

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

CI	FM	SC	FM	P1	L23	#	112
----	----	----	----	----	-----	---	-----

Zimmerman, George ADI,APLgp,Cisco,Marvell,OnSemi,Sony,SenTekse

Comment Type **ER** Comment Status **A** resolved

This draft is amending IEEE Std 802.3-2022 which has already been amended now by at least 9 published amendments, and at least one in WG ballot ahead of this draft. It is important to keep track of the other changes so that the new changes are properly correlated with clause numbers and other changes made. Since this amendment makes changes to clauses 30 & 45 in places near or at where other amendments have, this may create errors. Hence my marking this comment, which seems minor, as required.

SuggestedRemedy

Replace "IEEE Std 802.3y-20xx" with the list of published amendments and those ahead of this amendment in the process. (Note - Include at least the published amendments (dd, cs, db, ck, de, cx, cz, cy, df, and Cor1 listed in the introduction), as well as 802.3da which is ahead of this amendment.

Editor to review edits to existing clauses (30, 45, and 80) to determine whether any section numbering or editing instructions for location of changes are altered.

Response Response Status **U**

ACCEPT IN PRINCIPLE.

Replace "IEEE Std 802.3y-20xx" with the list of published amendments and those ahead of this amendment in the process.

Follow the latest template (Version 5.5).

CI	FM	SC	FM	P1	L23	#	24
----	----	----	----	----	-----	---	----

Ran, Adeo Cisco Systems, Inc.

Comment Type **E** Comment Status **A** resolved

The list of amendments is missing.

Currently ratified amendments are listed in the proposed response.

SuggestedRemedy

Change "as amended by IEEE Std 802.3yy-20xx" to

"as amended by IEEE Std 802.3dd-2022, IEEE Std 802.3cs-2022, IEEE Std 802.3db-2022, IEEE Std 802.3ck-2022, IEEE Std 802.3de-2022, IEEE Std 802.3cx-2023, IEEE Std 802.3cz-2023, IEEE Std 802.3cy-2023, IEEE Std 802.3df-2024, and IEEE Std 802.3-2022/Cor 1-2024".

Response Response Status **C**

ACCEPT IN PRINCIPLE.

See comment #112.

CI	FM	SC	FM	P1	L26	#	132
----	----	----	----	----	-----	---	-----

Dawe, Piers Nvidia

Comment Type **E** Comment Status **A** bucket_EZ

Task Force review

SuggestedRemedy

Working Group ballot

Response Response Status **C**

ACCEPT.

CI	FM	SC	FM	P1	L26	#	25
----	----	----	----	----	-----	---	----

Ran, Adeo Cisco Systems, Inc.

Comment Type **E** Comment Status **A** bucket_EZ

Task Force review has completed.

SuggestedRemedy

Change "Task Force review" to "Working Group Ballot".

Response Response Status **C**

ACCEPT.

See comment #132.

CI	FM	SC	FM	P8	L3	#	26
----	----	----	----	----	----	---	----

Ran, Adeo Cisco Systems, Inc.

Comment Type **E** Comment Status **R** resolved

The placeholders in the text box should be replaced.

SuggestedRemedy

Change from

"IEEE Std 802.3xx-20xx, IEEE Draft Standard for Ethernet. Amendment: Amendment title (copy from PAR)."

to

"IEEE Std 802.3dk-20xx, IEEE Draft Standard for Ethernet—Amendment: Bidirectional 100 Gb/s Optical Access PHYs"

Response Response Status **C**

REJECT.

See comment #222.

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: Clause, Subclause, page, line

CI FM

SC FM

Page 1 of 39

2025/4/28 22:41:11

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl **FM** SC **FM** P8 L31 # 27
 Ran, Adee Cisco Systems, Inc.
 Comment Type **E** Comment Status **A** bucket_EZ
 Placeholder should be replaced
 SuggestedRemedy
 Change "IEEE Std 802.3xx-20xx" to "IEEE Std 802.3dk-20xx"
 Response Response Status **C**
 ACCEPT.

Cl **00** SC **0** P0 L0 # 53
 Regev, Alon Keysight
 Comment Type **E** Comment Status **A** bucket_EZ
 PDF document properties contain incorrect data:
 Title is listed as "IEEE Draft P802.3xx"
 Author is listed as "IEEE P802.3xx Task Force"
 Subject is listed as "IEEE P802.3aj"
 Copyright notice is "Copyright © 201x IEEE. All rights reserved."
 SuggestedRemedy
 change Title from "IEEE Draft P802.3xx" to "IEEE Draft P802.3dk"
 change Author from "IEEE P802.3xx Task Force" to "IEEE P802.3dk Task Force"
 change Subject from "IEEE P802.3aj" to ""IEEE P802.3dk"
 change copyright notice from "Copyright © 201x IEEE. All rights reserved." to "Copyright © 2025 IEEE. All rights reserved."
 Response Response Status **C**
 ACCEPT.

Cl **00** SC **0** P0 L0 # 131
 Dawe, Piers Nvidia
 Comment Type **E** Comment Status **A** bucket_EZ
 pdf metadata is at default
 SuggestedRemedy
 Populate with correct data
 Response Response Status **C**
 ACCEPT.
 See comment #53.

Cl **00** SC **0** P1 L # 28
 Ran, Adee Cisco Systems, Inc.
 Comment Type **TR** Comment Status **R** resolved
 The project description refers to "a single strand of single-mode fiber". The word "strand" appears two more times in the draft, but is not defined in it. The base standard has only 3 instances of "strand", all related to copper wires, not optical fibers. It is unclear what "strand" means.
 SuggestedRemedy
 Assuming "strand" means a single fiber, as it seems from the draft, I suggest changing "a single strand of single-mode fiber" to "one single-mode fiber", consistent with the text added in 30.5.1.1.2.
 Implement across the draft (3 instances, and possibly other places as appropriate).
 Response Response Status **W**
 REJECT.
 Strand is used in cp abstract and list of amendment.
 All the abstracts will not be incorporated into the 802.3 base standard.
 Keep consistent with 802.3cp.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

CI 00 SC 0 P1 L13 # 222

Wienckowski, Natalie

IVN Solutions LLC

Comment Type ER Comment Status R resolved

The Ammendment title is supposed to match the name in the PAR

SuggestedRemedy

Change: Amendment: Bidirectional 100 Gb/s Optical Access PHYs

To: Amendment: Greater than 50 Gb/s Bidirectional Optical Access PHYs Task Force

Also change this on the heading of each page.

Response Response Status C

REJECT.

The title is within the scope of PAR.

Subclause 4.2.3.2 'Review of draft standards' of the IEEE-SA Standards Board Operations Manual <https://standards.ieee.org/wp-content/uploads/import/documents/other/sb_om.pdf#page=10> lists 'Title of Document. The title on the draft document and submittal form shall be within the scope as stated on the most recently approved PAR, or action(s) shall be taken to ensure this.'. Further, the IEEE-SA 2014 Style manual has similar text that reads, 'Per 4.2.3.2 of the IEEE-SA Standards Board Operations Manual, the title on the draft document shall be within the scope as stated on the most recently approved PAR.' <<https://mentor.ieee.org/myproject/Public/mytools/draft/styleman.pdf#page=13>>.

