagram in 113.2."

SuggestedRemedy

Change to "see Figure 113–5"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.2.3.14.3**   *P* **47**   *L* **19**   # 366

Remein, Duane   Huawei Technologies

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

lfer_count is referred to as a variable. while it is defined as a counter a counter

The same issues appears in 45.2.3.14.4 pg 47 ln 29 for errored_block_count

SuggestedRemedy

change
"defined by the lfer_count variable"
to
"defined by counter lfer_count"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.3.7.2**   *P* **123**   *L* **17**   # 367

Remein, Duane   Huawei Technologies

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

Misc issues in Figure 113–17
1) There appear to be two different dashed boxes, I assume there only one is intended.
2) Transition from TX_C to TX_D does not connect to TX_C state.
3) Dashed line below TX_E (around T_TYPE(tx_raw)=LI) crosses state transition T_TYPE(tx_raw) = (E + S).

SuggestedRemedy

1) Use the same pen for all dashed boxes
2) Connect the line
3) omit the extended leg up from the dashed box (use a simple rectangle)
While not required it might be easier to read the transition states out of TX_E if the exit paths ran horizontally for a bit and conditions were all above the lines as is done for (T_TYPE(tx_raw) = LI) exiting TX_T state.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment 297

Cl **113**   *SC* **113.4.2.2**   *P* **129**   *L* **45**   # 369

Remein, Duane   Huawei Technologies

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

No reason this cannot be a live reference "45.2.1.7.4"

SuggestedRemedy

Make live and remove forest green

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 54 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:07 PM
SORT ORDER: Topic

Cl **113**	*SC* **113.3.5.3**	*P* **114**	*L* **39**	*#* 370

Remein, Duane   Huawei Technologies

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

Apparently October is a very important month for 40G Eth. (does it work during Nov-Sep too?) :-)
So I see 51 instance of this undefined abbreviation of Octet. Surely 102 characters won't break the bank and cause an overdraft of characters!

SuggestedRemedy

Change all 51 instance of "Oct" to Octet
There are a few instance of "octet Oct" (ex pg 134 ln 50, pg 134 Ln 17, 26, & 35) which could probably be shortened to Octet

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.
Commenter may consider this text is also in Clause 55 on revisions of 802.3

And thank you for the laugh after 100 comments on missing or double periods.

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

Remein, Duane   Huawei Technologies

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

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

SuggestedRemedy

Remove Annex A

Proposed Response   *Response Status* **W**

PROPOSED 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* **D**   *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.

Proposed Response   *Response Status* **W**

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

Cl **113**	*SC* **113.1**	*P* **71**	*L* **17**	*#* 361

Remein, Duane   Huawei Technologies

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

I believe these three things are plural
"Together, the PCS, PMA and the PMD sublayer"

SuggestedRemedy

Change "sublayer" to "sublayers"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment 274

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

Remein, Duane   Huawei Technologies

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

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **81**	*SC* **81.1**	*P* **65**	*L* **7**	*#* 360

Remein, Duane   Huawei Technologies

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

I believe this is a replacement not a change (no changes indicated in figure):
"Change Figure 81-1 as follows:"

SuggestedRemedy

Change Editing Instruction to: "Replace Figure 81-1 with the following:"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 204 for a more complete remedy

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 55 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:07 PM
SORT ORDER: Topic

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

Remein, Duane　　　　　　　　　Huawei Technologies

Comment Type　**ER**　　*Comment Status*　**D**　　　　　　　　*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."

Proposed Response　　　*Response Status*　**W**

PROPOSED ACCEPT.

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

Remein, Duane　　　　　　　　　Huawei Technologies

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

Proposed Response　　　*Response Status*　**W**

PROPOSED 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*　**D**　　　　　　　　*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)

Proposed Response　　　*Response Status*　**W**

PROPOSED ACCEPT.

Cl **45**　　　*SC* **45.2.1.7.4**　　　*P* **38**　　　*L* **52**　　　# 392

Remein, Duane　　　　　　　　　Huawei Technologies

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

Stray period in front of Editing Instruction:
".Insert row in Table 45–9 as appropriate."
 ^

SuggestedRemedy

Strike the errant period.

Proposed Response　　　*Response Status*　**W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general　　　　*Topic*　**EZ**　　　Page 56 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn　　　4/29/2015 2:42:07 PM
SORT ORDER: Topic

Cl **45**	*SC* **45.2.1.63**		*P* **40**		*L* **39**		#	393

Remein, Duane   Huawei Technologies

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

Editing Instruction and header number disagree:
"Change title 45.2.1.67 to include 40GBASE-T.
45.2.1.63 10G/40GBASE-T pair swap and polarity register (Register 1.130)"

SuggestedRemedy

Change 45.2.1.67 to 45.2.1.63

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**	*SC* **45.2.3.7**		*P* **43**		*L* **38**		#	394

Remein, Duane   Huawei Technologies

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

Change marking in Table 45-123 indicate that the "2 1 0" at top of description are being added (they are underlined). This is not the case.

SuggestedRemedy

Remove underlining of the "2 1 0" header.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**	*SC* **45.2.3.7.6**		*P* **44**		*L* **10**		#	395

Remein, Duane   Huawei Technologies

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

An inserted subclause after 45.2.3.7.5 should be designated 45.2.3.7.5a not 45.2.3.7.6 per template.
Inserted text should not be underlined.

SuggestedRemedy

Change to 45.2.3.7.5a in header and Editing Instruction.
Remove underline

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**	*SC* **45.2.3.9**		*P* **44**		*L* **17**		#	396

Remein, Duane   Huawei Technologies

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

Errant period:
"45.2.3.9 .EEE ..."
        ^

Also you are not changing rows but a row

SuggestedRemedy

Remove period
Change Editing Instruction to "Change row in ..."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**	*SC* **113.1.3**		*P* **75**		*L* **45**		#	398

Remein, Duane   Huawei Technologies

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

In Figure 113-3 Note 1 refers to a "recovered_clock arc". Is this synonymous with the recovered_clock signal?

SuggestedRemedy

Change "recovered_clock arc" to "recovered_clock signal"

Proposed Response   *Response Status* **W**

PROPOSED REJECT. The meaning may be interpreted as same, but arc properly indicates the line on the diagram, whereas signal connotes electrical properties.

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

Remein, Duane   Huawei Technologies

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

Proposed Response   *Response Status* **W**

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

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 57 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:07 PM
SORT ORDER: Topic

Cl **45**   *SC* **45.2.7**   *P* **47**   *L* **37**   # 351

Remein, Duane   Huawei Technologies

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

The title of the table does not appear to be changed:
"Change title and rows in Table 45–200 as appropriate."

There appear to be several references in the table to 45.2.7.10

SuggestedRemedy

Change to read:
"Change rows in Table 45–200 as shown."
Remove excess references.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.7.2.4.5**   *P* **178**   *L* **47**   # 411

Zimmerman, George   CME Consulting

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

title is incorrect relative to abbreviation and content

SuggestedRemedy

Change "Multiple disturber power sum equal level far-end-crosstalk (PS ACRF)" to "Multiple disturber power sum attenuation to crosstalk ratio, far-end (PS ACRF)"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Dup of 473

Cl **28C**   *SC* **28C.11**   *P* **27**   *L* **21**   # 410

Zimmerman, George   CME Consulting

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

Missing reference to 40GBASE-T by name

SuggestedRemedy

Insert "(40GBASE-T)" after "Clause 113".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Dup of comment 310

Cl **00**   *SC* **0**   *P* **23**   *L* **13**   # 409

Zimmerman, George   CME Consulting

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

Replace "as appropriate" with direct reference
Consider comment generic to editing instructions on the draft

SuggestedRemedy

Replace "as appropriate" by reference to where row or text is inserted

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Editor to review draft and replace 'as appropriate' with specific references and instructions.

Cl **28**   *SC* **28.3.1**   *P* **23**   *L* **5**   # 408

Zimmerman, George   CME Consulting

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

indicate where to insert row

SuggestedRemedy

replace "as appropriate" with "following row for 10GigT"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment 409.

Cl **81**   *SC* **81.1**   *P* **65**   *L* **10**   # 346

Lusted, Kent   Intel

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

It isn't clear from the editing instructions on line 7 as to what is changing in the figure.

The figure does not contain any underlined text, strikeouts, etc.

Furthermore, when compared to Figure 81-1 in P802.3bx Draft 3.0, much of the text between the figure and the figure title is missing (i.e. NOTE 1, XLGMII, etc)

SuggestedRemedy

Clarify editing instructions and add align missing text with Figure 81-1 from P802.3bx D3.0.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 62

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 58 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:07 PM
SORT ORDER: Topic

Cl **01**   *SC* **1.4**   *P* **20**   *L* **26**   # 407

Zimmerman, George   CME Consulting

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

Editors notes on lines 26 and 35 should be marked as being removed prior to publication

SuggestedRemedy

insert "(to be removed prior to publication)" after "Editor's Note" on lines 26 & 35.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **99**   *SC* **1**   *P* **6**   *L* **13**   # 406

Zimmerman, George   CME Consulting

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

Missing task force chair and task force editor in chief and designation of task force

SuggestedRemedy

Replace "FirstName SecondName IEEE P802.3xx" with:
"David Chalupsky IEEE P802.3bq" as Task Force Chair
"George Zimmerman IEEE P802.3bq" as Task Force Editor-in-Chief

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Dup of comments 53, 211, 227

Cl **113**   *SC* **113**   *P* **71**   *L* **1**   # 347

Lusted, Kent   Intel

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

The title "Physical Coding Sublayer (PCS), Physical Medium Attachment (PMA) sublayer, Physical Medium Dependent (PMD) sublayer, and baseband medium, type 40GBASE-T" states that a PMD sublayer is present in the 40GBASE-T PHY.

However, no PMD is listed in the architectural diagram nor specified in the text of Clause 113.

Clause 55 title does not use PMD nor it PMD defined in the Clause 55 text

SuggestedRemedy

Suggest updating the title to align with clause 55. Something like "Physical Coding Sublayer (PCS), Physical Medium Attachment (PMA) sublayer and baseband medium, type 40GBASE-T".

Also remove PMD reference in first and second paragraph of Cl 113.1

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.2.3.9.8**   *P* **44**   *L* **35**   # 348

Remein, Duane   Huawei Technologies

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

Should be 45.2.3.9.7a not 45.2.3.9.8 in both header and Editing Instruction.

SuggestedRemedy

per comment

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.1.3**   *P* **72**   *L* **42**   # 362

Remein, Duane   Huawei Technologies

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

Is there some good reason to use 10000 Mb/s here rather than 10 Gb/s? It would certainly make the sentence more readable.

SuggestedRemedy

change 10000 Mb/s to 10 Gb/s

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Dup of comment 67

Cl **45**   *SC* **45.2.3.14**   *P* **46**   *L* **22**   # 350

Remein, Duane   Huawei Technologies

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

Title for Table 45-129 does not appear to have change marking (may just be a frame issue but should be fixed)

SuggestedRemedy

Show mark-up in title.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic

Topic **EZ**   Page 59 of 94
4/29/2015 2:42:07 PM

Cl **80**   *SC* **80.1.3**   *P* **61**   *L* **10**   # 436

Zimmerman, George   CME Consulting

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

Missing editing instruction

SuggestedRemedy

Insert editing instruction prior to Figure 80-1:
Change Figure 80-1 as follows:

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 381

Cl **45**   *SC* **45.2.7.11**   *P* **49**   *L* **6**   # 352

Remein, Duane   Huawei Technologies

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

Stray period.
".Change title and rows in Table 45–208 as appropriate."
 ^

SuggestedRemedy

strike.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 30 for more complete response.

Cl **45**   *SC* **45.2.7.11.6**   *P* **50**   *L* **1**   # 353

Remein, Duane   Huawei Technologies

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

Inserted para numbering incorrect
"Insert new paragraph after 45.2.7.11.6 ..."
"45.2.7.11.7 Link partner 40GBASE-T capability (7.33.8)"
Also:
"45.2.7.11.9 40GBASE-T Fast retrain ability (7.33.0)"
"45.2.7.11.10 10GBASE-T Fast retrain ability (7.33.1)"

SuggestedRemedy

Change 45.2.7.11.7 to 45.2.7.11.6a
Change 45.2.7.11.9 to 45.2.7.11.7a
Change 45.2.7.11.10 to 45.2.7.11.7b

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comments 31, 33, 184

Cl **45**   *SC* **45.2.7.13**   *P* **51**   *L* **1**   # 354

Remein, Duane   Huawei Technologies

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

Only changing one row and excessive use of periods
"Change rows in Table 45–210 as appropriate.."
         ^^

SuggestedRemedy

Change to "Change row in Table 45–210 as appropriate."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 186

Cl **45**   *SC* **45.2.7.13.10**   *P* **51**   *L* **16**   # 355

Remein, Duane   Huawei Technologies

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

Incorrect inserted para number:
"Insert new paragraph after 45.2.7.13.9 and re-number remaining clauses accordingly.
45.2.7.13.10 40GBASE-T EEE supported (7.60.9)"
Excessive use of underlined (not needed for inserts)

SuggestedRemedy

Change 45.2.7.13.9 to 45.2.7.13.4 in Editing Instruction
Change 45.2.7.13.10 to 45.2.7.13.4a in header
Remove underlining

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.2.7.13.10**   *P* **51**   *L* **23**   # 356

Remein, Duane   Huawei Technologies

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

Only changing one row:
"Change rows in Table 45–211 ..."

