| CI 1 SC 1.4.298 | P 208 | L 27 | Nvidia |
| :--- | ---: | ---: | ---: |
| Dawe, Piers |  |  |  |

Dawe, Piers
Comment Type TR Comment Status $\mathbf{R}$
This says "DWDM channel: The transmission path from a transmitting DWDM PHY (TP2) to a receiving DWDM PHY (TP3)". But it is explicit in 154.5.1 that there is a "patch cord between 2 m and 5 m in length" between the MDI and TP2. This is the same as all optical clauses from 1000BASE-X. So "transmitting DWDM PHY (TP2)" is not correct.

It is important not to mislead test engineers in a definitions section that should be used by test engineers working on all optical PMD types.

## SuggestedRemedy

As the 1.4 definitions should be brief rather than addressing all details, this can be simplified to:
The transmission path from a transmitting DWDM PHY to a receiving DWDM PHY
or
The transmission path from TP2 to a receiving DWDM PHY (TP3) in a DWDM Physical Layer
Response Response Status
REJECT.
The draft is consistent in defining the "DWDM channel" to be from TP2 to TP3. See: 1.4.216 black link approach

Figure 154-2-Block diagram for 100GBASE-ZR transmit/receive paths
154.6 DWDM channel over a DWDM black link

Annex 154A Examples of 100GBASE-ZR compliant DWDM black links
Consequently, the definition of DWDM channel in 1.4.298 makes it clear that this is the case by being explicit regarding the DWDM channel starting at TP2.

The first option in the suggested remedy loses the information that the channel starts at TP2.

The second option is not an improvement on the draft in that it is less clear that this is TP2 associated with the transmitting DWDM PHY.

| Cl 120 | SC 120.5.7.2 | P 4905 | L 22 |
| :--- | ---: | ---: | ---: |
| Dawe, Piers | Nvidia |  | \# 15 |

Comment Type TR Comment Status R
In 802.3cd, this said: For PMA lanes connected to the PMD service interface of a *200GBASE-CR4 or 200GBASE-KR4* PMD, the PMA shall / may provide $1 /(1+D) \bmod 4$ precoding /decoding capability. So I knew which the PMDs were. Now, it says "If the PMA is connected to the service interface of a PMD that uses the PMD control function (136.8.11)". 136.8.11 itself is short and does not provide that information. Its subclauses are very long, and I did not find the information there. 135.5.7.2 has the same problem.

## SuggestedRemedy

Refer to a statement of which PMDs uses the PMD control function (which I did not find).
Response
Response Status
REJECT
This comment does not apply to the changes between Draft 2.1 and Draft 2.0 or an unresolved negative comment. It is not within the scope of this recirculation ballot.

The first paragraph of 120.5.7.2 states: "For PMA lanes connected to the PMD service interface of a 200GBASE-CR4 or 200GBASE-KR4 PMD, the PMA shall provide 1/(1+D) mod 4 precoding capability on each transmit lane and may optionally provide $1 /(1+D) \bmod$ 4 decoding capability on each receive lane."

The first paragraph of 135.5 .7 .2 states: "A PMA shall provide $1 /(1+D) \bmod 4$ precoding capability on each output lane that is part of a 50GAUI-1 C2C or 100GAUI-2 C2C link, or connected to the PMD service interface of a 50GBASE-CR, 50GBASE-KR, 100GBASECR2, or 100GBASE-KR2 PMD."

Therefore, a list of PMDs that require the precoding capability that is the subject of the referenced paragraph (and a similar paragraph in Clause 135) are included. Reference to the corresponding PMD clauses will clarify that they use the PMD control function.

| Cl $103 \quad$ SC 103.3.5.1 | P4334 | L 41 |
| :--- | :---: | :---: |
| Grow, Robert | RMG Consulting | \# 35 |

Grow, Robert RMG Consulting

Comment Type TR Comment Status R
We should be consistent in use of separators for hexadecimal readability. Use of spaces would be consistent with decimal numbers, and has been recommended to IEEE editoria for inclusion in the next revision of the IEFE Standards Style Manual Other separators
should be reserved to indicate something else. For example hyphens indicate MAC address hexidecimal representation per IEEE Std 802.

SuggestedRemedy
Replace "-" with space " " unless a MAC address. Some locations also have changes requested for case of hexadecimal digits and Clause 142 locations also have a another change related to a comment on a unique hexidecimal notation convention ror that clause. (Attached file includes: Page, Sub-Clause and Line listing. Some locations )
Response
Response Status U
REJECT.
The response to comment \#33 did not include enforcement of the use of a specific separator.

There is no consensus in the comment resolution group to make this change

| Cl 142 | SC 142.1.1.2 | P 5470 | L 42 | \# 38 |
| :--- | :---: | :---: | :---: | :--- |
| Grow, Robert |  | RMG Consulting |  |  |
| Comment Type | ER | Comment Status R |  | hex |

This convention unique for Clause 142 is not justified by the six uses.