Based on the above, the title of the draft standard must be within the scope of the approved PAR and does not have to match the title of the approved PAR. The scope of the IEEE P802.3dk PAR is 'Define physical layer specifications and management parameters for symmetric bidirectional operation at greater than 50 Gb/s over a single strand of single mode fiber of at least 10 km.'. Since '... Bidirectional 100 Gb/s Optical Access ...' is greater than 50 Gb/s over a single strand of single-mode fibre, the title of the draft is within the scope of the PAR as required.

CI 00 SC 0 P2 L4 # 8

Maguire, Valerie

Copperopolis (affl w/ CME Consulting and Cisco)

Comment Type E Comment Status A resolved

Consider adding additional Keywords.

SuggestedRemedy

Insert in alphabetical order:

Optical Line Terminal (OLT), Optical Network Terminal (ONT), Optical Network Unit (ONU)

Response Response Status C

ACCEPT IN PRINCIPLE.

Optical Line Terminal (OLT) and Optical Network Unit (ONU) could be added, which have been used in the draft.

CI 00 SC 0 P7 L31 # 20

Lusted, Kent

Synopsys

Comment Type E Comment Status A bucket_EZ

Fill in the balloter information in the introduction

SuggestedRemedy

Fill in the balloter information in the introduction

Response Response Status C

ACCEPT.

CI 00 SC 0 P7 L50 # 6

Maguire, Valerie

Copperopolis (affl w/ CME Consulting and Cisco)

Comment Type E Comment Status A bucket_EZ

IEEE-SA Standards Board member names to be supplied at publication

SuggestedRemedy

Replace, "Konstantinos Karachalios, Secretary"

with, "FirstName SecondName, Secretary"

Response Response Status C

ACCEPT.

CI 00 SC 0 P8 L4 # 223

Wienckowski, Natalie

IVN Solutions LLC

Comment Type ER Comment Status R resolved

The box under "Introduction" needs to be updated with P802.3dk information.

SuggestedRemedy

Change: Std 802.3-20xx

To: Std 802.3dk-202x

and Change: Amendment title (copy from PAR)

To: Greater than 50 Gb/s Bidirectional Optical Access PHYs Task Force

Response Response Status U

REJECT.

See comment #222.

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: Clause, Subclause, page, line

CI 00

SC 0

Page 3 of 39

2025/4/28 22:41:12

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 00 SC 0 P11 L2 # 7

Maguire, Valerie Copperopolis (aff'l w/ CME Consulting and Cisco)

Comment Type E Comment Status A resolved

Consider adding placeholder information for P802.3da

SuggestedRemedy

Insert,
"IEEE Std 802.3da™-20xx
Amendment X- This amendment includes changes to IEEE Std 802.3-2022 and adds Clause 188 through Clause 189. This amendment adds Physical Layer specifications and management parameters for enhancement of multidrop 10 Mb/s operation based on the 10BASE-T1S PHY specified in Clause 147 of IEEE Std 802.3-2022, and specifies optional provision of power over single balanced pair mixing segments. Additionally, this amendment includes additions and changes to Clause 148 to automatically allocate node IDs (Dynamic PLCA)."
(Editor to ensure that TM is superscript)

Response Response Status C

ACCEPT IN PRINCIPLE.
See comment #112.

Cl 00 SC 0 P11 L54 # 258

Wienckowski, Natalie IVN Solutions LLC

Comment Type ER Comment Status A bucket_EZ

Missing table of contents

SuggestedRemedy

Create table of contents and insert after the introductory material and before Clause 30.

Response Response Status C

ACCEPT.

Cl 1 SC 1.4 P11 L0 # 96

Slavick, Jeff Broadcom

Comment Type TR Comment Status A resolved

Missing definitions for 100GBASE-BR10/20

SuggestedRemedy

1.4.x 100GBASE-BR10: IEEE 802.3 Physical Layer specification for a 100 Gb/s bidirectional link over one single-mode fiber with reach up to at least 10 km. There are different specifications for 100GBASE-BR10-D and 100GBASE-BR10-U; a transmission path connects one to the other. (See IEEE Std 802.3, Clause 168.)
1.4.y 100GBASE-BR20: IEEE 802.3 Physical Layer specification for a 100 Gb/s bidirectional link over one single-mode fiber with reach up to at least 20 km. There are different specifications for 100GBASE-BR20-D and 100GBASE-BR20-U; a transmission path connects one to the other. (See IEEE Std 802.3, Clause 168.)
1.4.z 100GBASE-BR40: IEEE 802.3 Physical Layer specification for a 100 Gb/s bidirectional link over one single-mode fiber with reach up to at least 40 km. There are different specifications for 100GBASE-BR40-D and 100GBASE-BR40-U; a transmission path connects one to the other. (See IEEE Std 802.3, Clause 168.)

Response Response Status W

ACCEPT IN PRINCIPLE.
Implement suggested remedy with editorial license.

Cl 1 SC 1.4 P12 L0 # 134

Dawe, Piers Nvidia

Comment Type E Comment Status A resolved

Physical Layer definitions are missing

SuggestedRemedy

Add Physical Layer definitions after 1.4.24 100BASE-X and before 1.4.24a 100GBASE-CR1

Response Response Status C

ACCEPT.
See comment #96.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 30 SC 30.5.1.1.2 P12 L11 # 122
Huber, Thomas Nokia
Comment Type E Comment Status A bucket_EZ
100GBASE-T is not included in 30.5.1.1.2 of 802.3-2022 or any of its amendments.
Further, In the rest of 30.5.1.1.2, the PHYs are listed alphabetically by rate; as such, this set BRxx PHYs should be inserted before 100GBASE-CR
SuggestedRemedy
Change the editing instruction to say "Insert the following types into the "APPROPRIATE SYNTAX" section of 30.5.1.1.2 after 50GBASE-SR:"
Response Response Status C
ACCEPT IN PRINCIPLE.
See comment #135.

Cl 30 SC 30.5.1.1.2 P12 L12 # 135
Dawe, Piers Nvidia
Comment Type E Comment Status A bucket_EZ
Unlike most tables which are in order of MAC rate - reach - length, this is in alphanumeric order
SuggestedRemedy
Change "30.5.1.1.2 after 100GBASE-T" to "30.5.1.1.2 (as modified by IEEE Std 802.3ck-2022), after 50GBASE-SR and before 100GBASE-CR1"
Response Response Status C
ACCEPT.

Cl 30 SC 30.5.1.1.2 P12 L12 # 113
Zimmerman, George ADI,APLgp,Cisco,Marvell,OnSemi,Sony,SenTekse
Comment Type E Comment Status A bucket_EZ
As a card-carrying BASE-T guy, I'm pretty sure we never got so audacious as to do 100GBASE-T. Where does this go? Most of these are alphanumeric, so I think the new MAUs are the first in the 100G section... (whereas "T" would be in an odd place, near the end, and the location of the new row in the fault description tables is grouped after the LR4/ER4 row... - that's why I'm not sure)
SuggestedRemedy
change 100GBASE-T to 50GBASE-SR
Response Response Status C
ACCEPT IN PRINCIPLE.
See comment #135.