SuggestedRemedy

Change rows to row

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 188

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 60 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:07 PM
SORT ORDER: Topic

Cl **99**   *SC* **1**   *P* **1**   *L* **29**   # 405

Zimmerman, George   CME Consulting

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

front matter is missing balloting stage text

SuggestedRemedy

Replace "[review/balloting stage]" by "Working Group ballot"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Dup of comments 252, 474, 208

Cl **45**   *SC* **45.5**   *P* **52**   *L* **4**   # 357

Remein, Duane   Huawei Technologies

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

More rows of "rows" that should be rows or "row"
Pg ln
52 4
52 13
53 1

Isn't editing Cl 45 a pain? This too shall pass :-)

SuggestedRemedy

per comment

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **78**   *SC* **78.1.3.3.1**   *P* **57**   *L* **11**   # 358

Remein, Duane   Huawei Technologies

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

No need to include text that is not changing:
"Change text in clause 78.1.3.3.1 as follows:"
There are also thee stray "<XREF>" marks in this section (ln 34, 51 & pg 58 ln 2).

SuggestedRemedy

Change to read:
"Change 7th paragraph in clause 78.1.3.3.1 as follows:"
Remove the first 6 paras: "When the start of "Assert LPI" encoding on the xMII is detected, ...
No data frames are lost or corrupted during the transition to or from the LPI mode."
Remove stray "<XREF>"s
Remove unchanged Figure 78–4 and WARNING following.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **80**   *SC* **80.1.5**   *P* **62**   *L* **50**   # 359

Remein, Duane   Huawei Technologies

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

Excessive use of forest green text "Table 80-2"

SuggestedRemedy

change color to black

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 202 for a more complete remedy
Apologies from a red-green colorblind editor.

Cl **45**   *SC* **45.2.3.13**   *P* **44**   *L* **39**   # 349

Remein, Duane   Huawei Technologies

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

Editing Instructions should be consistent:
"Change paragraph of 45.2.3.13 ..."

Same issue in 45.2.3.13.1, 45.2.3.13.4, 45.2.3.13.5, & 45.2.3.14

SuggestedRemedy

Change to read:
"Change title and paragraph of 45.2.3.13 ..."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 61 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:07 PM
SORT ORDER: Topic

Cl **113**   *SC* **113.7.2.3**   *P* **175**   *L*   *#* 220

Shariff, Masood   CommScope

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

Duplicate specifications at 10, 100, 1000 MHz because of using the <= sign for the upper frequencies in the ranges

SuggestedRemedy

Replace <= at these upper frequencies in the ranges with < in equatin 113-27

Also update equation 113-27 to use the latest TIA-568-C.2-1 draft 3.1 RL equations for consitency with equations other paramters.

19.0	$1 <= f < 10$
24-5log(f)	$10 <= f < 40$
16.0	$40 <= f < 130$
35-9log(f)	$130 <= f < 1000$
8 dB	$1000 <= f <= 2000$

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **00**   *SC* **0**   *P* **4**   *L* **19**   *#* 254

Grow, Robert   RMG Consulting

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

Might want to add an editors note here for the publication editor to insert descriptions of any other amendments approved before or at the same SASB meeting (take text from the approved amendment front matter).

SuggestedRemedy

See comment.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **01**   *SC* **1.5**   *P* **20**   *L* **38**   *#* 231

Booth, Brad   Microsoft

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

No abbreviations listed.

SuggestedRemedy

Remove 1.5.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 121

Cl **A**   *SC* **A**   *P* **21**   *L* **1**   *#* 232

Booth, Brad   Microsoft

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

No bibliography

SuggestedRemedy

Remove Annex A

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Dup of comments 54, 256, 213, 373. See comment 256

Cl **78**   *SC* **78.1**   *P* **57**   *L* **9**   *#* 233

Booth, Brad   Microsoft

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

Missing a space between "the" and "10GBASE-T"

SuggestedRemedy

Add space.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 41

Cl **80**   *SC* **80.1.4**   *P* **61**   *L* **49**   *#* 235

Booth, Brad   Microsoft

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

Twisted-pair should be hyphenated.

SuggestedRemedy

Add hyphen. Check draft for other occurrences.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic

Topic **EZ**   Page 62 of 94
4/29/2015 2:42:08 PM

Cl **99**   *SC* **Table of Contents**   *P* **11**   *L* **27**   # 236
Brown, Thomas   Vitesse Semiconductor

Comment Type   **E**   *Comment Status*   **D**   *EZ*
Under Annex 28c in TOC, a phrase is listed 1000 xGBASE-T

The phrase 1000 xGBASE-T is not correct.

SuggestedRemedy
I believe the author should replace 1000 xGBASE-T with 1000BASE-T

Proposed Response   *Response Status*   **W**
PROPOSED ACCEPT IN PRINCIPLE.
Edit to title of 28.C.11 removed 10GBASE-T and 1000, and inserted xG to make this the
xGBASE-T code - Editor to review table of contents generation to fix.

Cl **80**   *SC* **80.1.5**   *P* **62**   *L* **16**   # 488
Brown, Matt   APM

Comment Type   **E**   *Comment Status*   **D**   *EZ*
Incorrect and incomplete editing instruction. Since you are showing the whole table with
changes a change instruction rather than insert instruction is required. Also, the reference point
for the new row is incorrect.

SuggestedRemedy
Change:
Insert the following row after 40GBASE-LR4 and rightmost end column to Table 80-2 (existing
PHY entries in new column are blank)
To:
Change Table 80-2, inserting a new row for 40GBASE-T and a new column for 40GBASE-T
PCS/PMA/PMD, as follows:

Underline all items in the new row and new column.

Proposed Response   *Response Status*   **W**
PROPOSED ACCEPT IN PRINCIPLE. See comment 201

LATE COMMENT - TASK FORCE TO VOTE ON CONSIDERING

Cl **01**   *SC* **1.4**   *P* **20**   *L* **27**   # 238
HESS, DAVE   CORD DATA

Comment Type   **E**   *Comment Status*   **D**   *EZ*
Some uses of "ISO" should be "ISO/IEC"

SuggestedRemedy
replace "ISO" with "ISO/IEC"

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

Cl **01**   *SC* **1.4**   *P* **20**   *L* **36**   # 239
HESS, DAVE   CORD DATA

Comment Type   **E**   *Comment Status*   **D**   *EZ*
Some uses of "ISO" should be "ISO/IEC"

SuggestedRemedy
Replace "ISO" with "ISO/IEC"

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

Cl **A**   *SC* **A**   *P* **21**   *L* **1**   # 213
Anslow, Pete   Ciena

Comment Type   **E**   *Comment Status*   **D**   *EZ*
Either include some bibliography entries to be added to Annex A or remove it from the draft

SuggestedRemedy
Either include some bibliography entries to be added to Annex A and remove the editor's note
and "[Bx1] Name—Title."
or remove Annex A from the draft entirely

Proposed Response   *Response Status*   **W**
PROPOSED ACCEPT IN PRINCIPLE. Dup of comments 232, 256, 54, 373.
See comment 256

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic*   **EZ**   Page 63 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:08 PM
SORT ORDER: Topic

Cl **113**	*SC* **113.5.4.6.5**	*P* **164**	*L* **33**	*#* 217

Shariff, Masood   CommScope

Comment Type **E**   *Comment Status* **D**   *EZ*
Missing spec at 2000 MHz

SuggestedRemedy
Change < 2000 MHz to <= 2000 MHz

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

Cl **99**	*SC*	*P* **19**	*L* **46**	*#* 212

Anslow, Pete   Ciena

Comment Type **E**   *Comment Status* **D**   *EZ*
The editor's note refers to "IEEE P802.3bj and IEEE P802.3bk" which will both be superseded amendments by the time P802.3bq is published.

SuggestedRemedy
Change:
"(e.g., IEEE P802.3bj and IEEE P802.3bk)" to:
"(e.g., IEEE P802.3bn and IEEE P802.3bw)"

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

Cl **113**	*SC* **113.8.2.1**	*P* **183**	*L* **12**	*#* 221

Shariff, Masood   CommScope

Comment Type **E**   *Comment Status* **D**   *EZ*
Improve MDI RL specifications formatting

SuggestedRemedy
Format equations on the rows so the frequency ranges and equations line up from top to bottom

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

Cl **113**	*SC* **113.8.2.2**	*P* **183**	*L* **27**	*#* 222

Shariff, Masood   CommScope

Comment Type **E**   *Comment Status* **D**   *EZ*
Improve equation 113-46 formatting

SuggestedRemedy
Format equation so columns line up (maybe use left alignment)

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

Cl **81**	*SC* **81.1.7.3**	*P* **65**	*L* **49**	*#* 223

Booth, Brad   Microsoft

Comment Type **E**   *Comment Status* **D**   *EZ*
Double period at end of paragraph.

SuggestedRemedy
Fix.

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

Cl **113**	*SC* **113.1**	*P* **71**	*L* **9**	*#* 224

Booth, Brad   Microsoft

Comment Type **E**   *Comment Status* **D**   *EZ*
Over-use of defining acronyms. PCS, PMA and PMD are defined in the title and don't need to be redefined in the first paragraph. IEEE editor may catch these also.

SuggestedRemedy
Review usage with editor and eliminate excessive definitions.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE.
Editor to review relative to existing IEEE Std. 802.3 style

Cl **113**	*SC* **113.1**	*P* **71**	*L* **28**	*#* 225

Booth, Brad   Microsoft

Comment Type **E**   *Comment Status* **D**   *EZ*
Auto-negotation is hyphenated.

SuggestedRemedy
Insert hyphen.

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

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 64 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:08 PM
SORT ORDER: Topic

Cl **113**   *SC* **113.3.2.2.20**   *P* **103**   *L* **20**   # 289
Hidaka, Yasuo   Fujitsu Laboratories of

Comment Type **T**   *Comment Status* **D**   EZ
    The number above "PI" symbol is not readable in equation (113-3).

SuggestedRemedy
    Make the number above "PI" symbol to be read as "5" in equation (113-3).

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT IN PRINCIPLE. See comment 226

Cl **00**   *SC* **0**   *P* **6**   *L* **13**   # 227
Booth, Brad   Microsoft

Comment Type **E**   *Comment Status* **D**   EZ
    I'm sure that there is a task force chair and an editor for this project whose names are not
    FirstName SecondName. :-)

SuggestedRemedy
    Add the name for the Task Force chair and editor. Also add the names of the 802.3 voters.

Proposed Response   *Response Status* **W**
    PROPOSED ACCEPT. Dup of comments 53, 211, 406

Cl **113**   *SC* **113.3.2.2.5**   *P* **92**   *L* **28**   # 280
Hidaka, Yasuo   Fujitsu Laboratories of

Comment Type **E**   *Comment Status* **D**   EZ
    There is a meaningless mark above "Note: zero-pad replaced with random bits for
    transmission" in Figure 113-6 around line 28, page 92.

SuggestedRemedy
    Remove the mark above the note in Figure 113-6.

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

Cl **30**   *SC* **30.2.5**   *P* **29**   *L* **14**   # 266
Healey, Adam   Avago Technologies

Comment Type **E**   *Comment Status* **D**   EZ
    The column heading for the 10G/40GBASE-T Operating Margin package has become too long
    and "(conditional)" qualification word-wraps into oblivion.

SuggestedRemedy
    Increase the height of heading row so that the heading text fits.

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

Cl **00**   *SC* **0**   *P* **3**   *L* **13**   # 253
Grow, Robert   RMG Consulting

Comment Type **E**   *Comment Status* **D**   EZ
    Typically this box uses the expected name of the standard with 201x year. (It would be helpful
    to the
    publication editor to be consistent in use of 201x or 20xx. Though we aren't very close to
    decade wrap,
    we will have to start using 20xx in a few years.

