Proposed Responses

On page 49, line 47 (diff document) there is a reference to 25.4a.2 (link does not work) but 25.4a.2 does not exist in the draft.

On page 50, line 14 there is a reference to 25.4a.1 (link does not work) but 25.4a.1 does not exist in the draft.

On page 53, line 47 is "Insert 25.4a at the end of 25.4 as shown below." However, below this is subclause 25.5, followed by 25.50.1 etc. with no other editing instructions. These subclause numbers should presumably all be 25.4a.xxx

The clause numbering below this is also wrong, e.g. the PICS for clause 25 is 25.5 not 25.6

SuggestedRemedy
Correct clause numbering currently shown as 25.5 and 25.50 to 25.4a.
Change "Insert 25.4a at the end of 25.4 as shown below:" to "Insert 25.4a after 25.4 as shown below:" Make sure links in 24.4.1.4.3 and 24.4.1.5.3 remain correct and work properly. Also correct the clause numbering for the PICS section to 25.5 as per the editing instructions there.

Proposed Response
P.55, L.47, Change "Insert 25.4a at the end of 25.4 as shown below:" to "Insert 25.4a after 25.4 as shown below:" P.56, L.1, Change Subclause number 25.5 to 25.4a
Change all subsequent Subclause number from 25.50.xx to 25.4a.xx P.61, L.1, Change Subclause number 25.6 to 25.5
Change all subsequent Subclause number from 25.6.xx to 25.5.xx P.61, L.12, Change the reference of Subclause number in item LPI from 25.5 to 25.4a

The transition from LPI_K back to LP_IDLE_D is inconsistent with the equivalent legacy transition (RX_K to IDLE_D) when xmit != DATA. If xmit != DATA and Sudi([K/5.6]+[D/16.2]), the state diagram would get stuck into the LPI_K state indefinitely. However, this is highly unlikely. What is more likely is that auto-negotiation is restarted while the receiver is detecting LPI. In this case, the state diagram would remain in the LPI_K state during the data code-group reception, and would transition into the RX_INVALID state (via "F") when the next /K28.5/ is received. At worst, this would force an Auto-Negotiation restart (via RUDI(INVALID)) but this seems like an unnecessary glitch with a straightforward work-around.

SuggestedRemedy
For the transition from LPI_K to LPI_IDLE_D, change the term xmit != DATA &#8727; SUDI("member of set of" [D] * !([D21.5] * ![D2.2] * ![D5.6] * ![D16.2])) to xmit != DATA &#8727; SUDI("member of set of" [D] * ![D21.5] * ![D2.2] * ![D5.6] * ![D16.2])) Also remove the term xmit = DATA from the transition from LPI_K to IDLE_D (via "C")

Proposed Response
Rewriting to clarify the problems in the comment tool:
For the transition from LPI_K to LPI_IDLE_D, change the term xmit != DATA * SUDI("member of set of" [D] * ![D21.5] * ![D2.2])) to xmit != DATA * SUDI("member of set of" [D] * ![D21.5] * ![D2.2] * ![D5.6] * ![D16.2]))
(i.e. 2 elements added to the set of terms)
Also remove the term xmit = DATA from the transition from LPI_K to IDLE_D (via "C").
Comment Type TR  Comment Status D
The transition from RX_WAKE_DONE to LPI_K in the PCS Receive state diagram (Figure 36-7c, the second one) should be UCT (unconditional transition) and not SUDI. SUDI will cause to PCS Receive state diagram to be out of synchronization.
SuggestedRemedy
Change the transition condition from SUDI to UCT.
Proposed Response  Response Status W
PROPOSED ACCEPT.

Comment Type TR  Comment Status D
In order to advertise the fast retrain ability (45.7.10), the management needs to know if the PHY is capable of fast retrain. Also the management may choose not to advertise fast retrain ability, to the link partner, even if the local PHY is fast retrain capable. So define a bit to fast retrain ability bit to fast retrain control/status register. This bit will be set to one for PHYs that implement fast retrain capability.
SuggestedRemedy
Add a bit to 1.147, 10GBASE-T fast retrain status & control register, to indicate PHY fast retrain capability
Proposed Response  Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
Define a new register bit:
1.147.3 : Fast retrain ability : 1 = PHY supports fast retrain, 0 = PHY does not support fast retrain : read only
Insert 45.2.1.76a.3 Fast retrain ability (1.147.3)
This bit indicates that the PHY supports fast retrain as defined in 55.4.5.1.
**IEEE P802.3az D3.1 Energy Efficient Ethernet comments**

**Proposed Responses**

**Comment #79**

**Comment Type**: TR  
**Comment Status**: D  
**Comment**: A RO status bit is not provided to indicate whether fast retrain was negotiated or not. 1.147.0 does not suffice, since it may be overwritten by the station manager.