Cl 30 SC 30.5.1.1.2 P12 L12 # 105
Slavick, Jeff Broadcom
Comment Type ER Comment Status A bucket_EZ
100GBASE-T does not exist.
SuggestedRemedy
Change the editing instructions to be "Insert the following types into the "APPROPRIATE SYNTAX" section of 30.5.1.1.2 before 100GBASE-CR1 (as inserted by IEEE Std. 802.3ck-2022):"
Response Response Status W
ACCEPT IN PRINCIPLE.
See comment #135.

Cl 30 SC 30.5.1.1.2 P12 L16 # 136
Dawe, Piers Nvidia
Comment Type E Comment Status A resolved
So that the reviewers can confirm that the new material is inserted in the correct place
SuggestedRemedy
Please show one row before and one after the new material
Response Response Status C
ACCEPT.
For tables, show one row before and one after the new material.
Implement suggested remedy with editorial license.

Cl 30 SC 30.5.1.1.2 P12 L18 # 137
Dawe, Piers Nvidia
Comment Type T Comment Status A resolved
In 30.5, one should not describe these MAU types "bi-directional" when others such as 50GBASE-BR10 and 40GBASE-T are not described like that. By the way, 802.3 spells it without a hyphen.
SuggestedRemedy
Either change the description of many MAUs (via maintenance?) or don't use the word for these ones.
Response Response Status C
ACCEPT IN PRINCIPLE.
Keep the current description, remove hyphen from "bi-directional".
Maintenance required for previous BiDi descriptions in CL30.5.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

CI 30 SC 30.5.1.1.2 P12 L20 # 58
 Regev, Alon Keysight
 Comment Type E Comment Status A bucket_EZ
 References to "Clause 168" should be links
 SuggestedRemedy
 on lines 20, 23, 26, 29, 32, and 35 make the references to "Clause 168" into links to "Clause 168"
 Response Response Status C
 ACCEPT.
 See comment #114.

CI 30 SC 30.5.1.1.2 P12 L20 # 114
 Zimmerman, George ADI,APLgp,Cisco,Marvell,OnSemi,Sony,SenTekse
 Comment Type E Comment Status A bucket_EZ
 "Clause 168" references should be active cross-references (hyperlinks) - they are not.
 SuggestedRemedy
 Replace "Clause 168" text at lines 20, 23, 26, 29, 32, and 35 with active cross references
 Response Response Status C
 ACCEPT.

CI 30 SC 30.5.1.1.2 P12 L23 # 139
 Dawe, Piers Nvidia
 Comment Type E Comment Status A bucket_EZ
 Three dots
 SuggestedRemedy
 Should not be underlined
 Response Response Status C
 ACCEPT.

CI 30 SC 30.5.1.1.2 P12 L23 # 138
 Dawe, Piers Nvidia
 Comment Type E Comment Status A bucket_EZ
 Trailing blanks
 SuggestedRemedy
 Remove. It looks like there are five in this page
 Response Response Status C
 ACCEPT.

CI 45 SC 2.1.28 P15 L43 # 221
 Effenberger, Frank Futurewei Technologies
 Comment Type E Comment Status A resolved
 Table 45-50: The reserved bits are not quite right, as there are wo codepoints that need to be reserved.
 SuggestedRemedy
 Add the following:
 1 1 x x x = Reserved
 1 0 1 1 x = Reserved
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 See comment #147.

CI 45 SC 45.2.1.7.4 P13 L10 # 224
 Wienckowski, Natalie IVN Solutions LLC
 Comment Type E Comment Status R resolved
 Includes an unchanged row when the editing instructions say it doesn't.
 SuggestedRemedy
 Delete unchanged row
 Response Response Status C
 REJECT.
 See comment #136.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 45 SC 45.2.1.7.4 P13 L12 # 29

Ran, Adeo

Cisco Systems, Inc.

Comment Type ER Comment Status A bucket_EZ

Table 45-9 has been amended multiple times. The editorial instruction should state which version the amendment is based on.

Similarly for other tables in existing clauses (45 and 80).

I believe the current version of table 45-9 is in 802.3df-2024. Other tables may be in different amendments.

(P802.3da is also in flight but I assume P802.3dk is planned to be completed first)

The label in the suggested remedy is based on the label in 802.3df.

SuggestedRemedy

In the editorial instruction before Table 45-9, change the text to:

Insert a new row in Table 45-9 (as modified by IEEE Std 802.3db-2022, IEEE Std 802.3ck-2022, and IEEE 802.3df-2024) after the row for "100GBASE-LR4, 100GBASE-ER4", as follows (some unchanged rows not shown):"

Change other instructions in clause 45 and clause 80 as appropriate.

Response Response Status W

ACCEPT IN PRINCIPLE.

Implement suggested remedy with editorial license.

Cl 45 SC 45.2.1.7.4 P13 L20 # 140

Dawe, Piers

Nvidia

Comment Type E Comment Status A resolved

So that the reviewers can confirm that the new material is inserted in the correct place

SuggestedRemedy

Please show one row before and one after the new material

Response Response Status C

ACCEPT.

See comment #136.

Cl 45 SC 45.2.1.7.5 P13 L38 # 141

Dawe, Piers

Nvidia

Comment Type E Comment Status A resolved

So that the reviewers can confirm that the new material is inserted in the correct place

SuggestedRemedy

Please show one row before and one after the new material

Response Response Status C

ACCEPT.

See comment #136.

Cl 45 SC 45.2.1.7.5 P13 L40 # 225

Wienckowski, Natalie

IVN Solutions LLC

Comment Type E Comment Status R resolved

Includes an unchanged row when the editing instructions say it doesn't.

SuggestedRemedy

Delete unchanged row

Response Response Status C

REJECT.

See comment #136.

Cl 45 SC 45.2.1.8 P14 L5 # 143

Dawe, Piers

Nvidia

Comment Type E Comment Status A resolved

So that the reviewers can confirm that the new material is inserted in the correct place

SuggestedRemedy

Please show one row before and one after the new material

Response Response Status C

ACCEPT.

See comment #136.

Cl 45 SC 45.2.1.8.1 P13 L48 # 142

Dawe, Piers

Nvidia

Comment Type E Comment Status A bucket_EZ

Table 45-12 is part of 45.2.1.8 not 45.2.1.8.1

SuggestedRemedy

Delete "45.2.1.8.1 PMD transmit disable 14 (1.9.15)"

Response Response Status C

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: Clause, Subclause, page, line

Cl 45
SC 45.2.1.8.1

Page 7 of 39
2025/4/28 22:41:12

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

CI 45 SC 45.2.1.8.1 P14 L7 # 226

Wienckowski, Natalie

IVN Solutions LLC

Comment Type E Comment Status R resolved

Includes an unchanged row when the editing instructions say it doesn't.

SuggestedRemedy

Delete unchanged row

Response Response Status C

REJECT.
See comment #136.