SuggestedRemedy
    Replace IEEE P802.3bq with IEEE Std 802.3bq-201x (or 20xx).

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

Cl **113**   *SC* **113.5.4.6.4**   *P* **164**   *L* **10**   # 216
Shariff, Masood   CommScope

Comment Type **E**   *Comment Status* **D**   EZ
    Missing spec for 2000 MHz

SuggestedRemedy
    Change < 2000 to <= 2000

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

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 65 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:08 PM
SORT ORDER: Topic

Cl **80**   *SC* **80.1.5**   *P* **62**   *L* **16**   # 201

Anslow, Pete   Ciena

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

As the changes to Table 80-2 have not been marked, a "Replace" editing instruction is more appropriate than an Insert.
The "113" clause number in the rightmost heading should be a cross-reference
The ruling between the headings for the 40GBASE-FR PMD and 40GBASE-T PCS/PMA/PMD columns is the wrong thickness

SuggestedRemedy

Change the editing instruction to "Replace Table 80-2 as follows:"
Make the "113" clause number in the rightmost heading a cross-reference
Make the ruling between the headings for the 40GBASE-FR PMD and 40GBASE-T PCS/PMA/PMD columns "Very thin"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.
See comments 335, 488, 382, 73, 336, 46, 359
And remove "/PMD" from 40GBASE-T entry if comment 347 is accepted

---

Cl **45**   *SC* **45.5**   *P* **52**   *L* **4**   # 190

Anslow, Pete   Ciena

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

The editing instructions are not appropriate.

SuggestedRemedy

Change 45.5.3.2 editing instruction to:
"Insert a new row for *40T below the row for *10T in the table in 45.5.3.2 as follows (unchanged rows not shown):"
Remove the underline from the new row.
Change 45.5.3.6 editing instruction to:
"Change the row for *CT in the table in 45.5.3.6 as follows (unchanged rows not shown):"
Change 45.5.3.7 editing instruction to:
"Change the rows for RM15, RM16, and RM37 through RM40 in the table in 45.5.3.7 as follows (unchanged rows not shown):"
Change 45.5.3.8 editing instruction to:
"Change the row for *AT in the table in 45.5.3.8 as follows (unchanged rows not shown):"
Change 45.5.3.9 editing instruction to:
"Change the row for AM51 in the table in 45.5.3.9 and insert new rows for AM61 and AM62 at the end of the table as follows (unchanged rows not shown):"
Remove the underline from the AM61 and AM62 rows.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.5**   *P* **52**   *L* **9**   # 191

Anslow, Pete   Ciena

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

Many of the cross-references in 45.5 are shown in green, but should be active cross-references.
In 45.5.3.2, "45.2.1.8" is the "PMD transmit disable register". "45.2.1.12" seems to be a better place to point to as this is where the 40GBASE-T ability bit resides.
In 45.5.3.9, there should be entries in the subclause column for AM61 and AM62.

SuggestedRemedy

In 45.5.3.2, change "45.2.1.8" to "45.2.1.12" and make it a cross-reference.
In 45.5.3.6, make "45.2.3" a cross-reference.
In 45.5.3.7, make "45.2.13" (2 instances) and "45.2.14" (2 instances) cross-references.
In 45.5.3.8, make "45.2.7" a cross-reference.
In 45.5.3.9, make "45.2.7.11.1" a cross-reference and add cross-references to "45.2.7.10" to the AM61 and AM62 rows.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.5.3.7**   *P* **52**   *L* **30**   # 192

Anslow, Pete   Ciena

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

RM16 says "Loopback bit returns zero when operating at 10 Gb/s with port type selections other than 10GBASE-R or 10GBASE-T or 40GBASE-T". Now that 40GBASE-T has been added, "at 10 Gb/s" is no longer correct.

SuggestedRemedy

Change "when operating at 10 Gb/s" to "when operating at 10 Gb/s or 40 Gb/s"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 66 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:08 PM
SORT ORDER: Topic

Cl **47**　　　*SC* **45.2.7.11.7**　　　*P* **50**　　　*L* **3**　　　# 193

Anslow, Pete　　　　　　　　　　　　Ciena

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

This says "The bit is only valid when page receive bit 7.1.6 in is set to one."
"The bit" would be better as "Bit 7.33.8"
"page receive bit 7.1.6" should be "page received bit 7.1.6"
spurious "in" after "7.1.6"

SuggestedRemedy

Change:
"The bit is only valid when page receive bit 7.1.6 in is set to one." to:
"Bit 7.33.8 is only valid when page received bit 7.1.6 is set to one."

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT. See comment 321

Cl **78**　　　*SC* **78.1.3.3.1**　　　*P* **57**　　　*L* **34**　　　# 194

Anslow, Pete　　　　　　　　　　　　Ciena

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

The cross-reference to "Figure 78–3" is showing as "<XREF>Figure 78–3".
This is because the "FigNumber" cross-reference format used in Clause 78 is "<XREF>Figure\
<$paranumonly>" and this has been pasted into a clause file other than the original Clause 78
file which does not have an "XREF" character tag defined.

SuggestedRemedy

The easiest way to fix this is to highlight the cross-reference, open the Cross-reference pod,
Edit Format, delete the "XREF" from the start of the Definition, Done, Internal Cross-
References, Update.

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT. See comment 74

Cl **78**　　　*SC* **78.1.4**　　　*P* **58**　　　*L* **35**　　　# 195

Anslow, Pete　　　　　　　　　　　　Ciena

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

The inserted rows in Tables 78-1, 78-2, and 78-5 should not be underlined as they are
associated with "Insert" editing instructions.
The font used for these inserted rows is incorrect.

Also, the title of Table 78-2 is "Summary of the key EEE parameters for supported PHYs or
interfaces" not "Clauses associated with each interface type"

SuggestedRemedy

In Tables 78-1, 78-2, and 78-5 remove the underline from the inserted rows.
Re-apply the "CellBody" paragraph tag to the inserted rows (Times New Roman 9pt).
Correct the title of Table 78-2 to "Summary of the key EEE parameters for supported PHYs or
interfaces"

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT. See comments 43, 271, 272, 328, 329

Cl **80**　　　*SC* **80.1.3**　　　*P* **61**　　　*L* **9**　　　# 196

Anslow, Pete　　　　　　　　　　　　Ciena

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

The point of the list in 80.1.3 is to define the locations where the data-path widths are cannot be
changed by the implementation. Each element in the existing list states what the width at that
location is.

Also, as this is associated with an Insert editing instruction it should not be underlined.

SuggestedRemedy

Change to: "k) The MDI as specified in Clause 113 for 40GBASE-T uses a 4 lane data path."

Remove the underline

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general　　　　　　*Topic*　**EZ**　　　Page 67 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn　　　4/29/2015 2:42:08 PM
SORT ORDER: Topic

Cl **80**	*SC* **80.1.3**	*P* **61**	*L* **24**	*#* 197

Anslow, Pete   Ciena

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

There is no editing instruction associated with Figure 80-1.
The curly brackets associated with the left hand two stacks have no labels.
The AN block in the 40GBASE-T stack has note 2 applied: "NOTE 2—CONDITIONAL
BASED ON PHY TYPE", but there is only one PHY type and the AN layer is not shown as
optional in Table 80-2 or Figure 113-1.

SuggestedRemedy

Add an editing instruction: "Replace Figure 80-1 as follows:"
Remove the curley brackets associated with the left hand two stacks in Figure 80-1.
Remove note 2 fron the AN block in the middle stack in Figure 80-1

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comments 234, 381

Cl **80**	*SC* **80.1.4**	*P* **61**	*L* **47**	*#* 198

Anslow, Pete   Ciena

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

Text associated with an Insert editing instruction should not be underlined. (strictly, this would
result in underlined text being inserted into the standard.)

SuggestedRemedy

Remove the underline from the inserted text in 80.1.4

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**	*SC* **113.5.4.6.2**	*P* **163**	*L* **25**	*#* 215

Shariff, Masood   CommScope

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

RL for direct attach link segments has duplicate specs at 25 MHz and 1000 MHz

SuggestedRemedy

Change <= 25 to < 25
and   <= 1000 to < 1000

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Use consistent notation for symbols in equations (e.g., =,>,etc)

1000<f <= 2000
does not include 1000
25<f <= 1000
does not include 25

Cl **80**	*SC* **80.1.4**	*P* **62**	*L* **10**	*#* 200

Anslow, Pete   Ciena

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

Word missing in "using RS-FEC/LDPC encoding for transmission balanced twisted-pair"

SuggestedRemedy

Change to "using RS-FEC/LDPC encoding for transmission over balanced twisted-pair"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change
"40 Gb/s PHY using RS-FEC/LDPC encoding for transmission balanced twisted-pair
structured cabling systems" to
"40 Gb/s PHY using RS-FEC and LDPC encoding over balanced twisted-pair structured
cabling systems (see Clause 113)"

(see comment 487)

Cl **30**	*SC* **30.2.5**	*P* **29**	*L* **10**	*#* 265

Healey, Adam   Avago Technologies

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

Make the ruling and shading of Table 30-1e consistent with IEEE P802.3/D3.0.

SuggestedRemedy

Contact the Editor-in-Chief of IEEE P802.3 (IEEE 802.3bx) for the ruling and shading
information and reformat accordingly.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **80**	*SC* **80.1.5**	*P* **62**	*L* **52**	*#* 202

Anslow, Pete   Ciena

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

The note is not formatted correctly.

SuggestedRemedy

Change "Note: " to "NOTE—" where "—" is an em dash (Ctrl-q Shft-q).
Apply the paragraph Tag "Note" (9 pt font).
Make "Clause 28" a cross-reference

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 68 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:08 PM
SORT ORDER: Topic

Cl **80**   *SC* **80.4**   *P* **63**   *L* **16**   # 203

Anslow, Pete   Ciena

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

The footnotes are not formatted as table footnotes.
In footnote b 1.4.110 should be 1.4.117
Footnote c is missing

SuggestedRemedy

Format the footnotes at table footnotes
In footnote b change "1.4.110" to "1.4.117"
add footnote c

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **81**   *SC* **81.1**   *P* **65**   *L* **7**   # 204

Anslow, Pete   Ciena

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

A "Change" editing instruction isn't appropriate here.
The AN block in the 40GBASE-T stack has note 2 applied. If it was visible, this would be:
"NOTE 2—CONDITIONAL BASED ON PHY TYPE", but there is only one PHY type and the
AN layer is not shown as optional in Table 80-2 or Figure 113-1.
The acronym expansions and notes in the figure have an inappropriate format.
The spacing of the three stacks id uneven.

SuggestedRemedy

Change the editing instruction to: "Replace Figure 81-1 as follows:"
Remove note 2 from the AN block in the middle stack in Figure 81-1
Fix format of the acronym expansions and notes in the figure.
Change the position of the three stacks to be even and centred on the blocks above.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **81**   *SC* **81.1.7.3**   *P* **65**   *L* **52**   # 205

Anslow, Pete   Ciena

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

"in Figure 81-10a" should be "in Figure 81-13" and it should be in green font.

SuggestedRemedy

Change "in Figure 81-10a" to "in Figure 81-13" and apply the character tag "External"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **81.5**   *SC* **81.5.3.7**   *P* **69**   *L* **12**   # 206

Anslow, Pete   Ciena

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

81.3.1.2 TXC<7:0> (transmit control) does not define detection of Link Interruption.
The entries in the Subclause column for both rows and "Table 81-5" should be a cross-
reference (not green).
The item numbering does not follow the numbering practice for the rest of this PICS.

SuggestedRemedy

Change "81.3.1.2" to "81.3.4".
Make the entries in the Subclause column for both rows and "Table 81-5" cross-references.
Change item "LINT" to "LINT1"
Change item "LINT1" to "LINT2"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **99**   *SC*   *P* **1**   *L* **10**   # 207

Anslow, Pete   Ciena

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

The " X" was removed from "Amendment X:" in the 802.3 template in February 2014

SuggestedRemedy

Change "Amendment X:" to "Amendment:" on page 1, line 10 and also on page 19, line 3

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **99**   *SC*   *P* **1**   *L* **29**   # 208

Anslow, Pete   Ciena

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

"[review/balloting stage]" should be replaced with the stage that the draft is at.

SuggestedRemedy

Change "[review/balloting stage]" to "Working Group ballot recirculation"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. Dup of comments 405, 252, 474

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 69 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:08 PM
SORT ORDER: Topic

Cl **99** *SC*   *P* **3** *L* **13** # 209
Anslow, Pete   Ciena

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

In the second editor's note, "Amendment title (SHALL match PAR)" should be replaced by the exact wording of the amendment title from the PAR.

