EEE P802.3dj D1.0 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet 1st Task Force review comment

Cl 116 SC 116 P92 L40 # 445
Simms, William NVIDIA

Comment Type E Comment Status D (editorial)
spacing of text on line 40 is different than spacing of the same text in lin 38

Suggested Remedy
make spacing the same

Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

Cl 119 SC 119.2.5.8 P112 L27 # 470
Slavick, Jeff Broadcom

Comment Type E Comment Status D (editorial)
Extraneous "either"

Suggested Remedy
remove the word "either"

Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

Cl 176 SC 176.2 P196 L53 # 472
Slavick, Jeff Broadcom

Comment Type E Comment Status D (editorial)
Is respectively necessary here? X is just a list of different rates.

Suggested Remedy
remove the ", respectively"

Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

Cl 176 SC 176.2 P197 L3 # 473
Slavick, Jeff Broadcom

Comment Type E Comment Status D (editorial)
Is respectively necessary here? X is just a list of different rates.

Suggested Remedy
remove the ", respectively"

Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

Cl 176 SC 176.5.1.1 P200 L35 # 479
Slavick, Jeff Broadcom

Comment Type E Comment Status D (editorial)
test pattern generate is overlapping with the IS_SIGNAL_request/indication line in Figure 176-2

Suggested Remedy
Move "test pattern generate" to not overlap with the inst.IS_SIGNAL.request/indication line
Same in Figure 176-9,10,13,14,15,19,20,24,25,26

Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.
IEEE P802.3dj D1.0 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet 1st Task Force review comments

**Cl 176 SC 176.5.1.1**
P200 L35 # 478
Slavick, Jeff
Broadcom
Comment Type E Comment Status D (editorial)
test pattern generate is overlapping with the IS_SIGNAL_request line in Figure 176-2

**Suggested Remedy**
Move "test pattern generate" to not overlap with the inst.IS_SESSION_request line
Same in Figure 176-9,10,13,14,15,19,20,24,25,26

**Proposed Response**
Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

**Cl 176 SC 176.5.1.3.5**
P203 L25 # 476
Slavick, Jeff
Broadcom
Comment Type E Comment Status D (editorial)
It's a multiplexor or a multiplexing function

**Suggested Remedy**
add the word function after multiplexing

**Proposed Response**
Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

**Cl 176 SC 176.5.1.5**
P205 L20 # 484
Slavick, Jeff
Broadcom
Comment Type E Comment Status D (editorial)
Detailed functions and state diagrams has no content

**Suggested Remedy**
Change 176.5.1.6 to be a sub-heading of 176.5.1.5 (4th tier I think).

**Proposed Response**
Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

**Cl 176 SC 176.5.1.6.5**
P208 L9 # 483
Slavick, Jeff
Broadcom
Comment Type E Comment Status D (editorial)
I think it's best if the Start of the counter is the last thing in the Box

**Suggested Remedy**
Move "Start symbol_pair_lock_counter_demux" to be the last thing in LOSS_OF_SYMBOL_PAIR_LOCK box

**Proposed Response**
Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

**Cl 176 SC 176.5.2**
P208 L40 # 501
de Koos, Andras
Microchip Technology
Comment Type E Comment Status D (editorial)
Is specifying the 1:8 SM-PMA really necessary? Apart from the layers it attaches to and the labels on the interfaces, it is identical to the 8:1 PMA. Same thing for 16:2 vs 2:16 for 400G, 32:4 vs 4:32 for 800G, and 16:8 vs 8:16 for 1.6T. Alternately, could SM-PMAs be specified unidirectionally, rather than specifying transmit and receive? So 8:1 would only specify the PCS-PMD direction, and 1.8 would specify the PMD-PCS direction. Having so many sub-clauses that just point to other sub-clauses is an easy way to cause confusion.