CI 45 SC 45.2.1.27b P14 L13 # 123

Huber, Thomas

Nokia

Comment Type E Comment Status A bucket_EZ

The clause number for BiDi PMA/PMD extended ability 2 (register 1.35) is 45.2.1.33. The table number is 45-37.

SuggestedRemedy

Change the clause number from 45.2.1.27b to 45.2.1.33, change the editing instruction to say "Insert new rows in Table 45-37 above the row for "1.35.5" as shown (additional unchanged rows not shown):", and change the table number from 45-31b to 45-37.

Response Response Status C

ACCEPT IN PRINCIPLE.
See comment #144.

CI 45 SC 45.2.1.27b P14 L13 # 97

Slavick, Jeff

Broadcom

Comment Type ER Comment Status A bucket_EZ

Std 802.3-2022 BiDi PMA/PMD extended ability 2 is clause 45.2.1.33 and Table 45-37.

SuggestedRemedy

Fix the Clause numbering to align with base standard and update editing instructions appropriately.

Response Response Status W

ACCEPT IN PRINCIPLE.
See comment #144.

CI 45 SC 45.2.1.27b P14 L13 # 227

Wienckowski, Natalie

IVN Solutions LLC

Comment Type E Comment Status A bucket_EZ

The Clause numbers from P802.3-2022 need to be used, not the numbers from P802.3cp-2021.

SuggestedRemedy

Change 45.2.1.27b to 45.2.1.33 and reorder to put the clauses in the correct order.

Response Response Status C

ACCEPT.
See comment #144.

CI 45 SC 45.2.1.27b P14 L13 # 144

Dawe, Piers

Nvidia

Comment Type E Comment Status A resolved

Wrong subclause number

SuggestedRemedy

Change 45.2.1.27b to 45.2.1.33 and move this and its subclauses after 45.2.1.28.

Response Response Status C

ACCEPT IN PRINCIPLE.
See comment #124.

CI 45 SC 45.2.1.27b P14 L15 # 228

Wienckowski, Natalie

IVN Solutions LLC

Comment Type E Comment Status A bucket_EZ

The Table numbers from P802.3-2022 need to be used, not the numbers from P802.3cp-2021.

SuggestedRemedy

Change Table 45-31b to Table 45-37, also on line 19

Response Response Status C

ACCEPT.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 45 SC 45.2.1.27b P14 L39 # 145

Dawe, Piers

Nvidia

Comment Type E Comment Status A resolved

So that the reviewers can confirm that the new material is inserted in the correct place

SuggestedRemedy

Please show one row after the new material

Response Response Status C

ACCEPT.

See comment #136.

Cl 45 SC 45.2.1.27b P14 L44 # 98

Slavick, Jeff

Broadcom

Comment Type ER Comment Status A bucket_EZ

The descriptions of the bits are done from highest number bit to lowest. So the new clauses that are adding higher numbered bits should be inserted "before" the existing sub-clauses describing bits 5:0.

SuggestedRemedy

Change editing instruction to insert the new clauses "before 45.2.1.33.1" (after correcting to base standard clause numbers)

Response Response Status W

ACCEPT IN PRINCIPLE.

Implement suggested remedy with editorial license.

Cl 45 SC 45.2.1.27b.7 P14 L43 # 115

Zimmerman, George

ADI,APLgp,Cisco,Marvell,OnSemi,Sony,SenTekse

Comment Type E Comment Status A bucket_EZ

Insert editorial instructions are without underscores (those are for inserts on a "Change" instruction)

SuggestedRemedy

Remove underscores in 45.2.1.27b.7 through 45.2.1.27b.12 (including on paragraph text).

Response Response Status C

ACCEPT.

Cl 45 SC 45.2.1.27b.7 P14 L43 # 229

Wienckowski, Natalie

IVN Solutions LLC

Comment Type E Comment Status A bucket_EZ

The Clause numbers from P802.3-2022 need to be used, not the numbers from P802.3cp-2021. Also, the higher number bits are defined before the lower number bits so the new bit definitions go before the existing ones.

SuggestedRemedy

Change: 45.2.1.27b.7-45.2.1.27b.12 after 45.2.1.27b.6

To: 45.2.1.33.a-45.2.1.33.f before 45.2.1.33.1

Response Response Status C

ACCEPT.

See comment #144.

Cl 45 SC 45.2.1.27b.7 P14 L45 # 230

Wienckowski, Natalie

IVN Solutions LLC

Comment Type E Comment Status A bucket_EZ

The Clause numbers from P802.3-2022 need to be used, not the numbers from P802.3cp-2021.

SuggestedRemedy

Change 45.2.1.27b.7 to 45.2.1.33.a

Response Response Status C

ACCEPT.

See comment #144.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

CI 45 SC 45.2.1.27b.7 P14 L46 # 124

Huber, Thomas

Nokia

Comment Type E Comment Status A resolved

The new clauses related to the new bits in table 45-37 need to be inserted in 45.2.1.33 rather than in 45.2.1.27b. Since the current set of subclauses go from bit 5 to bit 0 (i.e., 45.2.1.33.1 concerns bit 5, 45.2.1.33.2 concerns bit 4, etc.), for consistency, the new subclauses be inserted before the existing subclauses rather than after them.

SuggestedRemedy

Change the editing instruction to say "Insert new subclauses 45.2.1.33.a to 45.2.1.33.f before 45.2.1.33.1". Change the subclause headings as follows:

45.2.1.27b.7 --> 45.2.1.33.a

45.2.1.27b.8 --> 45.2.1.33.b

45.2.1.27b.9 --> 45.2.1.33.c

45.2.1.27b.10 --> 45.2.1.33.d

45.2.1.27b.11 --> 45.2.1.33.e

45.2.1.27b.12 --> 45.2.1.33.f

Response Response Status C

ACCEPT.

CI 45 SC 45.2.1.27b.8 P15 L1 # 231

Wienckowski, Natalie

IVN Solutions LLC

Comment Type E Comment Status A bucket_EZ

The Clause numbers from P802.3-2022 need to be used, not the numbers from P802.3cp-2021.

SuggestedRemedy

Change 45.2.1.27b.8 to 45.2.1.33.b

Response Response Status C

ACCEPT.

CI 45 SC 45.2.1.27b.9 P15 L8 # 232

Wienckowski, Natalie

IVN Solutions LLC

Comment Type E Comment Status A bucket_EZ

The Clause numbers from P802.3-2022 need to be used, not the numbers from P802.3cp-2021.

SuggestedRemedy

Change 45.2.1.27b.9 to 45.2.1.33.c

Response Response Status C

ACCEPT.

CI 45 SC 45.2.1.27b.10 P15 L13 # 265

Wienckowski, Natalie

IVN Solutions LLC

Comment Type E Comment Status A bucket_EZ

The Clause numbers from P802.3-2022 need to be used, not the numbers from P802.3cp-2021.

SuggestedRemedy

Change 45.2.1.27b.10 to 45.2.1.33.d

Response Response Status C

ACCEPT.