**Suggested Remedy**

Provide a RO status bit to indicate whether fast retraining was successfully negotiated or not. 1.147.1 is suggested. Name "Fast Retrain Negotiated". Description: "1 = Fast retrain was negotiated; 0 = Fast retrain was not negotiated." R/W: "RO".

**Proposed Response**

**Response Status**: W  
**Proposed Accept In Principle**: Define a new register bit:

1.147.2 : Fast retrain negotiated : 1 = PHY has negotiated fast retrain, 0 = PHY has not negotiated fast retrain : read only

Insert 45.2.1.76a.4 Fast retrain ability (1.147.2)

This bit indicates that the PHY has negotiated fast retrain as defined in 55.4.5.1.

**Comment #80**

**Comment Type**: TR  
**Comment Status**: D  
**Comment**: What does it mean to disable this bit?

**Suggested Remedy**

Change "disabling this bit" to "setting this bit to 0".

**Proposed Response**

**Response Status**: W  
**Proposed Accept**:
### 46 46.1.7.3 140 42

**Comment Type:** T  
**Comment Status:** D  
**Proposed Response:**  
**Response Status:** W  
**Comment:** CARRIER status has values CARRIER_ON and CARRIER_OFF.  
**Suggested Remedy:**  
Change "CARRIER_STATUS is set to false" to "CARRIER_STATUS is set to CARRIER_OFF".  
**Proposed Response:** Proposed ACCEPT.

### 46 46.3.2.4 142 52

**Comment Type:** T  
**Comment Status:** D  
**Proposed Response:**  
**Response Status:** W  
**Comment:** There's no PICS entry for the shall in "The PHY shall restart RX_CLK so that at least one positive transition occurs before it deasserts LPI."
**Suggested Remedy:**  
Add PICS entry.  
**Proposed Response:** Proposed REJECT.

**Comment Type:** E  
**Comment Status:** D  
**Proposed Response:**  
**Response Status:** W  
**Comment:** The "shall" at this point refers to the PHY that is attached to this sublayer, therefore the PICS entry would be inappropriate. This is similar to numerous other examples in RS clauses.
**Suggested Remedy:**  
Proposed ACCEPT.

### 46 46.3a 144 5  

**Comment Type:** T  
**Comment Status:** D  
**Proposed Response:**  
**Response Status:** W  
**Comment:** label "PLS_Service Primitives" only applies to primitives starting with PLS.  
**Suggested Remedy:**  
Change "PLS_Service Primitives" to "PLS Service Primitives" and move to a location within the set of PLS primitives. Add dashed rectangle around PLS service primitives to differentiate from the LPI client service primitives.
**Proposed Response:** Proposed ACCEPT.

### 46 46.3a.1 144 30  

**Comment Type:** T  
**Comment Status:** D  
**Proposed Response:**  
**Response Status:** W  
**Comment:** While LPI_INDICATION is DEASSERT, all behavior is normal.  
**Suggested Remedy:**  
Delete "inter-frame".  
**Proposed Response:** Proposed ACCEPT.

**Comment Type:** T  
**Comment Status:** D  
**Proposed Response:**  
**Response Status:** W  
**Comment:** Until 1 second after link_status is OK, effect of primitive is undefined regardless of its value.  
**Suggested Remedy:**  
Delete "or if LPI_REQUEST=ASSERT".  
**Proposed Response:** Proposed ACCEPT.

### 46 46.3a.2.2 145 28  

**Comment Type:** T  
**Comment Status:** D  
**Proposed Response:**  
**Response Status:** W  
**Comment:** CARRIER status has values CARRIER_ON and CARRIER_OFF.  
**Suggested Remedy:**  
Change "CARRIER_STATUS = OFF" to "CARRIER_STATUS= CARRIER_OFF".
**Proposed Response:** Proposed ACCEPT.
<table>
<thead>
<tr>
<th>Comment Type</th>
<th>Comment Status</th>
<th>Proposed Response</th>
<th>Response Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>D</td>
<td>CARRIER status has values CARRIER_ON and CARRIER_OFF.</td>
<td>PROPOSED ACCEPT.</td>
</tr>
<tr>
<td>T</td>
<td>D</td>
<td>Change &quot;CARRIER_STATUS = ON&quot; to &quot;CARRIER_STATUS= CARRIER_ON&quot;.</td>
<td>PROPOSED ACCEPT.</td>
</tr>
<tr>
<td>T</td>
<td>D</td>
<td>TX_REFRESH state no longer exists.</td>
<td>PROPOSED ACCEPT.</td>
</tr>
<tr>
<td>T</td>
<td>D</td>
<td>There is a potential dead-lock definition if the timer expires at the same time as tx_raw transitions from L to L/LI.</td>
<td>PROPOSED ACCEPT.</td>
</tr>
<tr>
<td>E</td>
<td>D</td>
<td>The editing instruction says &quot;Insert new variables into 49.2.13.2.2, ...&quot; but the heading beneath this is &quot;49.2.9.2.2 Variables&quot;.</td>
<td>PROPOSED ACCEPT.</td>
</tr>
</tbody>
</table>