## SuggestedRemedy

Delete the second subbullet. If hyphenation comments are accepted, then the entirety of 142.1.1.2 can be deleted. Expand the six occurances on p. 5476, I. 32; PI 5490, I. 12 and 23; p. 5493, I. 14; p. 5499, I. 8; and p. 5502, I. 49.
Response
Response Status U
REJECT.
The convention is local to Clause 142 and aids in the understanding of structure of large hexadecimal values. There was no consensus in the comment resolution group to make the proposed change.

| Cl 113 | SC 113.7.3.1 | P 4634 | L 35 |
| :--- | :---: | :---: | :---: |

Maintenance 1334 does not seem to be correctly implemented in the draft (e.g.
"PSANEXT,f.", circle R and circle C and other odd characters)

## SuggestedRemedy

Fix fonts or entry errors of equation symbols. Remove "." after dB
Response
Response Status U

ACCEPT IN PRINCIPLE
Resolve with comment \#103.

| Cl 113 | SC 113.7.4.3.9 | P4639 | L 10 |
| :--- | :---: | :---: | :---: |
| Grow, Robert |  | RMG Consulting | \# 42 |
| Comment Type | TR | Comment Status A |  |
| $l$ |  |  |  |

Maintenance 1335 does not seem to be correctly implemented in the draft (e
"PSANEXT,f.", circle R and circle C and other odd characters)
SuggestedRemedy
Fix fonts or entry errors of equation symbols. Remove "." after dB
Response

> Response Status U

ACCEPT IN PRINCIPLE.
Resolve with comment \#103.

| Cl 142 | SC 142.3.5.1 | P 5499 | L 8 |
| :--- | :---: | :---: | :---: |
| Grow, Robert | RMG Consulting |  | \# 43 |

Comment Type ER Comment Status R
hex
Maintenance 1366 -- As noted on my comment to p. 5470, I. 42, the unique hexadecimal convention for repeating sequences should not be used. Similarly, my comment to p. 4334 , I. 41 would replace hyphen separators with space separators

SuggestedRemedy
Expand the hexadecimal string and replace hyphens with spaces per comments cited in this comment.
Response
Response Status
U
REJECT.
See the response to comments \#35 and \#38.

| Cl 120D | SC 120D.3.2.2 | P6642 | L 35 | \# 104 |
| :--- | :--- | :---: | :---: | :---: |

Ghiasi, Ali Ghiasi Quantum/Marvell

Comment Type TR Comment Status R
Case $B$ at 0.4 MHz was added due to risk of scape and peaking in the band from 0.04 MHz to 1.333 MHz , but even after adding test case $B$ the difference between test case $A$ and $B$ is a decade where PLL peaking may result in system failure. All other points in the table are separated by $3.3 x$ with exception of point $A$ to $B$ which is a decade.

## SuggestedRemedy

Please add one additional point between $A$ and $B$ at 0.1333 MHz with amplitude of 1.5 UI .
Response
Response Status U

REJECT.
A similar proposal to add the ( $0.1333 \mathrm{MHz}, 1.5 \mathrm{UI}$ ) test case to the PHYs and interfaces being defined by the P802.3ck Task Force was not accepted. See the response to comment \#35 in
<https://www.ieee802.org/3/ck/comments/draft2p0/8023ck_D2p0_final_closedcomments.pd f\#page=46>.

No data has been provided to demonstrate that a practical receiver that meets the jitter tolerance test conditions defined in the draft will not interoperate with a compliant transmitter and channel. No data has been provided to demonstrate that the addition of the proposed test case provides a higher assurance of interoperability.

No change to the draft.

Cl 120E SC 120E.3.3.2.1 P6660 $\quad$ L 38
Ghiasi, Ali Ghiasi Quantum/Marvell
Comment Type TR Comment Status $\mathbf{R}$
jtol
Case $B$ at 0.4 MHz was added due to risk of scape and peaking in the band from 0.04 MHz to 1.333 MHz , but even after adding test case B the difference between test case A and B is a decade where PLL peaking may result in system failure. All other points in the table are separated by $3.3 x$ with exception of point $A$ to $B$ which is a decade.

SuggestedRemedy
Please add one additional point between $A$ and $B$ at 0.1333 MHz with amplitude of 1.5 UI .
Response
Response Status

REJECT.
A similar proposal to add the ( $0.1333 \mathrm{MHz}, 1.5 \mathrm{UI}$ ) test case to the PHYs and interfaces being defined by the P802.3ck Task Force was not accepted. See the response to comment \#35 in
<https://www.ieee802.org/3/ck/comments/draft2p0/8023ck_D2p0_final_closedcomments.pd f\#page=46>

No data has been provided to demonstrate that a practical receiver that meets the jitter tolerance test conditions defined in the draft will not interoperate with a compliant transmitter and channel. No data has been provided to demonstrate that the addition of the proposed test case provides a higher assurance of interoperability.

No change to the draft.

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: Comment ID