**Suggested Remedy**
Consider specifying the 1:8 and 8:1 (and equivalent SM-PMAs for other rates) together.

**Proposed Response**
Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

**Cl 176 SC 176.6**
P213 L1 # 500
de Koos, Andras
Microchip Technology
Comment Type E Comment Status D (editorial)
Would it not be possible to merge Clause 176.5 and 176.6? They are 95% similar, so repeating everything is hardly necessary. Even the figures for 200GBASE-R SM-PMA (Figure 17603, Figure 17604, Figure 17605) have a general form with a variable number of PCSLs that are suitable for 400GBASE-R

**Suggested Remedy**
Consider merging subclauses 176.5 and 176.6

**Proposed Response**
Response Status W
PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.
IEEE P802.3dj D1.0 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet 1st Task Force review comments

### Comment 176
**SC 176.6.1**

**Comment Type:** E  **Comment Status:** D (editorial)

Clauses 176.6, 176.7 and 176.8 are missing the 'overview' sub-clauses (with tables) that exist in Clause 176.5 (e.g. 176.5.1.1). The equivalent content is there but is placed directly in each PMA sub-clause (e.g. 176.6.1)

**Suggested Remedy**

Structure the subclauses consistently between 200GBASE-R and 400GBASE-R, 800GBASE-R, 1.6TBASE-R.

**Proposed Response**

PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

### Comment 176
**SC 176.7.1**

**Comment Type:** E  **Comment Status:** D (editorial)

Table 176-7 includes two references to 400GBASE-R, these should be replaced with 800GBASE-R

**Suggested Remedy**

Replace the text "400GBASE-R" with "800GBASE-R" in Table 176-7.

**Proposed Response**

PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

### Comment 176
**SC 176.8.1.1**

**Comment Type:** E  **Comment Status:** D (editorial)

Test pattern check is overlapping with IS_SIGNAL.request

**Suggested Remedy**

Move "test pattern check" to no overlap with PMA.IS_SIGNAL.request in Figure 176-21.

**Proposed Response**

PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

---

**Comment 176A**

**SC 176A**

**Comment Type:** ER  **Comment Status:** D (editorial)

The annex title includes "Control function and start-up protocol", while in the subclauses and text there are alternative terms such as "interface control function", "Start-up protocol", and "training" (176A.9).

This mega-function requires nomenclature to describe it. It would be good to have an acronym-friendly name so that it can be included in tables of other clauses (e.g. Table 116-3, Table 179-1).

**Suggested Remedy**

A presentation with proposed nomenclature is planned.

**Proposed Response**

PROPOSED ACCEPT IN PRINCIPLE.

The following presentation was reviewed by the 802.3dj task force at the May Interim meeting:


May Interim Straw poll # has the following results:
Straw Poll #4
The nomenclature that I prefer for function defined in Annex 176A is:
A. "Inter-sublayer link training" (ILT or ISLT)
B. "Sublink training" (SLT)

Results (all): A: 81, B: 5

See:

Update the draft such that references to the link training function (AKA control function) use the following name and acronym instead:
"inter-sublayer link training"
"ILT".

Implement with editorial license.

[Editor's note: The comment type was change from ER to T as it was deemed somewhat technical.]
IEEE P802.3dj D1.0 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet 1st Task Force review comments

**Comment Type**
- **E**: Editorial
- **T**: Technical
- **G**: General

**Comment Status**
- **D**: Dispatched
- **A**: Accepted
- **R**: Rejected

**Response Status**
- **O**: Open
- **W**: Written
- **C**: Closed
- **Z**: Withdrawn

---

**Cl 176A SC 176A P555 L29 #146**

**Comment**

Simms, William NVIDIA

**Comment Type**
- **E**: Editorial

**Comment Status**
- **D**: Dispatched

3 states of Coefficient select echo are undefined

**Suggested Remedy**

- **ER**: Editorial Required

**Proposed Response**

PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

---

**Cl 176A SC 176A.2 P548 L24 #199**

**Comment**

Ran, Adee Cisco

**Comment Type**
- **ER**: Editorial Required

**Comment Status**
- **D**: Dispatched

"tx_symbol and rx_symbol variables" do not appear in this annex. They are in fact parameters of the service interface primitives of the sublayer that implements the control function.