**Proposed Responses**

**Comment Type**
- T: technical
- E: editorial
- G: general

**Comment Status**
- D: dispatched
- A: accepted
- R: rejected
- Z: withdrawn

**Response Status**
- O: open
- W: written
- C: closed
- U: unsatisfied

**Clause, Subclause, page, line**

**Proposed Response**
- Brown, Matthew Applied Micro (AMCC)
- Horner, Rita Avago Technologies
- Anslow, Peter Ciena Corporation
The definition of one_us_timer needs reference the parameter T_1U defined in Table 49-3 (which really should be replacing Table 49-2) in order to establish the bounds on the timer terminal count.

**Suggested Remedy**
Change the definition of one_us_timer to: "This timer is used to count approximately 1 microsecond intervals. The timer terminal count is set to T1U. When the timer reaches terminal count it will set the one_us_timer_done = TRUE."

**Proposed Response**

**Response Status:** W
PROPOSED ACCEPT.

---

The editing instruction says "Insert the following row into table 51.7.3.", but table 51.7.3 does not exist.

**Suggested Remedy**
Change *Insert the following row into table 51.7.3:" to "Insert the following row at the end of the table in 51.10.3:

**Proposed Response**

**Response Status:** W
PROPOSED ACCEPT.

---

As per D3.1, there is an option in the PMA to either send IDLE or Local Fault during fast retrain. However it is possible for one link partner to enable IDLE and other link partner may enable to send Local Fault condition. So the link partners may have different settings at either end of the link and this may cause inconsistent behaviour at the link/system level.

**Suggested Remedy**
One possibility is to provide a mechanism to advertise the fast retrain signal type along with fast retrain ability, so both link partner can enable this feature consistently. Alternatively do not provide an optional feature, just specify one mechanism to signal fast retrain active condition. This will ensure consistent behavior at the either end of the link.

**Proposed Response**

**Response Status:** W
PROPOSED REJECT.

The host system decides whether it wishes to receive local fault or idles during a fast retrain. It is not clear why the system behaviour needs to be symmetric.

There are several other comments addressing XGMII signaling during fast retrain and this response may be be changed by those responses.

(see . . . . . . )

---

Figure 55-4. PMA_FR_ACTIVE primitive is not required for EEE nor for normal operation.

**Suggested Remedy**
Re-draw dashed rectangle to include only EEE signals. Employ another means to differentiate FR signals from normal and EEE signals. Add a note to indicate the signals relevant to FR.

**Proposed Response**

**Response Status:** W
PROPOSED ACCEPT.
Cl 55 SC 55.2.2.10.1 P 193 L 4 # 30
Brown, Matthew Applied Micro (AMCC)

Comment Type E  Comment Status D
Not clear what rx_lpi_active is.

SuggestedRemedy
Change end of sentence to: "change in the rx_lpi_active variable as determined by the receive state diagram in Figure 55-16."

Proposed Response Response Status W
PROPOSED ACCEPT.

Cl 55 SC 55.2.2.11 P 201 L 10 # 5
Anslow, Peter Ciena Corporation

Comment Type E  Comment Status D
There is no editing instruction regarding 55.2.2.11 or 55.2.2.12

SuggestedRemedy
On page 200 change "Insert 55.2.2.9 and 55.2.2.10 after section 55.2.2.8 as shown below:" to "Insert 55.2.2.9, 55.2.2.10, 55.2.2.11 and 55.2.2.12 after section 55.2.2.8 as shown below;"

Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE.

The change is correct but the page number is 192]

Cl 55 SC 55.2.2.3.1 P 192 L 5 # 28
Brown, Matthew Applied Micro (AMCC)

Comment Type E  Comment Status D
Not clear what pcs_data_mode parameter is.

SuggestedRemedy
Add sentence... "The pcs_data_mode parameter reflects the value of the pcs_data_mode variable as specified in 55.3.5.2.2."

Proposed Response Response Status W
PROPOSED REJECT.

The text states clearly that the variable is set by the PMA PHY control state machine. This change is unnecessary.