CI 45 SC 45.2.1.27b.11 P15 L19 # 266

Wienckowski, Natalie

IVN Solutions LLC

Comment Type E Comment Status A bucket_EZ

The Clause numbers from P802.3-2022 need to be used, not the numbers from P802.3cp-2021.

SuggestedRemedy

Change 45.2.1.27b.11 to 45.2.1.33.e

Response Response Status C

ACCEPT.

CI 45 SC 45.2.1.27b.12 P15 L25 # 267

Wienckowski, Natalie

IVN Solutions LLC

Comment Type E Comment Status A bucket_EZ

The Clause numbers from P802.3-2022 need to be used, not the numbers from P802.3cp-2021.

SuggestedRemedy

Change 45.2.1.27b.12 to 45.2.1.33.f

Response Response Status C

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: Clause, Subclause, page, line

CI 45
SC 45.2.1.27b.12

Page 10 of 39
2025/4/28 22:41:12

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

CI 45 SC 45.2.1.28 P15 L31 # 146

Dawe, Piers

Nvidia

Comment Type T Comment Status A resolved

Why put the 100GBASE-BR PMA/PMD types in 1.29 with PQX rather than in 1.7 with 50GBASE-BR and 100GBASE ?

SuggestedRemedy

Change from 45.2.1.28 10P/2B PMA/PMD control register (Register 1.30) (which is wrong anyway, the table is for 1.29) Table 45-30, PMA/PMD control 3 register bit definitions, to 45.2.1.6 PMA/PMD control 2 register (Register 1.7) Table 45-7, PMA/PMD control 2 register bit definitions, values 1 1 1 1 x x.

Notice that 3dj is bringing bit 7 into use so there is adequate space here.

Response Response Status C

ACCEPT IN PRINCIPLE.

Implement suggested remedy with editorial license to check with related projects (802.3 db, df).

Table 45-7:

6 5 4 3 2 1 0

1 1 1 1 1 1 1 = 100GBASE-BR40-U PMA/PMD

1 1 1 1 1 1 0 = 100GBASE-BR40-D PMA/PMD

1 1 1 1 1 0 1 = 100GBASE-BR20-U PMA/PMD

1 1 1 1 1 0 0 = 100GBASE-BR20-D PMA/PMD

1 1 1 1 0 1 1 = 100GBASE-BR10-U PMA/PMD

1 1 1 1 0 1 0 = 100GBASE-BR10-D PMA/PMD

1 1 1 1 0 0 1 = reserved

CI 45 SC 45.2.1.28 P15 L37 # 147

Dawe, Piers

Nvidia

Comment Type E Comment Status A resolved

45.2.1.28 10P/2B PMA/PMD control register (Register 1.30)

SuggestedRemedy

Should have been 45.2.1.27 PMA/PMD control 3 register (Register 1.29) - but see another comment

Response Response Status C

ACCEPT IN PRINCIPLE.

See comment #146.

CI 45 SC 45.2.1.28 P15 L44 # 57

Regev, Alon

Keysight

Comment Type T Comment Status A resolved

Instead of just deleting "1 0 1 x x x = Reserved", replace it with "1 0 1 1 x = Reserved"

SuggestedRemedy

Instead of deleting "1 0 1 x x x = Reserved", replace it with "1 0 1 1 x = Reserved"

Response Response Status C

ACCEPT IN PRINCIPLE.

See comment #147.

CI 45 SC 45.2.1.28 P15 L44 # 99

Slavick, Jeff

Broadcom

Comment Type TR Comment Status A resolved

In Table 45-30 the entries for 101110 and 101111 are no longer specified.

SuggestedRemedy

Add in a 10111x = Reserved to Table 45-30

Response Response Status W

ACCEPT IN PRINCIPLE.

See comment #147.

CI 45 SC 45.2.1.28 P15 L44 # 125

Huber, Thomas

Nokia

Comment Type T Comment Status A resolved

The values 10111x need to be indicated as reserved

SuggestedRemedy

Insert a line "1 0 1 1 1 x = Reserved" above the line for BR40-U.

Response Response Status C

ACCEPT IN PRINCIPLE.

See comment #147.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 45 SC 45.2.1.28 P15 L44 # 80
 Simms, William NVIDIA
 Comment Type E Comment Status A resolved
 In Table 45-30, values 101110 and 101111 are undefined
 SuggestedRemedy
 Make these two remaining vvalues reserved
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 See comment #147.

Cl 45 SC 45.2.1.28 P15 L44 # 148
 Dawe, Piers Nvidia
 Comment Type E Comment Status A resolved
 1 1 x x x x = Reserved
 SuggestedRemedy
 Also 1 0 1 1 1 x = Reserved - but see another comment
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 See comment #147.

Cl 45 SC 45.2.1.28 P15 L51 # 149
 Dawe, Piers Nvidia
 Comment Type E Comment Status A resolved
 So that the reviewers can confirm that the new material is inserted in the correct place
 SuggestedRemedy
 Please show one sub-row after the new material
 Response Response Status C
 ACCEPT.
 See comment #136.

Cl 45 SC 45.2.1.28 P15 L51 # 150
 Dawe, Piers Nvidia
 Comment Type E Comment Status A resolved
 There is no following row
 SuggestedRemedy
 Remove the row with three dots
 Response Response Status C
 ACCEPT.

Cl 80 SC 80.1 P16 L2 # 151
 Dawe, Piers Nvidia
 Comment Type E Comment Status A resolved
 80.1 (as modified by 3ck) needs additions
 SuggestedRemedy
 Per comment
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 Add description in Clause 80.1 as:
 i) The MDIs as specified in:
 — Clause 89 for 40GBASE-FR
 — Clause 140 for 100GBASE-DR, 100GBASE-FR1, and 100GBASE-LR1
 — Clause 154 for 100GBASE-ZR
 — Clause 168 for 100GBASE-BRx
 use a single lane data path.
 50G BiDi is missing from Clause 131.1, maintenance request.
 Implement response with editorial license.

Cl 80 SC 80.1.3 P16 L2 # 152
 Dawe, Piers Nvidia
 Comment Type E Comment Status A resolved
 80.1.3 (as modified by 3ck) needs additions
 SuggestedRemedy
 Per comment
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 See comment #151.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 80 SC 80.2.3 P16 L2 # 153

Dawe, Piers Nvidia

Comment Type E Comment Status A resolved

Table 80-1, 40 Gb/s and 100 Gb/s PHYs and
Table 80-5, Nomenclature and clause correlation (100GBASE-P optical) need additions

SuggestedRemedy
Per comment

Response Response Status C

ACCEPT IN PRINCIPLE.
Copy related contents in Clause 157 to Clause 80 (Table 80-1 and Table 80-5).
Implement response with editorial license.