SuggestedRemedy

In the second editor's note, replace "Amendment title (SHALL match PAR)" with the exact wording of the amendment title from the PAR.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **99** *SC*   *P* **4** *L* **24** # 210
Anslow, Pete   Ciena

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

There is a spurious "IEEE 802.3 will continue to evolve." on line 24
Also, the summary of other amendments that are likely to be published before 802.3bq (at least IEEE Std 802.3bw-201x) should be added here

SuggestedRemedy

Remove "IEEE 802.3 will continue to evolve." on line 24
Add the summary of other amendments that are likely to be published before 802.3bq (at least IEEE Std 802.3bw-201x).

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **99** *SC*   *P* **6** *L* **13** # 211
Anslow, Pete   Ciena

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

Change:
FirstName SecondName, IEEE P802.3xx Task Force name Task Force Chair
FirstName SecondName, IEEE P802.3xx Task Force name Task Force Editor-in-Chief
to the text appropriate for this project

SuggestedRemedy

Change:
FirstName SecondName, IEEE P802.3xx Task Force name Task Force Chair
FirstName SecondName, IEEE P802.3xx Task Force name Task Force Editor-in-Chief
to the text appropriate for this project

Proposed Response *Response Status* **W**

PROPOSED ACCEPT. Dup of comments 53, 227, 406

Cl **80** *SC* **80.1.4** *P* **62** *L* **1** # 199
Anslow, Pete   Ciena

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

The Green font to denote an external cross-reference is not appropriate for an editing instruction since, by definition, the thing it refers to is in the draft!

SuggestedRemedy

Use the normal font for "Table 80-1" on line 1, "Table 80-2" on line 16 and also for "Table 80-2" on line 50.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **78** *SC* **78.1.4** *P* **58** *L* **27** # 327
Hidaka, Yasuo   Fujitsu Laboratories of

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

Clause title is not correct.

SuggestedRemedy

Change the clause title of 78.1.4 with "PHY types optionally supporting EEE".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **30** *SC* **30.3.2.1.2** *P* **32** *L* **14** # 250
Grow, Robert   RMG Consulting

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

Clause number should be a cross reference.

SuggestedRemedy

Replace text with cross reference. Also line 54.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ** Page 70 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:08 PM
SORT ORDER: Topic

Cl **113**　　*SC* **113.2.1.2.1**　　　*P* **80**　　*L* **28**　　# **485**
Brown, Matt　　　　　　　　APM

Comment Type **T**　　*Comment Status* **D**　　　　　*EZ*
If "READY" is not used for 40GBASE-T why is it listed in the 40GBASE-T clause?

SuggestedRemedy
Remove READY from the sentence on line 25.
Remove READY and description from the list on line 28.

Proposed Response　　*Response Status* **W**
PROPOSED ACCEPT. Dup of comment 71

LATE COMMENT - TASK FORCE TO VOTE ON CONSIDERING

Cl **113**　　*SC* **113.3.2.2.20**　　*P* **103**　　*L* **20**　　# **226**
Booth, Brad　　　　　　　Microsoft

Comment Type **E**　　*Comment Status* **D**　　　　　*EZ*
Equation 113-3 is chopped.

SuggestedRemedy
Fix.

Proposed Response　　*Response Status* **W**
PROPOSED ACCEPT. See comment 289

Cl **45**　　*SC* **45.2.3.9.8**　　　*P* **44**　　*L* **33**　　# **317**
Hidaka, Yasuo　　　　　　Fujitsu Laboratories of

Comment Type **E**　　*Comment Status* **D**　　　　　*EZ*
The new paragraph 45.2.3.9.8 for 3.20.7 should be inserted after 45.2.3.9.4.

SuggestedRemedy
Change the reference to "45.2.3.9.7" on line 33 with "45.2.3.9.4".

Change the subclause number "45.2.3.9.8" on line 35 with "45.2.3.9.5".

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

Cl **45**　　*SC* **45.2.7.10.5**　　　*P* **48**　　*L* **30**　　# **318**
Hidaka, Yasuo　　　　　　Fujitsu Laboratories of

Comment Type **E**　　*Comment Status* **D**　　　　　*EZ*
The new two paragraphs for 7.32.11 and 7.32.3 should be inserted after 45.2.7.10.4 and the clause numbers are missing.

SuggestedRemedy
Change "Insert new paragraph after 45.2.7.10.3" on line 30 with "Insert two new paragraphs after 45.2.7.10.4".

Insert clause number "45.2.7.10.5" at the beginning of line 32.

Remove the note of "Insert new paragraph after 45.2.7.10.6 and re-number remaining clauses accordingly." on line 38.

Insert clause number "45.2.7.10.6" at the beginning of line 40.

Insert clause number "45.2.7.10.8" at the beginning of line 48.

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

Cl **45**　　*SC* **45.2.7.10.5**　　　*P* **48**　　*L* **36**　　# **319**
Hidaka, Yasuo　　　　　　Fujitsu Laboratories of

Comment Type **T**　　*Comment Status* **D**　　　　　*EZ*
Reference to bit 7.32.12 should be 7.32.11.

SuggestedRemedy
Change "7.32.12" on line 36 with "7.32.11".

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

Cl **45**　　*SC* **45.2.7.11.7**　　　*P* **49**　　*L* **51**　　# **320**
Hidaka, Yasuo　　　　　　Fujitsu Laboratories of

Comment Type **E**　　*Comment Status* **D**　　　　　*EZ*
New paragraph for 7.33.8 should be inserted after 45.2.7.11.7 instead of after 45.2.7.11.6.

SuggestedRemedy
Change reference to "45.2.7.11.6" on line 51 in page 49 with "45.2.7.11.7".

Change clause number "45.2.7.11.7" on line 1 in page 50 with "45.2.7.11.8".

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

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic

Topic **EZ**　　　Page 71 of 94
4/29/2015 2:42:09 PM

Cl **45**   *SC* **45.2.7.11.7**   *P* **50**   *L* **3**   # 321
Hidaka, Yasuo   Fujitsu Laboratories of

Comment Type **E**   *Comment Status* **D**   *EZ*
"in" after "bit 7.1.6" does not make sense.

SuggestedRemedy
Remove "in" after "bit 7.1.6".

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. See comment 193

Cl **45**   *SC* **45.2.7.11.9**   *P* **50**   *L* **7**   # 322
Hidaka, Yasuo   Fujitsu Laboratories of

Comment Type **E**   *Comment Status* **D**   *EZ*
New paragraph for 7.33.0 should be inserted after the paragraph for 7.33.1.

SuggestedRemedy
Change line 7 through 23 in page 50 as follows:

Change paragraph 45.2.7.11.8 and re-number to 45.2.7.11.9 and insert new paragraph
45.2.7.11.10 in consideration of newly inserted 45.2.7.11.8.

45.2.7.11.9 10GBASE-T Fast retrain ability (7.33.1)

When read as a one, bit 7.33.1 is used to indicate that the link partner has the ability to support
the 10GBASE-T fast retrain capability as specified in 55.4.2.5.15. When read as a zero, bit
7.33.1 indicates that the PHY lacks the ability to support the 10GBASE-T fast retrain capability.

45.2.7.11.10 40GBASE-T Fast retrain ability (7.33.0)

When read as a one, bit 7.33.0 is used to indicate that the link partner has the ability to support
the 40GBASE-T fast retrain capability as specified in 113.4.2.5.15. When read as a zero, bit
7.33.0 indicates that the PHY lacks the ability to support the 40GBASE-T fast retrain capability.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. See comment 183

Cl **45**   *SC* **45.2.7.13.10**   *P* **51**   *L* **16**   # 323
Hidaka, Yasuo   Fujitsu Laboratories of

Comment Type **E**   *Comment Status* **D**   *EZ*
New paragraph for 7.60.9 should be inserted after 45.2.7.13.4 instead of after 45.2.7.13.9.

SuggestedRemedy
Change reference to "45.2.7.13.9" on line 16 with "45.2.7.13.4".

Change clause number "45.2.7.13.10" on lin 18 with "45.2.7.13.5".

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. See comment 355

Cl **80**   *SC* **80.1.4**   *P* **62**   *L* **10**   # 487
Brown, Matt   APM

Comment Type **E**   *Comment Status* **D**   *EZ*
Missing Clause reference.
Missing "over" between "transmission" and "balanced".
To be consistent with the other descriptions in this table "for transmission" should be "over".

SuggestedRemedy
Change:
40 Gb/s PHY using RS-FEC/LDPC encoding for transmission balanced twisted-pair structured
cabling systems
To:
40 Gb/s PHY using RS-FEC/LDPC encoding over balanced twisted-pair structured cabling
systems (see Clause 113)

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. See comment 200

LATE COMMENT - TASK FORCE TO VOTE ON CONSIDERING

Cl **78**   *SC* **78.1**   *P* **57**   *L* **3**   # 325
Hidaka, Yasuo   Fujitsu Laboratories of

Comment Type **E**   *Comment Status* **D**   *EZ*
Changed text in 78.1 does not exist in P02.3bx draft D3.0.

SuggestedRemedy
Remove line 3 through 9 in page 57 (i.e. change to text in 78.1).

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

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 72 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:09 PM
SORT ORDER: Topic

Cl **00**   *SC* **0**   *P* **1**   *L* **12**   # 251

Grow, Robert   RMG Consulting

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

Awkward alignment.

SuggestedRemedy

Make left justified rather than left right justified. Also title page 19.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **78**   *SC* **78.1.4**   *P* **58**   *L* **30**   # 328

Hidaka, Yasuo   Fujitsu Laboratories of

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

Caption and header row of Table 78-1 are incorrect and inconsistent.

SuggestedRemedy

Change "each interface type" in Table 78-1 caption with "each PHY or interface type".

Change "PHY type" in header row of Table 78-1 with "PHY or interface type".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comment 195 for a more complete response.

Cl **78**   *SC* **78.2**   *P* **58**   *L* **44**   # 329

Hidaka, Yasuo   Fujitsu Laboratories of

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

Caption and header row of Table 78-2 are incorrect.

SuggestedRemedy

Change caption of Table 78-2 with "Summary of the key EEE parameters for supported PHYs or interfaces".

Change "Protocol" in header row with "PHY or interface type".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment 195 for a more complete response

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Cl **80**   *SC* **80.1.3**   *P* **61**   *L* **7**   # 330

Hidaka, Yasuo   Fujitsu Laboratories of

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

Title of clause is not correct.

SuggestedRemedy

Change the title of 80.1.3 with "Relationship of 40 Gigabit and 100 Gigabit Ethernet to the ISO OSI reference model".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **80**   *SC* **80.1.3**   *P* **61**   *L* **9**   # 331

Hidaka, Yasuo   Fujitsu Laboratories of

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

A period is missing.

SuggestedRemedy

Add a period "." at the end of line 9.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 73 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:09 PM
SORT ORDER: Topic

Cl **113**	*SC* **113.1.1**	*P* **71**	*L* **31**	*#* 483

Brown, Matt · APM

Comment Type **ER** · *Comment Status* **D** · *EZ*

The objectives listed in this subclause are for the project, not for the PHY. In several recent amendments a similar objectives subclause has been removed from existing sub-clauses as the new project has new objectives and it becomes difficult to keep this list current and not included in new clauses. As an example see 802.3az (no project objectives in 78), 802.3bj (removed project objectives in 69.1.2), and 802.3by (deleted BASE-R FEC project objectives, replaced with summary, no objectives in Clause 105).

The clause should list what is supported, not what was intended (objectives = "something that one's efforts or actions are intended to attain or accomplish"). If a summary of the features is necessary these should be list as such, not as project objectives.

SuggestedRemedy

Remove sub-clause 113.1.1. Add a summary of functions if the text in 13.1 is not sufficient.

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

PROPOSED ACCEPT IN PRINCIPLE.

LATE COMMENT - TASK FORCE TO VOTE ON CONSIDERING

113.1.1 to be removed
See comment 457

Cl **80**	*SC* **80.1.4**	*P* **61**	*L* **49**	*#* 333

Hidaka, Yasuo · Fujitsu Laboratories of

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

Phrase "for transmitting 40GBASE-T over" is odd and inconsistent with other paragraphs in the same clause.

SuggestedRemedy

Change "for transmitting 40GBASE-T over" with "for 40Gb/s operation over".

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

PROPOSED ACCEPT.

Cl **80**	*SC* **80.1.4**	*P* **62**	*L* **1**	*#* 334

Hidaka, Yasuo · Fujitsu Laboratories of

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

40GBASE-ER4 is added to Table 80-1 in P802.3bx.

SuggestedRemedy

Change "between 40GBASE-LR4 and 100GBASE-KR4" with "between 40GBASE-ER4 and 100GBASE-KR4".