Cl 55 SC 55.2.2.12 P 193 L 42 # 52
Brown, Matthew Applied Micro (AMCC)

Comment Type E  Comment Status D
Not clear what fr_active parameter is.

SuggestedRemedy
Add sentence ... "The fr_active parameter reflects the value of the fr_active variable specified in 55.3.5.2.2."

Proposed Response Response Status W
PROPOSED REJECT.

The text states clearly that the variable is set by the PMA PHY control state machine. This change is unnecessary.
alert_detect parameter values do not match alert_detect variable.

Suggested Remedy
Either change values to match or explain that alert_detect parameter is DETECTED when alert_detect variable is TRUE and NOT_DETECTED with alert_detect variable is FALSE.

Proposed Response
Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
Change DETECTED to TRUE, change NOT_DETECTED to FALSE in 55.2.2.9.1.

When is alert_detect, set to NOT_DETECTED? Though the event DETECTED is obvious, it is not clear when alert_detect would be set to NOT_DETECTED. In fact, all of the definitions talk about the DETECTED event and the state machine really only requires the DETECTED event. Fixing this is somewhat complicated by the composite nature of the variable definition in 55.3.5.22.

Suggested Remedy
Re-define alert_detect to have single value DETECTED sent when alert signal is detected, otherwise parameter value is undefined.

Proposed Response
Response Status W
PROPOSED REJECT.
There are only two values that alert_detect can be set to. If, as the comment states, it is clear when the first value is used, then it should be equally clear when the second value is used.
Whether the second value is not_detected, false, or undefined is moot since it is not used/detected elsewhere.

Figure 55-15 does not include states for EEE and Figure 55-15a does not include dashed rectangles.

Suggested Remedy
Restate as follows: State transitions within dashed rectangles in Figure 55-15 and all states and transitions in Figure 55.15a shall be supported by PHYs with the EEE capability. PHYs without the EEE capability do not support these transitions.

Proposed Response
Response Status W
PROPOSED REJECT.
It is not clear what is incorrect in the current labeling.

Figure 55-15 notes that transitions inside dashed rectangles are required for EEE operation. Figure 55-15a notes that the entire diagram is required for EEE operation.
The suggested remedy does not improve the diagrams.
Cl 55 SC 55.3.2.2 P194 L 48 # 36
Brown, Matthew
Applied Micro (AMCC)

Comment Type ER
Comment Status D

Be clear about what is meant by "normal mode of operation".

Suggested Remedy
Change start of sentence to: "After reaching the normal mode of operation (pcs_data_mode = TRUE), ..."

Proposed Response
Response Status W

PROPOSED REJECT.

The Clause 55 base text defines a training mode of operation and a normal mode of operation. This description reuses those terms.

Cl 55 SC 55.3.2.21 P196 L 30 # 37
Brown, Matthew
Applied Micro (AMCC)

Comment Type ER
Comment Status D

Two variables cause transition to TX_NORMAL state.

Suggested Remedy
Change start of sentence to: "When PCS_Reset is asserted or pcs_data_mode is not asserted ..."

Proposed Response
Response Status W

PROPOSED ACCEPT.

Cl 55 SC 55.3.2.21 P206 L 26 # 6
Anslow, Peter
Ciena Corporation

Comment Type E
Comment Status D

"7.36us" should have a space between the number and the greek letter mu rather than u

Suggested Remedy
change "7.36us" to have a space between the number and its unit (use ctrl space to make it non-breaking) and the greek letter mu rather than u

Proposed Response
Response Status W

PROPOSED ACCEPT.
Proposed Responses

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Proposed Response

**Comment Type**: E  **Comment Status**: D
**Suggested Remedy**: Make sure that active is associated with pair, not pair and refresh_active.
**Proposed Response**: PROPOSED REJECT.

Comment Status: D  Response Status: W
Brown, Matthew  Applied Micro (AMCC)

---

Comment Type: TR  **Comment Status**: D
**Suggested Remedy**: Relevant to initial or subsequent normal retrain.
**Proposed Response**: PROPOSED ACCEPT.

Comment Status: D  Response Status: W
Brown, Matthew  Applied Micro (AMCC)

---

Comment Type: E  **Comment Status**: D
**Suggested Remedy**: Remove fragment or correct.
**Proposed Response**: PROPOSED ACCEPT IN PRINCIPLE.

Comment Status: D  Response Status: W
Brown, Matthew  Applied Micro (AMCC)

---

Comment Type: E  **Comment Status**: D
**Suggested Remedy**: Convention in this Clause is to use receiver not RX.
**Proposed Response**: PROPOSED ACCEPT.