Cl 80 SC 80.2.5 P16 L2 # 154

Dawe, Piers Nvidia

Comment Type E Comment Status A resolved

80.2.3 (as modified by 3ck) and 80.2.5 need additions

SuggestedRemedy
Per comment

Response Response Status C

ACCEPT IN PRINCIPLE.
Add 100GBASE-BRx descriptions in Clause 80.2.3 and 80.2.5 as:
Change the first paragraph in 80.2.3 (as modified by IEEE Std 802.3ck-2022) as follows:
A forward error correction sublayer is optional for 40GBASE-KR4, 40GBASE-CR4, and 100GBASE-CR10 PHYs and mandatory for 100GBASE-CR1, 100GBASE-CR2, 100GBASE-CR4, 100GBASE-KR1, 100GBASE-KR2, 100GBASE-KR4, 100GBASE-KP4, 100GBASE-VR1, 100GBASE-SR1, 100GBASE-SR2, 100GBASE-SR4, 100GBASE-DR, 100GBASE-FR1, 100GBASE-LR1, 100GBASE-ZR PHYs, and 100GBASE-BRx. The FEC sublayer can be placed in between the PCS and PMA sublayers or between two PMA sublayers.

Change the second paragraph of 80.2.5 (as modified by IEEE Std 802.3ck-2022) as follows: The 40GBASE-R, 100GBASE-R, 100GBASE-P, and 100GBASE-Z PMDs and their corresponding media are specified in Clause 84 through Clause 89, Clause 92 through Clause 95, Clause 136 through Clause 138, Clause 140, and Clause 154, Clause 162, Clause 163, and Clause 168.

Cl 80 SC 80.2.5 P16 L2 # 155

Dawe, Piers Nvidia

Comment Type E Comment Status A resolved

Table 80-8, Summary of Skew constraints and
Table 80-9, Summary of Skew Variation constraints need additions

SuggestedRemedy
Per comment

Response Response Status C

ACCEPT IN PRINCIPLE.
Add Clause 168.3.2 to Table 80-8 (as modified by 802.3ck and 802.3db).
Add Clause 168.3.2 to Table 80-9 (as modified by 802.3ck and 802.3db).

Cl 80 SC 80.4 P16 L6 # 156

Dawe, Piers Nvidia

Comment Type E Comment Status A bucket_EZ

This table is ordered by MAC rate - reach - length, so these rows don't go at the end

SuggestedRemedy
Change "Insert three new rows at the end of Table 80-7" to "Insert three new rows in Table 80-7 (as modified by IEEE Std 802.3db-2022) between 100GBASE-LR1 PMD and 100GBASE-ER4 PMD"

Response Response Status C

ACCEPT IN PRINCIPLE.
Implemented suggested remedy with editorial license.

Cl 80 SC 80.4 P16 L12 # 157

Dawe, Piers Nvidia

Comment Type E Comment Status A resolved

So that the reviewers can confirm that the new material is inserted in the correct place

SuggestedRemedy
Please show one row before and one after the new material

Response Response Status C

ACCEPT.
See comment #136.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 80 SC 80.4 P16 L13 # 101

Slavick, Jeff Broadcom

Comment Type TR Comment Status A bucket_EZ

The other optical PHYs in this table note that the delay time includes 2m of fiber.

SuggestedRemedy

Add "Includes 2m of fiber." before the See 168.3.1

Response Response Status W

ACCEPT.

Cl 80 SC 80.4 P16 L13 # 158

Dawe, Piers Nvidia

Comment Type E Comment Status A bucket_EZ

To match the existing entries

SuggestedRemedy

Insert "Includes 2 m of fiber." 3 times

Response Response Status C

ACCEPT IN PRINCIPLE.
See comment #101.

Cl 80 SC 80.4 P16 L17 # 159

Dawe, Piers Nvidia

Comment Type E Comment Status A resolved

This is a long table and this amendment makes it longer, so it should make the consequential change.

SuggestedRemedy

Split the table into two, one for 40G and one for 100G.

Response Response Status C

ACCEPT IN PRINCIPLE.
Implement suggested remedy with editorial license.

Cl 80 SC 80.7 P16 L20 # 160

Dawe, Piers Nvidia

Comment Type E Comment Status A resolved

Needs to mention the new PMD clause. Insert:

SuggestedRemedy

Change the first paragraph of 80.7 as follows:

80.7 Protocol implementation conformance statement (PICS) proforma

Change the first paragraph of 80.7 (as modified by IEEE Std 802.3ck-2022) as follows:

The supplier of a protocol implementation that is claimed to conform to any part of IEEE Std 802.3, Clause 45, Clause 73, Clause 74, Clause 81 through Clause 89, Clause 91 through Clause 95, Clause 135 through Clause 138, Clause 140, Clause 152 through Clause 154, _Clause 157,_ Clause 161 through Clause 163, and related annexes _,_ demonstrates compliance by completing a protocol implementation conformance statement (PICS) proforma.

Response Response Status C

ACCEPT IN PRINCIPLE.
Implement suggested remedy with editorial license.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 91	SC 91.5.2.7	P16	L22	# 161
Dawe, Piers		Nvidia		
Comment Type	E	Comment Status	A	resolved
Missing material				
SuggestedRemedy				
Bring in 91.5.2.7, 91.5.3.3, 91.5.3.3.1, 91.6.3, 91.7.3, 91.7.4.1, 91.7.4.2 (as modified by 3ck) and make appropriate changes				
Response	Response Status C			
ACCEPT IN PRINCIPLE. See comment #68 and #69. Change 91.6.3 (as modified by IEEE Std 802.3ck-2022) as follows: When this variable is set to one, the alignment marker mapping function substitutes the fixed bytes of the alignment markers corresponding to PCS lanes 17, 18, and 19 with the fixed bytes for the alignment marker corresponding to PCS lane 16 (see 91.5.2.6). When this variable is set to zero, the alignment markers corresponding to PCS lanes 17, 18, and 19 are passed through unmodified. The default value of the variable is one which is the value required by the 100GBASE-CR4, 100GBASE-KR4, 100GBASE-KP4, and 100GBASE-SR4 PMDs. This variable is set to zero for the 100GBASE-CR2, 100GBASE-KR2, 100GBASE-VR1, 100GBASE-SR2, 100GBASE-SR1, 100GBASE-DR, 100GBASE-FR1, and 100GBASE-LR1, 100GBASE-CR1, 100GBASE-KR1, 100GBASE-BR10, 100GBASE-BR20, and 100GBASE-BR40 PMDs. This variable is mapped to the bit defined in 45.2.1.116 (1.200.3).				
In 91.7.3: Add 100GBASE-BR10, 100GBASE-BR20, and 100GBASE-BR40 after 100GBASE-KR1 for item KP4 and FDDP in the table (as modified by IEEE Std 802.3ck-2022).				
In 91.7.4.1: Add 100GBASE-BR10, 100GBASE-BR20, and 100GBASE-BR40 after 100GBASE-KR1 for item TF11 in the table (as modified by IEEE Std 802.3ck-2022).				
In 91.7.4.2: Add 100GBASE-BR10, 100GBASE-BR20, and 100GBASE-BR40 after 100GBASE-KR1 for item RF4, RF6, and FR12 in the table (as modified by IEEE Std 802.3ck-2022).				
Implement response with editorial license.				