**Suggested Remedy**

- **ER**: Editorial Required

**Proposed Response**

PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

---

**Cl 176A SC 176A.4.1+ P555 L46 #447**

**Comment**

Simms, William NVIDIA

**Comment Type**
- **E**: Editorial

**Comment Status**
- **D**: Dispatched

Should the status field name be uniquified? The field name in the text of the table and text sections below the table do not clearly identify text as a field.

**Suggested Remedy**

- **ER**: Editorial Required

**Proposed Response**

PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

---

**Cl 176A SC 176A.4.1+ P555 L46 #447**

**Comment**

Simms, William NVIDIA

**Comment Type**
- **E**: Editorial

**Comment Status**
- **D**: Dispatched

It took me longer than usual to realize the algorithm continues on page 559

**Suggested Remedy**

- **ER**: Editorial Required

**Proposed Response**

PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

---

**Cl 176A SC 176A.6.4 P558 L21 #555**

**Comment**

Law, David HPE

**Comment Type**
- **E**: Editorial

**Comment Status**
- **D**: Dispatched

(angular)

176A.6.4 says that 'The variables coef req, coef sts, and k are defined in 176A.10.3.1', however, 176A.10.3.1 'Variables' uses all lowercase for the coef sts values (e.g., updated, coefficient at limit and equalization limit) and coef req (e.g. decrement, increment) whereas 176A.10.3.1 uses all uppercase for the coef sts values (e.g., UPDATED, COEFFICIENT AT LIMIT AND EQUALIZATION LIMIT) and coef req (e.g., DECREMENT, INCREMENT).

**Suggested Remedy**

- **ER**: Editorial Required

**Proposed Response**

PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

---

**Cl 176A SC 176A.6.4 P558 L46 #558**

**Comment**

Law, David HPE

**Comment Type**
- **E**: Editorial

**Comment Status**
- **D**: Dispatched

(angular)

**Proposed Response**

PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.

---

**Cl 176A SC 176A.6.4 P558 L54 #548**

**Comment**

Simms, William NVIDIA

**Comment Type**
- **E**: Editorial

**Comment Status**
- **D**: Dispatched

It took me longer than usual to realize the algorithm continues on page 559

**Suggested Remedy**

- **ER**: Editorial Required

**Proposed Response**

PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.
Comment Type ER Comment Status D (editorial)
The "Segment by segment training" seems to be an introductory subclause that explains the purpose of the whole thing.

It would help readers if this introduction is placed at the beginning of the annex. The current introduction in 176A.1 seems too brief.

Suggested Remedy
Move 176A.9 and its subclauses into 176A.1 (with some hierarchy) or after it.

Rephrase the text as necessary to make it a good introduction to the control function (e.g., explain what "RTS" stands for).

Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPAL. Implement with editorial license and discretion.

Comment Type E Comment Status D (editorial)
Subclause 176A.10.1 'State diagram conventions' says that 'The notation used in the state diagrams follows the conventions of 21.5.' Subclause 21.5.3 'State transitions' says 'The following terms are valid transition qualifiers:' and item d) says 'An unconditional transition: UCT.' As a result, it is not necessary to expand UCT on it's first use in Annex 176A.

Suggested Remedy
Change the text 'UCT (unconditional transition)' to read 'UCT'.

Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPAL. Implement with editorial license and discretion.

Cl 176A SC 176A-6 P 568 L 21 # 149
Simms, William NVIDIA
Comment Type ER Comment Status D (editorial)
Figure 176A-6 has an extraneous < in the name 'local_tf_lock<''

Suggested Remedy
change to 'local_tf_lock''

Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPAL. Implement with editorial license and discretion.
EE 802.3dj D1.0 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet 1st Task Force review comments

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<th>P270</th>
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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 Z/withdrawn
SORT ORDER: Clause, Subclause, page, line
Page 6 of 7 5/30/2024 4:14:49 PM
Law, David  
HPE

Comment Type  E  Comment Status  D  (editorial)

The variable 'alignnment_status' used in the LOSS_OF_ALIGNMENT and ALIGNMENT_ACQUIRED states is misspelt.

Suggested Remedy

Suggest that 'alignnment_status' should read 'alignment_status'.

Proposed Response  
Response Status  W

PROPOSED ACCEPT IN PRINCIPLE.
Implement with editorial license and discretion.