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

PROPOSED ACCEPT.

Cl **80**	*SC* **80.1.5**	*P* **62**	*L* **16**	*#* 335

Hidaka, Yasuo · Fujitsu Laboratories of

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

40GBASE-ER4 is added in P802.3bx.

SuggestedRemedy

Change "after 40GBASE-LR4" on line 16 with "after 40GBASE-ER4".

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

PROPOSED ACCEPT IN PRINCIPLE. See comment 201

Cl **113**	*SC* **113.1.2**	*P* **72**	*L* **9**	*#* 276

Hidaka, Yasuo · Fujitsu Laboratories of

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

A period "." is missing.

SuggestedRemedy

Add a period "." at the end of line 9.

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

PROPOSED ACCEPT.

Cl **113**	*SC* **113.2.2.4.2**	*P* **85**	*L* **4**	*#* 278

Hidaka, Yasuo · Fujitsu Laboratories of

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

800 MHz is probably incorrect.

SuggestedRemedy

Change "800 MHz" with "3.2 GHz".

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

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic

Topic **EZ**

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4/29/2015 2:42:09 PM

Cl **113**   *SC* **113.1.3**   *P* **72**   *L* **45**   # 279

Hidaka, Yasuo   Fujitsu Laboratories of

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

Words "auxiliary channel bit" and "auxiliary bit" are used inconsistently.

SuggestedRemedy

Change "auxiliary channel bit" in the following locations with "auxiliary bit":

Page 72, line 45
Page 76, line 15
Page 76, line 19
Page 90, line 46

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.
Same usage occurs in Clause 55 - commenter may wish to file comments in revision or maintenance

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Cl **113**   *SC* **113.1.3**   *P* **72**   *L* **42**   # 484

Brown, Matt   APM

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

Per style manual section 13.3.2 "10000" should be "10 000".
Alternately, you can reduce the integer size by using "giga" instead of "mega".
Also, it more common and more concise to use "*baud" instead of "*symbols per second".

SuggestedRemedy

Change "10000 Mb/s" to "10 000 Mb/s" or "10 Gb/s".
Change "3200 Megasymbols per second" to "3 200 Megasymbols per second" or "3.2 Gigasamples per second" or "3.2 Gbaud".
Use the same form throughout the clause (e.g., Figure 113-2).

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

LATE COMMENT - TASK FORCE TO VOTE ON CONSIDERING

Change format of 10000 to 10 Gb/s
Change 3200 to 3 200
(maintain Megasymbols per second)
Editor to review clause to maintain consistency

Cl **Annex**   *SC*   *P* **21**   *L* **1**   # 256

Grow, Robert   RMG Consulting

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

Looks like the FrameMaker book is messed up.

SuggestedRemedy

Delete Annex A at this point from the FrameMaker book.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. (Dup of comments 232, 54, 213, 373.)
Add Editor's note (to be removed prior to publication): This clause is a placeholder for bibiliographic entries, and is to be deleted if none are added by the end of the WG ballot phase.

Cl **113**   *SC* **113.7.2.1**   *P* **174**   *L* **40**   # 242

HESS, DAVE   CORD DATA

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

Some uses of "ISO" should be "ISO/IEC"

SuggestedRemedy

Replace "ISO" with "ISO/IEC"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.7.2**   *P* **174**   *L* **23**   # 241

HESS, DAVE   CORD DATA

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

Some uses of "ISO" should be "ISO/IEC".
Complete "Category 8", should be "TIA Category 8"

SuggestedRemedy

Table 113–22
Replace "ISO" with "ISO/IEC" in 3 places
Table 113–22, row 2, column 1
Replace "ISO Class I / Category 8" with "ISO/IEC Class I / TIA Category 8"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 75 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:09 PM
SORT ORDER: Topic

Cl **28**   *SC* **28.5.3**   *P* **23**   *L* **32**   # 264
Healey, Adam   Avago Technologies

Comment Type **E**   *Comment Status* **D**   *EZ*
The option "*40G" is defined but is not used.

SuggestedRemedy
Add "40G:M" to the "Status" column for item SD11 and "!40G:M" to the "Status" columen for item SD10.

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

Cl **28A**   *SC*   *P* **25**   *L* **1**   # 263
Healey, Adam   Avago Technologies

Comment Type **E**   *Comment Status* **D**   *EZ*
There are no obvious changes to Annex 28A.

SuggestedRemedy
Remove Annex 28A from the draft amendment.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. (dup of comments 5, 138, 375, 248, 260)

Cl **Annex**   *SC* **28D.8**   *P* **28**   *L* **10**   # 262
Grow, Robert   RMG Consulting

Comment Type **E**   *Comment Status* **D**   *EZ*
FrameMaker definition seems to be messed up, no space after number.

SuggestedRemedy
Fix FrameMaker definition.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. See comment 69

Cl **Annex**   *SC*   *P* **26**   *L* **8**   # 261
Grow, Robert   RMG Consulting

Comment Type **E**   *Comment Status* **D**   *EZ*
This should be an insert instruction.

SuggestedRemedy
Insert new list item a) and re-letter following list items.

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

Cl **28**   *SC* **Table 26-9**   *P* **23**   *L* **13**   # 259
Grow, Robert   RMG Consulting

Comment Type **ER**   *Comment Status* **D**   *EZ*
Again, what is appropriate, don't make the publication editor guess. Also a problem with line 27 and line 39.

SuggestedRemedy
In all locations replace "appropriate." with "as follows:". Editor is requested to search for appropriate and make all editing instructions precise. Better to use instructions like: Change the indicated row of Table x-x as follows, Insert the following in numeric order.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. Dup of comment 258, see comment 409

Cl **28**   *SC* **Table 26-9**   *P* **23**   *L* **13**   # 258
Grow, Robert   RMG Consulting

Comment Type **E**   *Comment Status* **D**   *EZ*
Again, what is appropriate, don't make the publication editor guess.

SuggestedRemedy
Insert row in Table 28-9 in alphabetic order.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. See comment 409.

Cl **28A**   *SC* **0**   *P* **25**   *L* **1**   # 248
Frazier, Howard   Broadcom Corporation

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

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT. (dup of comments 5, 138, 375, 260, 263)

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 76 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:09 PM
SORT ORDER: Topic

Cl **28**	*SC* **28.3.1**	*P* **23**	*L* **6**	*#* 257

Grow, Robert   RMG Consulting

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

What is appropriate. Looking at P802.3/D3.0, this list of variables appears to be random. I expect alphanumerical order would be appropriate, and will submit a comment against P802.3/D4.0 to make this section alphanumerical ordered. Also, format does not match base document.

SuggestedRemedy

Change editing instruction to be Insert the following in the first variable list in alphanumerical order. Additionally, it appears that the semicolon should be followed by a tab rather than a space (please use same format as is used in the base, the list is also slightly indented on the left).

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.
See comment 409.
Insert in order consistent with revision draft
Format same as base on indentation

Cl **Annex**	*SC*	*P* **25**	*L* **1**	*#* 260

Grow, Robert   RMG Consulting

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

There does not appear to be any modifications to this Annex.

SuggestedRemedy

Remove Annex 28A from the FrameMaker book.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. (dup of comments 5, 138, 375, 248, 263)

Cl **45**	*SC* **45.2.3.14**	*P* **46**	*L* **25**	*#* 24

Hajduczenia, Marek   Bright House Networks

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

In Table 45-129, there are multiple instances of "10GBASE-T or 40GBASE-T ". Following other changes in Clause 45, text "10GBASE-T or 40GBASE-T " should be "10/40GBASE-T" since the statements are applicable to 10GBASE-T and 40GBASE-T alike

SuggestedRemedy

Change "10GBASE-T or 40GBASE-T " to "10G/40GBASE-T in Table 45-129. Consider applying similar changes in other locations in Clause 45, where similar text exists.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. See comment 17

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

Frazier, Howard   Broadcom Corporation

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

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

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

Frazier, Howard   Broadcom Corporation

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

Proposed Response   *Response Status* **W**

PROPOSED 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.

Cl **01**	*SC* **1.4**	*P* **20**	*L* **21**	*#* 1

Hajduczenia, Marek   Bright House Networks

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

It is not clear why we say "2,000 MHz" and not rather "2 GHz"

SuggestedRemedy

Change "2,000 MHz" to "2 GHz" in line 21 and 30 in definition of Category 8.1 and Category 8.2. There is no reason to spell out MHz when the number in GHz is much more readable.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
2000 MHz is used for consistency with the cabling specifications
Remove comma and write as 2 000 MHz per IEEE style guide.
See comment 120

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic

Topic **Format**   Page 77 of 94
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Cl **113**   *SC* **113.4.6.1**   *P* **149**   *L* **50**   # 443
Frazier, Howard   Broadcom Corporation

Comment Type **E**   *Comment Status* **D**   *Format*
In Figure 113-29, the state diagram has instances where a space is missing between an operator and operand.

SuggestedRemedy
Look for "minwait_timer_done*" and change to "minwait_timer_done *".

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

Cl **00**   *SC*   *P*   *L*   # 482
Brown, Matt   APM

Comment Type **E**   *Comment Status* **D**   *Format*
For Figure 113-1, use similar format/syntax for similar figures for other 25G, 40G, and 100G PHYs. As an example, see 802.3bx D2.1 Figure 80-1.

SuggestedRemedy
For XLGMII use superscript "1".
Replace note "*XLGMII with "NOTE 1--XLGMII is optional". Alternately, this is the only PHY that states this in this particular diagram. Consider removing this note.
Change "FORTY GIGABIT" to "40 GIGABIT"

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

LATE COMMENT - TASK FORCE TO VOTE ON CONSIDERING

Figure to be cleaned up to align with style of both 25G/40G/100G and 10GBASE-T PHYs.
Delete note "XLGMII is optional" with
Change FORTY GIGABIT to 40 GIGABIT

Cl **113**   *SC* **113**   *P* **94**   *L* **1**   # 125
Anslow, Pete   Ciena

Comment Type **ER**   *Comment Status* **D**   *Format*
While many figures in Clause 113 appear to be editable, so are not. This makes life very difficult for the editors of the revision project when figures need to be changed.
The IEEE style guide recommends a minimum font size in figures of 8pt. Some figures in Clause 113 have text with a much smaller size than this that is very difficult to read.

SuggestedRemedy
Make all of the figures in Clause 113 (with the exception of figures illustrating equations such as Figure 113-38) editable in FrameMaker. This includes Figures 113-8, 113-10, and 113-14. Increase the font size of text in figures that is smaller than 8 pt.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE.
Editor to review figures for font sizes smaller than 8 pt. Editor to redraw figures as updated making them editable in FrameMaker.

Cl **113**   *SC* **113.3.7.2**   *P* **124**   *L* **20**   # 399
Remein, Duane   Huawei Technologies

Comment Type **T**   *Comment Status* **D**   *Format*
Exit condition from TX_L, T_TYPE(tx_raw) = (C + D + E + S + T) is different from the exit state tx_lpi_active. These lines should not be connected.

SuggestedRemedy
Redraw loop tx_lpi_active line so it does not connect to the exit transition from TX_L

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

Cl **00**   *SC* **0**   *P* **18**   *L* **27**   # 255
Grow, Robert   RMG Consulting

Comment Type **E**   *Comment Status* **D**   *Format*
Something crept into the definitions here, a space is needed between the number and title.

SuggestedRemedy
Fix FrameMaker definitions.

Proposed Response   *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE.
Editor to fix spacing in table of contents. Dup of 451

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **Format**   Page 78 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:09 PM
SORT ORDER: Topic

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

Frazier, Howard   Broadcom Corporation

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

Proposed Response   *Response Status* **W**

PROPOSED 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* **113.4.6.1**	*P* **149**	*L* **8**	*#* 441

Frazier, Howard   Broadcom Corporation

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

Proposed Response   *Response Status* **W**

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

Remein, Duane   Huawei Technologies

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

Proposed Response   *Response Status* **W**

PROPOSED 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 **78**	*SC* **78.5**	*P* **59**	*L* **3**	*#* 44

Hajduczenia, Marek   Bright House Networks

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

"10GBASE-T PHY and 40GBASE-T PHY" - in other locations, we used "10G/40GBASE-T PHYs"

SuggestedRemedy

Change "10GBASE-T PHY and 40GBASE-T PHY" to "10G/40GBASE-T PHYs" and then modify verbs to match accordingly.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. See comment 17

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

Frazier, Howard   Broadcom Corporation

Comment Type **ER**   *Comment Status* **D**   *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 *".