Comment Status: D  Response Status: W
Brown, Matthew  Applied Micro (AMCC)

---

Comment Type: E  **Comment Status**: D
**Suggested Remedy**: LPI is indicated by LPI client and RS not MAC
**Proposed Response**: PROPOSED REJECT.

Comment Status: D  Response Status: W
Brown, Matthew  Applied Micro (AMCC)

---

Comment Type: TR  **Comment Status**: D
**Suggested Remedy**: Change "MAC indicates" to "LPI client indicates".
**Proposed Response**: PROPOSED ACCEPT.

Comment Status: D  Response Status: W
Brown, Matthew  Applied Micro (AMCC)

---

Comment Type: E  **Comment Status**: D
**Suggested Remedy**: Sentence fragment.
**Proposed Response**: PROPOSED ACCEPT.

Comment Status: D  Response Status: W
Brown, Matthew  Applied Micro (AMCC)
The portion of the definition relating to detection of alert signal is not really clear. It is clear that alert_detect is set TRUE when the alert signal is detected. The definition of the alert detection function on page 216 only specifies when alert_detect is set. It is not clear when (or if) the alert_detect variable is ever set to FALSE. This variable is more of an event, than a state. What is the right unambiguous way to specify this.

**Suggested Remedy**

Provide a mechanism or description that explains how the alert_detect variable is set to FALSE after being set TRUE. One way to resolve this is as follows. (a) In Figure 55-16, add "alert_detect = FALSE" in states "RX_INIT" and "RX_W". Define alert_detect as being set to TRUE by ALERT detect process.

**Proposed Response**

PROPOSED REJECT. See #29. The description is clear.

**Comment Type** TR

**Comment Status** D

**Comment**

The portion of the definition relating to detection of alert signal is not really clear. It is clear that alert_detect is set TRUE when the alert signal is detected. The definition of the alert detection function on page 216 only specifies when alert_detect is set. It is not clear when (or if) the alert_detect variable is ever set to FALSE. This variable is more of an event, than a state. What is the right unambiguous way to specify this.

**Suggested Remedy**

Provide a mechanism or description that explains how the alert_detect variable is set to FALSE after being set TRUE. One way to resolve this is as follows. (a) In Figure 55-16, add "alert_detect = FALSE" in states "RX_INIT" and "RX_W". Define alert_detect as being set to TRUE by ALERT detect process.

**Proposed Response**

PROPOSED REJECT. See #29. The description is clear.

**Comment Type** T

**Comment Status** D

**Comment**

Grammar.

**Suggested Remedy**

Replace comma at end of sentence with period.

**Proposed Response**

PROPOSED ACCEPT.

**Comment Type** E

**Comment Status** D

**Comment**

For clarity, for a table for various definitions of lpi_tx_mode.

**Suggested Remedy**

Create table for defining lpi_tx_mode. Two columns: value and condition. One row is used for each value.

**Proposed Response**

PROPOSED REJECT.

This does not seem necessary.

**Comment Type** E

**Comment Status** D

**Comment**

Consistent terminology.

**Suggested Remedy**

Change "that have the fast retrain" to "that support the fast retrain".

**Proposed Response**

PROPOSED ACCEPT.

**Comment Type** ER

**Comment Status** D

**Comment**

Given that lpi_fr_sigtype is defined in the previous line to exist only for PHYs that support FR, it is unnecessary and somewhat confusing to qualify the IDLE state with support of fast retrain.

**Suggested Remedy**

Change first sentence to: "This variable is set to IDLE if 1.147.1 is set to 1."

**Proposed Response**

PROPOSED REJECT.

This is not necessary.

**Comment Type** E

**Comment Status** D

**Comment**

"to the eight types" to "one of the eight types"

**Suggested Remedy**

As stated by the text, a vector may simultaneously belong to C and I, so the proposed remedy is not accurate.
<table>
<thead>
<tr>
<th>Cl</th>
<th>SC</th>
<th>P</th>
<th>L</th>
<th>Comment Type</th>
<th>Comment Status</th>
<th>Suggested Remedy</th>
<th>Proposed Response</th>
<th>Response Status</th>
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<tbody>
<tr>
<td>55</td>
<td>55</td>
<td>203</td>
<td>36</td>
<td>E</td>
<td>D</td>
<td>Add underline to &quot;and /LI/.&quot;</td>
<td>PROPOSED ACCEPT.</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>55</td>
<td>204</td>
<td>15</td>
<td>E</td>
<td>D</td>
<td>Change &quot;to the eight types&quot; to &quot;one of the eight types&quot;</td>
<td>PROPOSED REJECT.</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>55</td>
<td>205</td>
<td>26</td>
<td>E</td>
<td>D</td>
<td>No states are unique to EEE.</td>
<td>PROPOSED ACCEPT.</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>55</td>
<td>207</td>
<td>34</td>
<td>TR</td>
<td>D</td>
<td>Change last term to: &quot;(( !(lpi_fr_sigtype==&quot;IDLE&quot;) * lpi_fr_active) + !lpi_fr_active) * !pcs_data_mode&quot;</td>
<td>PROPOSED REJECT.</td>
<td></td>
</tr>
</tbody>
</table>