Cl 135	SC 135.5.7	P16	L30	# 162
Dawe, Piers		Nvidia		
Comment Type	T	Comment Status	R	resolved
Should precoding be allowed as an option?				
SuggestedRemedy				
Consider including precoding (135.5.7) as an option. This could be controlled by the network operator according to experience.				
Response	Response Status C			
REJECT.				
No consensus to make this change.				
Call for more contributions on this topic in the next meeting.				

Cl 157	SC 1.3	P18	L1	# 220
Effenberger, Frank		Futurewei Technologies		
Comment Type	E	Comment Status	A	bucket
Figure 157-1(a) is unfortunate in how it breaks over the pages, and then Table 157-2 gets broken up in a weird way.				
SuggestedRemedy				
Try to squeeze all four speeds onto a single figure.				
Response	Response Status C			
ACCEPT IN PRINCIPLE.				
See comment #127.				

Cl 157	SC 157	P17	L1	# 126
Huber, Thomas		Nokia		
Comment Type	E	Comment Status	A	bucket_EZ
This clause is missing editing instructions				
SuggestedRemedy				
Add an editing instruction at the top of the page:				
"Change clauses 157 and 157.1 as shown:"				
Add an editing instruction below clause 157.2: "Change clause 157.2.1 as shown"				
Delete tables 157-3 through 157-5, as they are not being modified.				
Add an editing instruction: "Insert Table 157-6 below Table 157-5."				
Add an editing instruction: "Change clauses 157.2.2 through 157.2.5 as shown:"				
Delete clauses 157.2.6 and 157.2.7 since they are not being modified.				
Add an editing instruction: "Change clauses 157.3, 157.4, and 157.6 as shown:"				
Response	Response Status C			
ACCEPT IN PRINCIPLE.				
See comment #102.				

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 157 SC 157 P17 L1 # 116
Zimmerman, George ADI,APLgp,Cisco,Marvell,OnSemi,Sony,SenTekse
Comment Type E Comment Status A resolved
There is no editing instruction for this clause. As the entire clause seems to be included here, marked with 'change' editing marks (which is more than you need), it seems "Change title and text of Clause 157 as shown:" may be used - even though it is REALLY unusual.
SuggestedRemedy
Insert editing instruction prior to header, "Change title and text of Clause 157 as shown:"
Response Response Status C
ACCEPT IN PRINCIPLE.
See comment #102.

Cl 157 SC 157 P17 L1 # 30
Ran, Adeo Cisco Systems, Inc.
Comment Type ER Comment Status A bucket_EZ
Missing editorial instruction for clause 157.
It seems that this amendment includes the whole clause with changes. But instructions should be given for specific changes, per the IEEE SA style manual.

Especially, changes to tables and the addition of a new figure 157-1a should be separate instructions. Tables that are not changed at all (such as table 157-3 through table 157-5) should not appear in the draft.

Previous amendments can be used as references.
SuggestedRemedy
Add editorial instructions to each subclause that is changed, as done in previous amendments.
Response Response Status W
ACCEPT IN PRINCIPLE.
See comment #102.

Cl 157 SC 157.1 P17 L1 # 102
Slavick, Jeff Broadcom
Comment Type TR Comment Status A bucket_EZ
There is no editing instruction for Clause 157 which is an existing base standard clause.
SuggestedRemedy
Reduce the amount of text, Figures and Tables to only be changes being made to Clause 157 and not the entire Clause. Inserting appropriate editing instructions for section that is being changed.
Response Response Status W
ACCEPT IN PRINCIPLE.
Implement suggested remedy with editorial license.

Cl 157 SC 157.1.1 P17 L3 # 233
Wienckowski, Natalie IVN Solutions LLC
Comment Type E Comment Status A bucket_EZ
Missing editorial instruction.
SuggestedRemedy
Add editorial instruction: Change the first and second paragraphs of 157.1.1 as follows:
Delete third paragraph as it has no changes.
Response Response Status C
ACCEPT IN PRINCIPLE.
See comment #102.

Cl 157 SC 157.1.2 P17 L23 # 234
Wienckowski, Natalie IVN Solutions LLC
Comment Type E Comment Status A bucket_EZ
Missing editorial instruction.
SuggestedRemedy
Add editorial instruction: Change 157.1.2 as follows:
Response Response Status C
ACCEPT IN PRINCIPLE.
See comment #102.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

CI 157 SC 157.1.2 P17 L28 # 235

Wienckowski, Natalie

IVN Solutions LLC

Comment Type ER Comment Status A resolved

References to external points not properly indicated. Per the instructions in the FM draft template: Any cross references that refer to clauses, tables, equations, or figures not covered by this amendment are highlighted in green. This is done by applying a character tag of "External".

SuggestedRemedy

Correct all external references per instructions throughout the document.

Response Response Status C

ACCEPT.

CI 157 SC 157.1.2 P17 L30 # 81

Simms, William

NVIDIA

Comment Type E Comment Status A bucket_EZ

missing 'and' before 80.1.3

SuggestedRemedy

add the 'and' to be consistent with the one removed in front of 50 Gb/s

Response Response Status C

ACCEPT.

CI 157 SC 157.1.2 P17 L30 # 31

Ran, Adeel

Cisco Systems, Inc.

Comment Type E Comment Status A bucket_EZ

Missing "and" before 80.1.3

SuggestedRemedy

Insert "and"

Response Response Status C

ACCEPT.

CI 157 SC 157.1.2 P17 L30 # 64

Regev, Alon

Keysight

Comment Type E Comment Status A bucket_EZ

"80.1.3" should be "and 80.1.3"

SuggestedRemedy

change "80.1.3" to "and 80.1.3"

Response Response Status C

ACCEPT.

CI 157 SC 157.1.2 P17 L30 # 86

Mi, Guangcan

Huawei Technologies Co., Ltd

Comment Type ER Comment Status A bucket_EZ

in "131.1.2 (for 50 Gb/s), 80.1.3 (for 100 Gb/s)", missing and

SuggestedRemedy

change to "131.1.2 (for 50 Gb/s), and 80.1.3 (for 100 Gb/s)"

Response Response Status W

ACCEPT.

CI 157 SC 157.1.3 P17 L51 # 236

Wienckowski, Natalie

IVN Solutions LLC

Comment Type E Comment Status A resolved

Missing editorial instruction.

The entire subclause shouldn't be included, only the changes should be included.

SuggestedRemedy

Add editorial instruction: Change row "r" of Table 157-1 as follows (unchanged rows not shown):

Delete text before the table and unchanged table rows.

Response Response Status C

ACCEPT IN PRINCIPLE.

Implement suggested remedy with editorial license.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 157 SC 157.1.3 P18 L1 # 237
Wienckowski, Natalie IVN Solutions LLC
Comment Type E Comment Status A bucket
Missing editorial instruction.
The unchanged figure should not be included.
SuggestedRemedy
Add editorial instruction: Change title of Figure 157-1 as follows:
Delete the figure.
Response Response Status C
ACCEPT IN PRINCIPLE.
See comment #127.