Proposed Response   *Response Status* **W**

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

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **Format**   Page 79 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:09 PM
SORT ORDER: Topic

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

Frazier, Howard   Broadcom Corporation

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

Proposed Response *Response Status* **W**

PROPOSED REJECT.
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 **45** *SC* **45.2.1.66** *P* **41** *L* **34** # 17

Hajduczenia, Marek   Bright House Networks

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

Is there any reason for separating 10GBASE-T and 40GBASE-T when in other locations we used "10G/40GBASE-T" to designate them together?

SuggestedRemedy

Change "10GBASE-T and 40GBASE-T PMAs" to "10G/40GBASE-T PMAs"
Similar change on page 41, line 43; page 41, line 52; page 42, line 6
Similarly, "10GBASE-T or 40GBASE-T" should be changed to "10G/40GBASE-T" on page 42, line 31, line 39,

There are also similar instances in 45.2.3.13.4, 45.2.3.13.5, 45.2.3.14 and following subclauses where entries for 40GBASE-T were added.

Proposed Response *Response Status* **W**

PROPOSED REJECT.
Rule is that when text refers to a jointly used control or status bit or register (or other joint functional unit) 10G/40G (or xG) is used. When PMAs are referred to, they are specific and distinct, for example, a 10GBASE-T PHY may or may not have a 40GBASE-T functionality - there is no such thing as a single PMA capable of 10G & 40G operation defined in 802.3 (although devices may be built that implement both 10G and 40G PMAs)

Cl **113** *SC* **113.4.2.5.13** *P* **138** *L* **1** # 463

Frazier, Howard   Broadcom Corporation

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

In Figure 113-18 there are several polylines that have an arrowhead in between the begining and the end of the polyline, because they were drawn as a series of individual line segments.

SuggestedRemedy

Remove the extraneous arrowheads by either changing the end style or redrawing as polylines.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Editor believe that commenter means Figure 113-28, based on page and description.

Cl **113** *SC* **113.1.1** *P* **71** *L* **31** # 2

Hajduczenia, Marek   Bright House Networks

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

Objectives should not be listed anymore.

SuggestedRemedy

Remove 113.1.1 altogether - objectives are recored in project documentation and do not matter for definition of PHY.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT. See comment 457

Cl **113** *SC* **113.1.1** *P* **71** *L* **31** # 124

Anslow, Pete   Ciena

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

Recent amendments to 802.3 (802.3bj, 802.3bm, 802.3bw, 802.3by) have not included the project objectives in the draft and have removed some that were already there.
See 69.1.2 and 80.1.2 in IEEE Std 802.3bj-2014.
See 96.1.1 in the compare version of P802.3bw D1.4.

SuggestedRemedy

Remove 113.1.1 entirely.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT. See comment 457

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general *Topic* **Format** Page 80 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn 4/29/2015 2:42:10 PM
SORT ORDER: Topic

Cl **80**   *SC* **80.1**   *P* **61**   *L* **20**   # `234`

Booth, Brad   Microsoft

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

Figure 80-1 should be cleaned up to improve readability. Plus, a few corrections are required.

SuggestedRemedy

Remove note 2 from the AN in the 40GBASE-T PHY (AN is mandatory). Remove the brackets on the right side of both the 40GBASE-R and 40GBASE-T stack, and create separation between bracket and 100GBASE-R stack to help indicate that PHY applies to all the sublayers between the xMII and the MDI. Remove the XLGMII label and arrow from the 40GBASE-R, and add arrow from XLGMII label for 40GBASE-T to point to the 40GBASE-R.

Make similar fixes to Figure 81-1.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **01**   *SC* **1.5**   *P* **20**   *L* **41**   # `419`

Zimmerman, George   CME Consulting

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

Abbreviation text is a placeholder. Abbreviations missing.

SuggestedRemedy

Insert : "Editors Note (to be removed prior to publication): Abbreviations clause here is a placeholder for abbreviations new to this amendment to be added to IEEE Std. 802.3 - Commenters should comment on and flag new abbreviations to be added"

Replace "ABBR" abbreviation entry with:
"xGBASE-T BASE-T Ethernet PCS/PMA/PMDs with 1000Mbps or greater speed"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
See comment 332

Cl **113**   *SC* **113.8.1**   *P* **182**   *L* **3**   # `404`

Belopolsky, Yakov   Bel Stewart

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

40GBASE-T is intended to operate over the cabling that meets the requirements of the ISO/IEC 111801 standard that includes Class I and Class II channels and in fact recognizes that components of categories 6a and 7a or better can support such transmission.
The IEC 60603-7-81 is not published, very limited technical data is available for such connectors   Connectors with mechanical interface specified in the IEC61076-3-110 have a better balance (no-split pair issues) and support more robust channel transmission performance. Numerous presentations were given to IEEE illustrating the   superior transmission performance. The reliance on the only one connector type will result in the limited deployment of the 40GBASE-T technology
Figures 113-40 & 113-41: The informational figures 113-40 and 113-41 are misleading.

SuggestedRemedy

Remove pictures 113-40 and 113-41
Line 6 remove the sentence starting with "These connectors are depicted…."

Line 4 add   "Eight -pin connectors meeting the requirements of IEC 61076-3-110 (published) shall be used as an alternative mechanical interface to the balanced cabling"

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
See draft liaison from IEC on 60603-7-81 status. Additionally see Task Force Review comments on D1.2.

Cl **113**   *SC* **113.8.2.2**   *P* **184**   *L*   # `465`

Lackner, Hans   QoSCom GmbH

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

As some values of the channels specified can only be made if shields are used, the MDI connection has to be also a shielded design. When using shields the symmetry mechanisms are different. The values in Formula 113-57 are too high.

SuggestedRemedy

Change in Formula 113-57
48 to 40 and
44 to 35,7
Add to editors note in line 33 that lines 38-54 will be removed prior to publication.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. Equation number stated is not valid. Assuming 113-46, the commentor has not provided sufficient information in comment to support suggest remedy to change draft.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **MDI**   Page 81 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:10 PM
SORT ORDER: Topic

Cl **113**   *SC* **113.8.2.2**   *P* **183**   *L* **27**   # 345

Lusted, Kent   Intel

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

An illustration of the Insertion Loss limit given in EQ 113-46 improves readability.

SuggestedRemedy

Add graphic.

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
EQ 113-46 is 113.8.2.2 MDI impedance balance. Commentor please check comment.

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

Lackner, Hans   QoSCom GmbH

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

Proposed Response   *Response Status* **W**

PROPOSED REJECT. 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* **113.8.1**   *P* **182**   *L* **9**   # 55

McDermott, Thomas   Fujitsu

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

At this point in time, it appears that all Cat 8 cables are shielded cable. Figures 133-40 and 113-41, and table 113- 23 do not indicate any shield connection point(s).

SuggestedRemedy

Revised both figures and the table to indicate shield connection point(s).

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Editor to check figures 133-40 and 113-41 figures for consistency with IEC 60603-7-51 and IEC 60603-7-81 and revise if figures illustrate shield connection points; if shield not indicated, will add a note indicating shielding requirements.

Cl **113**   *SC* **113.8.2.2**   *P* **183**   *L* **49**   # 110

Cibula, Peter   Intel Corporation

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

Subclause 113.8.2.2 makes reference to two different transmitter states when describing the impedance balance requirement and the descriptive test method. Lines 31 and 32 state "Test-mode 5 may be used to generate an appropriate transmitter output.", while Lines 49 and 50 state "… but with the transmitter output disabled." The phrase in Lines 49 and 50 appears to be in error and is inconsistent with other text.

SuggestedRemedy

As indicated in the recommended text on Page 12 of cibula_3bq_02_0115.pdf, change the text in Lines 49 and 50 from "During the test the PHY is connected to the MDI as in normal operation, but with the transmitter output disabled." to "During the test the PHY is connected to the MDI as in normal operation."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **113**   *SC* **113.8.2.1**   *P* **183**   *L* **12**   # 344

Lusted, Kent   Intel

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

An illustration of the RL limit given in EQ 113-45 improves readability.

SuggestedRemedy

Add graphic.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **MDI**   Page 82 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:10 PM
SORT ORDER: Topic

Cl **113**   *SC* **113.11**   *P* **185**   *L* **46**   # 237

Brown, Thomas   Vitesse Semiconductor

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

The sum of transmit and receive delays .... shall not exceed 25 600 BT.

The number of BT's of delay should be specified as one number.

SuggestedRemedy

Correct the sum of transmit and receive delays by specifying one number of BT.

Proposed Response   *Response Status* **W**

PROPOSED REJECT. Practice is consistent with 10GBASE-T Phys and allows for implementation flexibility.

Cl **45**   *SC* **45.2.7.11.7**   *P* **50**   *L* **4**   # 421

Zimmerman, George   CME Consulting

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

Incorrect bit referenced in paragraph

SuggestedRemedy

Change 7.33.11 to 7.33.8

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **45**   *SC* **45.2.1.62.1**   *P* **40**   *L* **17**   # 313

Hidaka, Yasuo   Fujitsu Laboratories of

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

The definition of a new field of 1.129.1 is confused and mixed with the definition of an existing field of 1.129.0.

The same problem in Table 45-54.

SuggestedRemedy

Change 45.2.1.62.1 as follows:

45.2.1.62.1 40GBASE-T LP information valid (1.129.1)

When read as a one, bit 1.129.1 indicates that the startup protocol defined in 113.4.2.5 has been completed, and that the contents of bits 1.130.11:0, 1.131.15:10, 1.145.14:8, 1.146.14:8, and 1.146.6:0, which are established during the startup protocol, are valid. When read as a zero, bit 1.129.1 indicates that the startup process has not been completed, and that the contents of these bits that are established during the startup protocol are invalid. A 40GBASE-T PMA shall return a value of zero in bit 1.129.1 if PMA link_status=FAIL.

45.2.1.62.2 10GBASE-T LP information valid (1.129.0)
When read as a one, bit 1.129.0 indicates that the startup protocol defined in 55.4.2.5 has been completed, and that the contents of bits 1.130.11:0, 1.131.15:10, 1.145.14:8, 1.146.14:8, and 1.146.6:0, which are established during the startup protocol, are valid. When read as a zero, bit 1.129.0 indicates that the startup process has not been completed, and that the contents of these bits that are established during the startup protocol are invalid. A 10GBASE-T PMA shall return a value of zero in bit 1.129.0 if PMA link_status=FAIL.

Change Table 45-54 as follows:

Bit(s)	Name	Description
1.129.15:2	Reserved	(same as before)
1.129.1	40GBASE-T LP information valid	(same as 1.129.0)
1.129.0	10GBASE-T LP information valid	(same as before)

Proposed Response   *Response Status* **W**

PROPOSED REJECT. There is only one link partner at a time so the functionality of LP information valid is combined into one bit for 10G & 40GBASE-T (see comment 316)

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **MGMT**   Page 83 of 94

COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:10 PM

SORT ORDER: Topic

Cl **113**　　*SC* **113.6**　　　　　*P* **168**　　*L* **20**　　　# `401`

Remein, Duane　　　　　　　Huawei Technologies

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

This para make is sound like Cl 45 and MDIO are required for 40G. However Cl 45 is optional for all subsequent clauses.

See related comment against Cl 28D.8 pg 28 ln 12

SuggestedRemedy

Create a cross reference table (for example see 82.3.1 PMD MDIO function mapping Table 82-10 and elsewhere in Section 6 of the Std that lists required variables and their corresponding MDIO registers.

Proposed Response　　*Response Status* **W**

PROPOSED REJECT.
Statement is clear that the functions MAY BE provided by Cl 45, language and definitions are consistent with existing language in Clause 55.

Cl **45**　　*SC* **45.2.3.13**　　　*P* **44**　　*L* **46**　　　# `22`

Hajduczenia, Marek　　　　　Bright House Networks

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

Some of the marked change make little sense: "BASE-R, and 10GBASE-T, or 40GBASE-T", or "when the BASE-R PCS or the 10GBASE-T or the 40GBASE-T PCS "

SuggestedRemedy

Change "when the BASE-R PCS or the 10GBASE-T or the 40GBASE-T PCS " to read "when the BASE-R PCS, 10GBASE-T, or the 40GBASE-T PCS " - use proper markup
Change "BASE-R, 10GBASE-T, or 40GBASE-T" - use proper markup

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **113**　　*SC* **113.6.1.1**　　　*P* **168**　　*L* **43**　　　# `402`

Remein, Duane　　　　　　　Huawei Technologies

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

This statement requires Cl 45 which is optional for all Eth.
"A 40GBASE-T PHY shall use the management register definitions and values specified in Table 113–19."

SuggestedRemedy

See comment against Cl 113.6 pg 168 ln 20.

Scrub the draft for any statements that require Cl 45 and reword to require variables rather than Cl 45 registers.