**Comment:** It appears that the existing equation is correct. The editor believes that the suggested change is equivalent to the existing transition condition.
**Comment Type** ER  **Comment Status** D  

Figure 55-16. Last term in transition criteria on open transition to FR_RX_INIT could be clarified by adding brackets around comparison of lpi_fr_sigtype. Also, outer brackets are not required so they can be removed.

**Suggested Remedy**
Change last term to: "((lpi_fr_sigtype==IDLE) * lpi_fr_active) * ! pcs_data_mode"

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

---

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

Figure 55-16. Use of block_lock in open transition to RX_INIT and FR_RX_INIT is redundant since it is further qualified by pcs_data_mode.

**Suggested Remedy**
Remove !block_lock term from open transition to RX_INIT and FR_RX_INIT.

**Proposed Response**  **Response Status** W  
PROPOSED REJECT.

Pcs_data_mode does not exist for legacy 10GBASE-T phys, therefore it needs to remain.

---

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

Grammar.

**Suggested Remedy**
Change "indicates that current" to "indicates the current".

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

IEEE P802.3az D3.1 Energy Efficient Ethernet comments

D3.1 of 802.3az

Proposed Response

Comment Type ER Comment Status D
Use normal form for primitive/parameter.

Suggested Remedy
Change "PMA_CONFIG.indication parameter config" to "PMA_CONFIG.indication(config)".

Proposed Response Response Status W
PROPOSED ACCEPT.

Comment Type ER Comment Status D
The wake signal is not properly defined here. Either fix or refer to official definition.

Suggested Remedy
Change sentence to: "The alert signal is followed by a wake signal as specified in 55.3.2.2.9a."

Proposed Response Response Status W
PROPOSED REJECT.

The description seems adequate. The reference in the suggested remedy does not give details of the wake signal so would be a poorer choice.

Proposed Response

Comment Type ER Comment Status D
Use normal form for primitive/parameter.

Suggested Remedy
Change "PMA_CONFIG.indication parameter config" to "PMA_CONFIG.indication(config)".

Proposed Response Response Status W
PROPOSED ACCEPT.

Comment Type ER Comment Status D
Use normal form for primitive/parameter.

Suggested Remedy
Change "PMA_CONFIG.indication parameter config" to "PMA_CONFIG.indication(config)".

Proposed Response Response Status W
PROPOSED ACCEPT.

Comment Type ER Comment Status D
Similar requirements exist for fast retrain.

Suggested Remedy
Add sentence, "For PHYs that support fast retrain, further requirements for this transition are described in 55.4.2.5.15."

Proposed Response Response Status W
PROPOSED REJECT.

The requirements for fast retrain do not affect normal training.
Similar requirements exist for fast retrain.

Suggested Remedy
Add sentence, "For PHYs that support fast retrain, further requirements for this transition are described in 55.4.2.5.15."

Proposed Response
PROPOSED REJECT.

The requirements for fast retrain do not affect normal training.

Proposed Response
PROPOSED ACCEPT.

This is out of scope for clause 55.
<table>
<thead>
<tr>
<th>CI</th>
<th>SC</th>
<th>Comment Type</th>
<th>Comment Status</th>
<th>Suggested Remedy</th>
<th>Proposed Response</th>
<th>Response Status</th>
<th>Comment Status</th>
<th>D3.1 of 802.3az</th>
</tr>
</thead>
<tbody>
<tr>
<td>55</td>
<td>55.4.2.5.15</td>
<td>ER</td>
<td>D</td>
<td>Reference to incorrect figure.</td>
<td>Brown, Matthew</td>
<td>W</td>
<td>PROPOSED ACCEPT.</td>
<td></td>
</tr>
<tr>
<td>73</td>
<td>55.4.2.5.15</td>
<td>TR</td>
<td>D</td>
<td>Relevant to initial or subsequent normal retrain.</td>
<td>Brown, Matthew</td>
<td>W</td>
<td>PROPOSED ACCEPT.</td>
<td></td>
</tr>
<tr>
<td>74</td>
<td>55.4.2.5.15</td>
<td>E</td>
<td>D</td>
<td>lower power mode is not commonly used term</td>
<td>Brown, Matthew</td>
<td>W</td>
<td>PROPOSED ACCEPT.</td>
<td></td>
</tr>
<tr>
<td>78</td>
<td>55.4.5.1</td>
<td>E</td>
<td>D</td>
<td>Use superscript for exponential terms.</td>
<td>Brown, Matthew</td>
<td>W</td>
<td>PROPOSED ACCEPT.</td>
<td></td>
</tr>
<tr>
<td>77</td>
<td>55.4.5.1</td>
<td>E</td>
<td>D</td>
<td>For 2^6 and 2^4, use superscript for 6 and 4, respectively.</td>
<td>Brown, Matthew</td>
<td>W</td>
<td>PROPOSED ACCEPT.</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>55.4.5.1</td>
<td>ER</td>
<td>D</td>
<td>Common terminology.</td>
<td>Brown, Matthew</td>
<td>W</td>
<td>PROPOSED ACCEPT.</td>
<td></td>
</tr>
</tbody>
</table>
Anslow, Peter  
Ciena Corporation  