Proposed Response　　*Response Status* **W**

PROPOSED REJECT.
The statement is consistent with Clause 55. The statement refers to the definitions and values, not the implementation of the registers.

Cl **28D**　　*SC* **28D.8**　　　　*P* **28**　　*L* **12**　　　# `400`

Remein, Duane　　　　　　　Huawei Technologies

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

This statement implies Cl 45 (which is optional in it's entirety) is required:
"requires additional MDIO registers"
This also applies to other instances in the draft (such as 113.6.1.1 pg 168 ln 43 which also implies Cl 45 registers are required).

SuggestedRemedy

Create a cross reference table (for example see 82.3.1 PMD MDIO function mapping Table 82-10 and elsewhere in Section 6 of the Std that lists required variables and their corresponding MDIO registers.

Proposed Response　　*Response Status* **W**

PROPOSED REJECT.
Text is consistent with existing Annex 28D text in 28D.6 and 28D.7

Cl **45**	*SC* **45.2.1.64.1**	*P* **41**	*L* **13**	*#* 316

Hidaka, Yasuo   Fujitsu Laboratories of

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

Only existing LP information valid bit 1.129.0 is referred.

SuggestedRemedy

Change "If LP information valid bit, 1.129.0, is set to one" with
"If either 10GBASE-T LP information valid bit, 1.129.0, or 40GBASE-T LP information valid bit, 1.129.1, is set to one".

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
Since there can only be one LP at a time, there is only one LP information valid bit. (see comment 313)

Cl **113**	*SC* **113.1.3.1**	*P* **76**	*L* **27**	*#* 459

Frazier, Howard   Broadcom Corporation

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

In this paragraph we find a repetition of the text that appeared in footnote 5 on page 72. The last sentence of this paragraph is tutorial in nature and does not belong in the standard.

SuggestedRemedy

Delete the sentence: "The resulting
checkerboard constellation is based on a lattice called RZ2 in the literature (see Forney [B31])."

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
Sentence is consistent with other text in IEEE Std. 802.3, through multiple revisions.
This information was added to IEEE Std. 802.3 by IEEE Std. 802.3an-2006 for clarity the nature of the DSQ128 constellation (vs., for example, the PAM16 modulation), and is relevant to Clause 113 as well.

Cl **113**	*SC* **113.1.3**	*P* **72**	*L* **52**	*#* 458

Frazier, Howard   Broadcom Corporation

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

Half of footnote 5 is useful information that should be moved into the body of the subclause, and the other half is tutorial information that should not be included in the standard.

SuggestedRemedy

Move the sentence "5The DSQ128 symbols are obtained by concatenating two time-adjacent 1D PAM16 symbols and retaining among the 256 possible
Cartesian product combinations, 128 maximally spaced 2D symbols." into the body of the subclause immediately after "(double square 128).". Delete the remainder of the footnote.

Proposed Response   *Response Status* **W**

PROPOSED REJECT.
Footnote is consistent with other text in IEEE Std. 802.3 through multiple revision cycles, and provides useful information, suitable for a footnote. This information was added to IEEE Std. 802.3 by IEEE Std. 802.3an-2006 for clarity the nature of the DSQ128 constellation, and is relevant to Clause 113 as well.

Cl **81**	*SC* **81.1**	*P* **65**	*L* **33**	*#* 338

Hidaka, Yasuo   Fujitsu Laboratories of

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

Definition of RS-LDPC is missing.

SuggestedRemedy

Add definition of RS-LDPC as follows:

RS-LDPC = REED-SOLOMON LOW-DENSITY PARITY CHECK

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
See comment 332, removing RS-LDPC as an abbreviation from the text and using existing RS-FEC and LDPC abbreviations.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **PCS**   Page 85 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:10 PM
SORT ORDER: Topic

Cl **113**　　*SC* **113.3.2.3**　　　　*P* **108**　　*L* **8**　　　# `293`

Hidaka, Yasuo　　　　　　　　Fujitsu Laboratories of

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

The statement "One XLGMII data transfer is decoded from each block." does not describe the PCS receive function well.

SuggestedRemedy

Change the statement "One XLGMII data transfer is decoded from each block." with the following:

50 XLGMII data transfers are decoded from one RS-LDPC frame.

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **113**　　*SC* **113.3.2.2.15**　　　*P* **98**　　*L* **26**　　　# `283`

Hidaka, Yasuo　　　　　　　　Fujitsu Laboratories of

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

The ratio of transfer rates should be "25:128".

SuggestedRemedy

Change "25:64" on line 26, page 98 with "25:128".

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **113**　　*SC* **113.3.2.2.23**　　*P* **106**　　*L* **31**　　　# `439`

Zimmerman, George　　　　　　CME Consulting

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

References to LDPC framer blocks of purely 65B blocks should now be mixed 512B and 65B blocks.

SuggestedRemedy

Rename 65B-LDPC framer to block-LDPC framer in 113.3.2.2.23 title & paragraph
Change: "betewen the 65-bit width of the 65B blocks and the 4D-PAM16" to "between the mixed 513B and 65B blocks and the 4D-PAM16" (line 31)
Change "entirely of 64B/65B LDPC-encoded LP_IDLE" to "entirely of RS-LDPC encoded LP_IDLE" (line 50, cl. 113.3.2.2.24)
Change "64B/65B encoding technique" to "mixed 512B/513B 64B/65B RS-LDPC encoding used in normal data mode"(p. 130, line 52, cl. 113.4.2.2.1)

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Rename 65B-LDPC framer to block-LDPC framer in 113.3.2.2.23 title & paragraph
Change: "betewen the 65-bit width of the 65B blocks and the 4D-PAM16" to "between the mixed 513B and 65B blocks and the 4D-PAM16" (line 31)
Change "entirely of 64B/65B LDPC-encoded LP_IDLE" to "entirely of RS-FEC and LDPC encoded LP_IDLE" (line 50, cl. 113.3.2.2.24)
Change "64B/65B encoding technique" to "mixed 512B/513B 64B/65B RS-FEC and LDPC encoding used in normal data mode"(p. 130, line 52, cl. 113.4.2.2.1)

(see comment 332)

Cl **113**　　*SC* **113.3.6.2.1**　　　*P* **115**　　*L* **24**　　　# `422`

Zimmerman, George　　　　　　CME Consulting

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

blocks don't go to LDPC encoder anymore, now they go to the transcoder and framer first

SuggestedRemedy

Change "to the LDPC encoder" to "to the 512B/513B transcoder and block-LDPC framer" (or 65B-LDPC framer if previous comment on 113.3.2.2.23 is not accepted) - in 4 places, EBLOCK_T, LBLOCK_T, LPBLOCK_T, IBLOCK_T

Proposed Response　　*Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic

Topic **PCS**

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Cl **80**	*SC* **80.1.3**	*P* **61**	*L* **37**	*#* 332

Hidaka, Yasuo   Fujitsu Laboratories of

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

A new abbreviation for "RS-LDPC" is not defined.

SuggestedRemedy

Add a definition of "RS-LDPC" as follows"

RS-LDPC = REED-SOLOMON LOW-DENSITY PARITY CHECK

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Use existing 802.3 defined abbreviations, RS-FEC and LDPC, as follows:

Change RS-LDPC PCS in Figures 80-1 and 81-1 to "40GBASE-T PCS"

In 113.3.2.2 (p. 80, line 44) change "mixed 513B-65B-RS-LDPC encoding" to "mixed 513B-65B-RS-FEC-LDPC encoding"

In Figure 113-7 (p. 93) change "RS-LDPC received frame" to "Received frame" and change "RS-LDPC decoded frame" to "FEC-decoded frame" (since LDPC and RS-FEC are already called out in the figure)

Insert in 80.1.4 after line 49, "40GBASE-T uses a combination of Reed-Solomon-FEC (RS-FEC) and low density parity check (LDPC) FECs in its physical coding sublayer that is mapped to a 128 double-square (DSQ128) constellation for transmission on 4-pair, twisted-pair copper cabling."

See comments 200 and 439

Cl **113**	*SC* **113.3.2.2.5**	*P* **95**	*L* **7**	*#* 77

Mark, Laubach   Broadcom Corporation

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

Regarding "Editor's Note (to be removed prior to publication): Figure 113–9 shows the full set of 32 bit block alignments n the anticipation of updating the document to include a 25Gbps rate which may be 32 bit aligned.". First "n" should be "in". Second, is there any technical impact on this specification if Figure 113-9 is left as is and then remove this EN?

SuggestedRemedy

Remove EN if possible.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Fix 'n' to "in".
Purpose of note is to avoid comments deleting extra block alignments until 25GBASE-T PAR is resolved. EN to be removed at that time.

Cl **113**	*SC* **1.2**	*P* **72**	*L* **10**	*#* 57

McDermott, Thomas   Fujitsu

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

Figure 113-1 does not show the RS-LPDC FEC PCS sublayer, as shown in figure 81-1 for 40GBASE-T.

SuggestedRemedy

Revise figure 113-1 to include RS LDPC FEC PCS sublayer.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Revise Figure 113-1 to show 40GBASE-T PCS
See comment 332

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

Wang, Zhongfeng   Broadcom Corp.

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

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Task Force to consider presentation on alternative transcoding

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **PCS**   Page 87 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:10 PM
SORT ORDER: Topic

Cl **113**   *SC* **113.3.2.2.15**   *P* **98**   *L* **24**   # 282

Hidaka, Yasuo   Fujitsu Laboratories of

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

The second and third statements "A single XLGMII data transfers is encoded into each block. It takes 256 PMA_UNITDATA transfers to send an LDPC frame of data." in the paragraph do not describe the transmit process well.

SuggestedRemedy

Change the second and third statements of the paragraph with the following:

50 XLGMII data transfers are encoded into an RS-LDPC frame.
It takes 256 PMA_UNITDATA transfers to send an RS-LDPC frame of data.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change to read, "50 XLGMII data transfers are encoded into an LDPC frame.
It takes 256 PMA_UNITDATA transfers to send an LDPC frame of data."

(note the term LPDC frame is used throughout both Clause 55 and draft clause 113 to represent the framing structure including the uncoded or RS-FEC coded bits)

Cl **113**   *SC* **113.5**   *P* **154**   *L* **33**   # 299

Hidaka, Yasuo   Fujitsu Laboratories of

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

The statement "Common-mode tests use the common-mode return point as a reference." on line 33, page 154 is out of context and not clear.

There is not definition of the common-mode return point.
There is no nearby descriptions about common-mode tests.

It should be moved to an appropriate location with a referenct to the defnition of the common-mode return point, or removed.

SuggestedRemedy

Remove the statement of "Common-mode tests use the common-mode return point as a reference" on line 33, page 154.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Editor to search for any tests left hanging and reinsert statement there if needed.

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

Frazier, Howard   Broadcom Corporation

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

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Remove editor's note.

Cl **113**   *SC* **113.5.3.2**   *P* **158**   *L* **47**   # 444

Frazier, Howard   Broadcom Corporation

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

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

SuggestedRemedy

If the note is false, then remove it. If it is true, then fix the SFDR and restart the WG ballot.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
See comment 424

Cl **113**   *SC* **113.5.3.2**   *P* **158**   *L* **47**   # 424

Zimmerman, George   CME Consulting

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

Equation 113-9, needs to be frequency scaled to get the same SNR due to transmitter nonlinear distortion as 10GBASE-T, as flagged by editors note. Editor's note has served its purpose.

SuggestedRemedy

In Equation 113-9: change f/25 to f/100
Delete editors note, lines 47-50

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **PMA**   Page 88 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:10 PM
SORT ORDER: Topic

Cl **113**   *SC* **113.4.5.1**   *P* **145**   *L* **30**   # 464
Dai, Shaoan   Marvell

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

Missing a definition for pma_reset which appears in Fig 113-29.

SuggestedRemedy

Insert the following definition:
"pma_reset
Allows reset of the PHY Control and Link Monitor state diagrams.
Values: ON or OFF"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.
Correction was made during 802.3bx WG balloting to Clause 55.

Cl **113**   *SC* **113.5.4.6**   *P* **162**   *L* **42**   # 97
McClellan, Brett   Marvell

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

Subclause 113.5.4.6 Direct attach cable assembly and subclauses 113.5.4.6.1 through
113.5.4.6.14 specify a link segment, not receiver electrical specifications. The appropriate
locations for this section is under Subclause 113.7 Link segment characteristics.

SuggestedRemedy

Move Subclauses 113.5.4.6 through 113.5.4.6.14 into 113.7.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Move to 113.7 and relable as 'short reach/direct attach link segment specifications'. Check all
references to 113.5.4.6 to refer to new subclause under 113.7. Check all references to short
reach test mode.

Cl **113**   *SC* **113.5.4.5**   *P* **162**   *L* **37**   # 446
Frazier, Howard   Broadcom Corporation

Comment Type **ER**   *Comment Status* **D**   *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."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.
Implement with comment#97

Cl **113**   *SC* **113.5.4.5**   *P* **162**   *L* **33**   # 426
Zimmerman, George   CME Consulting

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

"both short reach test channels" - there is only one, and it is specified in 113.5.4.6

SuggestedRemedy

Change "through both short reach test channels" with "through a (short reach) link segment
meeting the requirements specified in 113.5.4.6".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Remove "both", and align text with other comments on this same text. (see comments 97 & 446)

Cl **113**   *SC* **113.5.4.5**   *P* **162**   *L* **40**   # 427
Zimmerman, George   CME Consulting

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

Register 1.131 (Phy Short reach mode) is misnamed, and also needs 40G inserted in clause
45 definition (45.2.1.64.2)

SuggestedRemedy

Change "PHY short reach register setting" to "PHY short reach mode register setting".
Insert text to Clause 45.2.1.64.2, after "The short reach mode of the 10GBASE-T PHY
provides a means for operation on a cable plant that has
parametric performance equivalent to 30 m of Class F and Class EA cabling as defined in
55.5.4.5.":
"The short reach mode of the 40GBASE-T PHY provides a means for operation on a link
segment that has
parametric performance equivalent to a 5m direct attach cable assembly specified in 113.5.4.6."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT. See comment 97

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **Shortreach**   Page 89 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:10 PM
SORT ORDER: Topic

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

Frazier, Howard   Broadcom Corporation

Comment Type **TR**   *Comment Status* **D**   *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."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Text of subclause to be implemented with comment#97.

Direct attach terminology for committee discussion. Please note;
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* **D**   *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.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
See comment 97

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

Lo, William   Marvell Semiconductor

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

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Task Force to discuss with 93 & 84

Cl **55**   *SC* **55**   *P* **55**   *L* **1**   # 103

McClellan, Brett   Marvell

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

In November the Maintenance task force considered a maintenance request to remove the 10GBASE-T periodic training. The task force forwarded the request to the 802.3bq task force for consideration.

http://www.ieee802.org/3/maint/requests/maint_1266.pdf
http://www.ieee802.org/3/maint/requests/revision_history.html#REQ1266

SuggestedRemedy

Implement the changes to Clauses 45 and 55 as detailed in
http://www.ieee802.org/3/maint/requests/maint_1266.pdf as part of 802.3bq.
In addition, in 55.4.2.5.15 Fast retrain function
delete text "The training sequence without periodic re-initialization described in 55.3.4 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."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Task Force to consider maintenance request

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **Training**   Page 90 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:11 PM
SORT ORDER: Topic

CI **113**   *SC* **113.4.2.5.15**   *P* **141**   *L* **5**   # 94

McClellan, Brett   Marvell

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

The current text for fast retrain has the THP enabled during the PMA_Coeff_Exch state. During normal link training, the THP is bypassed in PMA_Coeff_Exch state enabling the receiver to determine the optimal DFE/THP for the link conditions. Allowing the local device to request the link partner to bypass the THP during fast retrain in the PMA_Coeff_Exch state will enable the receiver to determine the optimal DFE/THP for the link conditions.

SuggestedRemedy

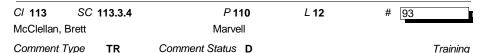change "After completing the link failure signal the PHY shall transition to the PMA_Coeff_Exch state, keep its THP turned on with its previously exchanged coefficients, and send PAM2 signaling within a time period equivalent to 9 LDPC frame periods."
to "After completing the link failure signal the PHY shall transition to the PMA_Coeff_Exch state. If the link partner requested THP bypass during fast retrain the PHY will bypass the THP (or set THP coefficients to zero) during the PMA_Coeff_Exchstate state. Otherwise the PHY will keep its THP turned on with its previously exchanged coefficients, and send PAM2 signaling within a time period equivalent to 9 LDPC frame periods."

Proposed Response   *Response Status*   **W**

PROPOSED ACCEPT.

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

McClellan, Brett   Marvell

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

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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"

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Consider with maintenance request in comment 103
Consider with comments 84 & 107

Cl **113**　　*SC* **113.6.1.2**　　　*P* **170**　　*L* **5**　　　# 84

Kim, Yong　　　　　　　　　Broadcom

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

"repeat training" capability as presented in
http://www.ieee802.org/3/bq/public/jul14/souvignier_3bq_01_0714.pdf
was adopted by a motion (in minuites) in
http://www.ieee802.org/3/bq/public/jul14/unconfirmed_minutes_3bq_0714.pdf

So unless there were a committee action to reverse this requirement (the commenter is not aware of such) and in which case, this comment is to be withdrawn by the commenter, this ability needs to be defined.

SuggestedRemedy

Please do so (add a 40GBASE-T repeat-train ability).

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Comment was implemented to the extent described in July minutes - motion was not to adopt repeat training capability, but to modify the strawman in the text. This was later updated during Task Force Review, and the same commenter concurred PTS was broken and a supported text changes. See comment 156 on D1.1.1:
http://www.ieee802.org/3/bq/comments/p802.3bq_d1.1.1_approved_responses_CommentID.pdf
Task Force to consider with comments 93 & 107

Cl **45**　　*SC* **45.2.1.62**　　　*P* **40**　　*L* **11**　　　# 102

McClellan, Brett　　　　　　　Marvell

Comment Type **T**　　*Comment Status* **D**　　　　*xGBASE-T*

Clause 45 registers and bits should be renamed from '10G/40GBASE-T' to 'xGBASE-T' for simplification and in anticipation of supporting 25G, 2.5G and 5G which will use the same registers. NOTE: Annex 28C has already been modified to use xGBASE-T. See page 27 line 16 Clause 55 was also changed, see page 55.

SuggestedRemedy

Replace '10G/40GBASE-T' with 'xGBASE-T' in register and register bit names.
Replace only in register names and bit names but not in descriptions that include a listing of speeds.
e.g. do not replace on page 46 line 40.
Example locations: 45.2.1.62 page 40 lines 11, 13, 23, 28, 41, 45, 49, 51

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.
See comment 6 for definition of xGBASE-T

Cl **28C**　　*SC* **28C**　　　*P* **27**　　*L* **11**　　　# 6

Hajduczenia, Marek　　　　　　Bright House Networks

Comment Type **T**　　*Comment Status* **D**　　　　*xGBASE-T*

It is not clear xGBASE-T is and where it is defined. There are two ways it seems to be defined "multigigabit", "multiple Gigabit", and "xGBASE-T" - which one is to be used?

SuggestedRemedy

If we want to use "xGBASE-T" in the document, it should be defined in Clause 1 as follows:
"xGBASE-T: designates jointly 1000BASE-T, 10GBASE-T, and 40GBASE-T"

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.
add new definition to 1.4 defining xGBASE-T as "BASE-T Ethernet PCS/PMA/PMDs at speeds in excess of 1000Mbps, including 10GBASE-T (Clause 55), and 40GBASE-T (Clause 113)"

Change references to xGBASE-T Technology Message Code to be "xGBASE-T and 1000BASE-T Technology Message Code"

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Topic

Topic **xGBASE-T**　　Page 92 of 94
4/29/2015 2:42:11 PM

Cl **113**   *SC* **113.6.2**   *P* **171**   *L* **38**   # 273

Hidaka, Yasuo   Fujitsu Laboratories of

Comment Type **T**   *Comment Status* **D**   *xGBASE-T*

I do not agree to use abbreviation of xGBASE-T, because there are many xGBASE-T to be defined in near future, and it is not clear which xGBASE-T will be included.

I think it is safe to consider for each description for each technology rather than just using abbreviation.

If we are motivated to use an abbrevation to represent some common abstraction, we should give a clear definition of the abstraction rather than just using abbreviation.

SuggestedRemedy

Change "xGBASE-T" on line 13 thru 15 with "40GBASE-T/10GBASE-T/1000BASE-T".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
See comment 6

Cl **28C**   *SC* **28C.11**   *P* **27**   *L* **1116**   # 82

Kim, Yong   Broadcom

Comment Type **TR**   *Comment Status* **D**   *xGBASE-T*

Change to make MC9 to be a generic does not work (i.e. change to xGBASE-T) from 10GBASE-T and 1000BASE-T), because it implies that all future xxBASE-T would use this. Secondary part of this comment is 1000BASE-T is not noted anywhere as 1GBASE-T, requiring careful changes everywhere apppropriate to indicate 1000BASE-T == 1GBASE-T.

SuggestedRemedy

Just revise to reflect what is actually being done.
Change to:
Line 11 - 40GBASE-T/10GBASE-T/1000BASE-T
Line 16 - 40GBASE-T, 10GBASE-T, and 1000BASE-T.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
xGBASE-T to be specifically defined term
Generic reference to MC9 to be 1000BASE-T and xGBASE-T
See comment 6

Cl **28C**   *SC* **28C.11**   *P* **27**   *L* **11**   # 309

Hidaka, Yasuo   Fujitsu Laboratories of

Comment Type **T**   *Comment Status* **D**   *xGBASE-T*

I do not agree to use abbreviation of xGBASE-T, because there are many xGBASE-T to be defined in near future, and it is not clear which xGBASE-T will be included.

I think it is safe to consider for each description for each technology rather than just using abbreviation.

If we are motivated to use an abbrevation to represent some common abstraction, we should give a clear definition of the abstraction rather than just using abbreviation.

SuggestedRemedy

Change "xGBASE-T" on line 11, page 27 with "40GBASE-T/10GBASE-T/1000BASE-T".

Change "xGBASE-T" on line 16, page 27 with "40GBASE-T, 10GBASE-T and 1000BASE-T".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
See comment 6

Cl **55**   *SC* **55.6.2**   *P* **55**   *L* **13**   # 324

Hidaka, Yasuo   Fujitsu Laboratories of

Comment Type **T**   *Comment Status* **D**   *xGBASE-T*

I do not agree to use abbreviation of xGBASE-T, because there are many xGBASE-T to be defined in near future, and it is not clear which xGBASE-T will be included.

I think it is safe to consider for each description for each technology rather than just using abbreviation.

If we are motivated to use an abbreviation to represent some common abstraction, we should give a clear definition of the abstraction rather than just using abbreviation.

SuggestedRemedy

Change "xGBASE-T" on line 13 thru 15 with "40GBASE-T/10GBASE-T/1000BASE-T".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Definition of xGBASE-T added to the definitions section, to include 40GBASE-T and 10GBASE-T. References on lines 13 thru 15 changed to "1000BASE-T and xGBASE-T".

See comments 6, 82, 95, 92, 102, 273, 309, 324

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **xGBASE-T**   Page 93 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:11 PM
SORT ORDER: Topic

Cl **113**   *SC* **113.6.1.2**   *P* **169**   *L* **24**   # 95

McClellan, Brett   Marvell

Comment Type **T**   *Comment Status* **D**   *xGBASE-T*

"10GBASE-T and 1000BASE-T formatted Extended Next Page" should be "xGBASE-T technology message Extended Next Page" so that it matches the change made in 28C.11
similary page 169 line 27
"40GBASE-T message page exchange" should be "xGBASE-T technology message Extended Next Page exchange"

SuggestedRemedy

page 169 line 24 change "10GBASE-T and 1000BASE-T formatted Extended Next Page" to "xGBASE-T technology message Extended Next Page"
line 27 change "40GBASE-T message page exchange" to "xGBASE-T technology message Extended Next Page exchange"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change to "xGBASE-T and 1000BASE-T technology message Extended Next page" since new definition does not include 1000BASE-T (see comment 6)

Cl **30**   *SC* **Table 30-1e**   *P* **29**   *L* **13**   # 249

Grow, Robert   RMG Consulting

Comment Type **ER**   *Comment Status* **D**   *xGBASE-T*

Insert has caused a text wrap that is not shown. Also a problem for second and third pages of table.
There are other locations where adding speeds to the name may become a problem like in the PICS where non-breaking spaces have not been used resulting in a name split with only a single letter in the last line. For example 10G/25G/40G, increases row height would eliminate even more data rows below
the headings. The quick solution of increasing row height to allow all text to show in one line is probably not the best for long term purposes.

SuggestedRemedy

Perhaps something like xG (as used in other locations) might be better than a list of speeds.
This will require a search and selective replace of 10G/40G.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Use newly defined term xGBASE-T for header
See comment 6 for definition of xGBASE-T.
Editor to review tables for spacing and row height issues.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **xGBASE-T**   Page 94 of 94
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   4/29/2015 2:42:11 PM
SORT ORDER: Topic