**Comment Type:** E  
**Comment Status:** D  
**2**^9, **2**^5 and **2**^6, **2**^4 on line 45 aren't in the same format as powers of two in the transition_count paragraph above.  

**SuggestedRemedy:**  
change to using superscript for the power  

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

---  

Anslow, Peter  
Ciena Corporation  

**Comment Type:** TR  
**Comment Status:** D  
**Figure 55-27b. link_fail_sig_timer_done not defined**  

**SuggestedRemedy:**  
Define fr_max_wait_timer in 55.4.5.2  

**Proposed Response**  
Response Status W  
PROPOSED REJECT.  

---  

Anslow, Peter  
Ciena Corporation  

**Comment Type:** TR  
**Comment Status:** D  
**Figure 55-24. fr_maxwait_timer_done not defined**  

**SuggestedRemedy:**  
Define fr_max_wait_timer in 55.4.5.2  

**Proposed Response**  
Response Status W  
PROPOSED REJECT.  

Fr_maxwait_timer is defined in 55.4.5.2 already.
Submitted on behalf of Iain Robertson
This sub-clause discusses output amplitude requirements during LPI but makes no mention of common mode requirements. It should stipulate the amount by which the common mode can deviate from the non-LPI value.

**Suggested Remedy**
Add a sentence, plus a spec in table 72-6. Suggested wording:
"During LPI, the common mode shall be maintained to within +/- TBDmV of the pre-LPI value"
Suggested spec in table 7-6: "Common mode voltage deviation (max) during LPI: TBDmV"

Need discussion on the TBD value. For reference, PCI-E specs this as 100mV.

**Proposed Response**
PROPOSED ACCEPT IN PRINCIPLE.

Need to supply TBD mV. To be voted on by Task Force.

---

802.3ba changed the title of clause 74 and also the title of 74.4.1

**Suggested Remedy**
Change the title of 74 to "Forward Error Correction (FEC) sublayer for BASE-R PHYs" and the title of 74.4.1 to "Functional block diagram for 10GBASE-R PHYs"

**Proposed Response**
PROPOSED ACCEPT.

---

If the optional Energy Efficient Ethernet (EEE) capability is supported...

**Suggested Remedy**
The editing instruction is "Change 74.10.2.3 as shown below:" but only one of the three functions is shown.

**Proposed Response**
SHOW THE TWO UNMODIFIED FUNCTIONS IN NORMAL FONT.

PROPOSED REJECT.

Several versions back the decision was to show only the changes.

---

802.3ba changed the title of clause 74.11

**Suggested Remedy**
In the title of 74.11 change "sublayer for 10GBASE-R PHYs" to "sublayer for BASE-R PHYs"

**Proposed Response**
PROPOSED ACCEPT.

---

The text starting "If the optional Energy Efficient Ethernet (EEE) capability is supported ..." has been added, but is not shown in underline font. Also, the font size (9 pt) is wrong.

**Suggested Remedy**
Show the inserted text in underline and the correct size.
<table>
<thead>
<tr>
<th>Cl</th>
<th>SC</th>
<th>Page</th>
<th>Comment Type</th>
<th>Comment Status</th>
<th>Suggested Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>74</td>
<td>74.5.1.4</td>
<td>276</td>
<td>E</td>
<td>D</td>
<td>Subclauses 74.5.1.4 through 74.5.1.7 have been added with the insert instruction, so none of the text should be shown in underline font. However some is and some isn't underlined.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Suggested Remedy</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Remove the underline from subclauses 74.5.1.4 through 74.5.1.7</td>
</tr>
<tr>
<td>74</td>
<td>74.7.4.8</td>
<td>277</td>
<td>T</td>
<td>D</td>
<td>I believe the actual requirement here is that the hold-off timer not expire before 13.7 microseconds have passed. It could be longer since the FEC would set signal_ok to TRUE after detecting two scrambled blocks.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Suggested Remedy</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Change the first sentence to: &quot;When rx_LPI_active is TRUE and rx_mode is set to DATA, start a hold-off timer whose duration is greater than or equal to 13.7 microseconds and enable...&quot; Also change item b (page 278, line 7) to: &quot;Expiration of the hold-off timer.&quot;</td>
</tr>
<tr>
<td>78</td>
<td>78.1.3.2</td>
<td>256</td>
<td>E</td>
<td>D</td>
<td>Use primitive/parameter name.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Suggested Remedy</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Change &quot;the LPI_INDICATION parameter is set to DE-ASSERT in the LP_IDLE indication primitive of the LPI Client service interface&quot; to &quot;LP_IDLE.indication(LPI_INDICATION) to ASSERT&quot;</td>
</tr>
<tr>
<td>78</td>
<td>78.1.4</td>
<td>257</td>
<td>E</td>
<td>D</td>
<td>Table 78-1. All relevant clauses should be listed here. In particular, for 100BASE-TX clause 25 should be listed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Suggested Remedy</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>For 100BASE-TX list 24 and 25. For 1000BASE-KX list 70, 35. For 10GBASE-KX4 list 71, 48. For 10GBASE-KR list 72, 51, 49.</td>
</tr>
</tbody>
</table>

**Proposed Responses**

- Anslow, Peter
  - **Comment Type:** E
  - **Comment Status:** D
  - **Suggested Remedy:** Remove the underline from subclauses 74.5.1.4 through 74.5.1.7
  - **Proposed Response:** PROPOSED ACCEPT.

- Healey, Adam
  - **Comment Type:** T
  - **Comment Status:** D
  - **Suggested Remedy:** Change the first sentence to: "When rx_LPI_active is TRUE and rx_mode is set to DATA, start a hold-off timer whose duration is greater than or equal to 13.7 microseconds and enable..." Also change item b (page 278, line 7) to: "Expiration of the hold-off timer."
  - **Proposed Response:** PROPOSED ACCEPT.

- Brown, Matthew
  - **Comment Type:** E
  - **Comment Status:** D
  - **Suggested Remedy:** Change "the LPI_INDICATION parameter to ASSERT in the LP_IDLE indication primitive of the LPI Client service interface" to "LP_IDLE.indication(LPI_INDICATION) to ASSERT"
  - **Proposed Response:** PROPOSED ACCEPT.
### Comments and Proposed Responses

#### Draft 3.0 Comment #174 was not implemented.

**Suggested Remedy:**
- Implement Draft 3.0 Comment #174.

**Proposed Response**
- Response Status: W
- Proposed Accept.

Response to Comment #174 on D3.0 is shown below:

"During the link establishment process, both link partners indicate their EEE capabilities. EEE is supported only if during auto-negotiation both the local device and link partner advertise the EEE capability for the resolved PHY type. If EEE is not supported, all EEE functionality is disabled and the LPI client shall not assert LPI."

All EEE PHY clauses need to add a reference to 78.3 where EEE support is first mentioned.

---

#### Comment #174

- **Comment Type:** TR
- **Comment Status:** D
- **Draft 3.0 Comment:** #174 was not implemented.

**Suggested Remedy:**
- Implement Draft 3.0 Comment #174.

**Proposed Response**
- Response Status: W
- Proposed Accept.

**Response:**
- Change the paragraph starting on line 47 of 78.3 to read:

"During the link establishment process, both link partners indicate their EEE capabilities. EEE is supported only if during auto-negotiation both the local device and link partner advertise the EEE capability for the resolved PHY type. If EEE is not supported, all EEE functionality is disabled and the LPI client shall not assert LPI."

All EEE PHY clauses need to add a reference to 78.3 where EEE support is first mentioned.

---

#### Comment #174

- **Comment Type:** TR
- **Comment Status:** D
- **Draft 3.0 Comment:** #174 was not implemented.

**Suggested Remedy:**
- Implement Draft 3.0 Comment #174.

**Proposed Response**
- Response Status: W
- Proposed Accept.

**Response:**
- Change the paragraph starting on line 47 of 78.3 to read:

"During the link establishment process, both link partners indicate their EEE capabilities. EEE is supported only if during auto-negotiation both the local device and link partner advertise the EEE capability for the resolved PHY type. If EEE is not supported, all EEE functionality is disabled and the LPI client shall not assert LPI."

All EEE PHY clauses need to add a reference to 78.3 where EEE support is first mentioned.