Cl 157 SC 157.1.3 P18 L1 # 127
Huber, Thomas Nokia
Comment Type T Comment Status A resolved
The architecture is essentially the same for all rates. Rather than introducing figure 157-1a to introduce the 100G rate, it would be better to use a single figure that is more generic and covers the architecture of all rates.
SuggestedRemedy
Take figure 157-1a as a starting point. Change "CGMII" to "XGMII, 25GMII, 50GMII, or CGMII". Change the PCS to "10GBASE-R, 25GBASE-R, 50GBASE-R, or 100GBASE-R PCS" (or maybe just "rGBASE-R PCS", referencing the nomenclature introduced in Table 157-1). Add note 1 to the FEC sublayer, saying "conditional for 10GBASE-BRx based on PHY type". At the bottom, list all the various PMDs, or use a generic "rGBASE-BRx" label. Replace the existing figure 157-1 with the figure described in this comment..Undo the modifications to the title of Figure 157-1. Delete new figure 157-1a.and the reference to it in 157.1.2 (which is not shown as a change in the draft).
Response Response Status C
ACCEPT IN PRINCIPLE.
Implement with 10G with a note on the FEC, merge 25G, 50G and 100G together.
Implement suggested remedy with editorial license.

Cl 157 SC 157.1.3 P18 L35 # 238
Wienckowski, Natalie IVN Solutions LLC
Comment Type E Comment Status A resolved
The table should not be broken up with a Figure in the middle of it. Only the new rows should be shown.
SuggestedRemedy
Add editorial instruction: Insert new rows at the end of Table 157-2 as follows (unchanged rows not shown):
Delete the first 18 rows of the table which are not changed.
Response Response Status C
ACCEPT IN PRINCIPLE.
Implement suggested remedy with editorial license.

Cl 157 SC 157.1.3 P18 L35 # 239
Wienckowski, Natalie IVN Solutions LLC
Comment Type E Comment Status A bucket_EZ
Missing editorial instruction.
SuggestedRemedy
Add editorial instruction: Change the second paragraph of 157.1.3 as follows:
Response Response Status C
ACCEPT IN PRINCIPLE.
Implement suggested remedy with editorial license.

Cl 157 SC 157.1.3 P18 L42 # 4
Schreiner, Stephan Rosenberger Hochfrequenztechnik GmbH & Co. KG
Comment Type E Comment Status A bucket
Table 157-2 - Multi-Gigabit Ethernet BiDi PHYs is interrupted by Figure 157-1a - Architectural positioning of 100 Gb/s Ethernet BiDi PHYs.
SuggestedRemedy
Reorder from: "Figure 157-1 ... Table 157-2 ... Figure 157-1a ... Table 157-2 (continued)" to "Figure 157-1 ... Figure 157-1a ... Table 157-2"
Response Response Status C
ACCEPT IN PRINCIPLE.
See comment #127.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

CI 157 SC 157.1.3 P19 L1 # 240

Wienckowski, Natalie

IVN Solutions LLC

Comment Type E Comment Status A bucket

Missing editorial instruction.

SuggestedRemedy

Add editorial instruction: Insert Figure 157-1a after Figure 157-1 as follows:

Response Response Status C

ACCEPT IN PRINCIPLE.
See comment #127.

CI 157 SC 157.1.4 P20 L37 # 241

Wienckowski, Natalie

IVN Solutions LLC

Comment Type E Comment Status A bucket_EZ

Missing editorial instruction.

SuggestedRemedy

Add editorial instruction: Change 157.1.4 as follows:

Response Response Status C

ACCEPT IN PRINCIPLE.
Implement suggested remedy with editorial license.

CI 157 SC 157.1.4 P22 L31 # 163

Dawe, Piers

Nvidia

Comment Type E Comment Status A resolved

Add 100GAUI-1 C2C and C2M

SuggestedRemedy

Add 120F, 120G after 135G (2-lane PMA) and before 168 (PMD). Optional.

Response Response Status C

ACCEPT IN PRINCIPLE.
See comment #21.

CI 157 SC 157.2 P21 L15 # 1

D'Ambrosia, John

Futurewei, U.S. Subsidiary of Huawei

Comment Type ER Comment Status A bucket_EZ

As currently written, Note A only applies to the one cell where it is denoted, when in actuality it applies to all of the various cells in the clause columns
Also applies to Table 157-4, 157-5, and 157-6

SuggestedRemedy

Move the current location of Note A in table to next to "Clause."

Response Response Status W

ACCEPT.

CI 157 SC 157.2 P22 L36 # 3

D'Ambrosia, John

Futurewei, U.S. Subsidiary of Huawei

Comment Type E Comment Status A resolved

In Table 157-6, Clause 91 title is noted as "100GBASE-R FEC", but the title of Clause 91 refers to "RS-FEC." Reference Table 80-3a from IEEE Std 802.3ck-2022

SuggestedRemedy

Change "100GBASE-R FEC" to "100GBASE-R RS-FEC"

Response Response Status C

ACCEPT.

CI 157 SC 157.2.1 P20 L45 # 242

Wienckowski, Natalie

IVN Solutions LLC

Comment Type E Comment Status A bucket_EZ

Missing editorial instruction.

SuggestedRemedy

Add editorial instruction: Change title 157.2.1 as follows:

Response Response Status C

ACCEPT IN PRINCIPLE.
Implement suggested remedy with editorial license.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

CI 157 SC 157.2.1 P20 L48 # 243

Wienckowski, Natalie

IVN Solutions LLC

Comment Type E Comment Status A bucket_EZ

Missing editorial instruction.

SuggestedRemedy

Add editorial instruction: Change the last sentence of the first paragraph of 157.2.1 as follows:

Move all text to before the tables. Delete the unchanged sentences as they have no changes.

Response Response Status C

ACCEPT IN PRINCIPLE.

Implement suggested remedy with editorial license.

CI 157 SC 157.2.1 P21 L1 # 244

Wienckowski, Natalie

IVN Solutions LLC

Comment Type E Comment Status A bucket_EZ

Delete unchanged content.

SuggestedRemedy

Delete Table 157-3, Table 157-4, Table 157-5.

Response Response Status C

ACCEPT.

CI 157 SC 157.2.1 P21 L15 # 5

Schreiner, Stephan

Rosenberger Hochfrequenztechnik GmbH & Co. KG

Comment Type E Comment Status A bucket_EZ

Table 157-3 has ist footnote index on the Mandatory "M" in line 2, column 3. All other tables have this footnote index on line 2 column 2.

SuggestedRemedy

Change the footnote index position to the Line: "10GBASE-BR10-D" , column "EEE"

Response Response Status C

ACCEPT IN PRINCIPLE.

See comment #1.

CI 157 SC 157.2.1 P22 L26 # 245

Wienckowski, Natalie

IVN Solutions LLC

Comment Type E Comment Status A bucket_EZ

Missing editorial instruction.

SuggestedRemedy

Add editorial instruction: Insert Table 157-6 after Table 157-5 as follows:

Response Response Status C

ACCEPT IN PRINCIPLE.

Implement suggested remedy with editorial license.

CI 157 SC 157.2.1 P22 L27 # 87

Mi, Guangcan

Huawei Technologies Co., Ltd

Comment Type TR Comment Status A resolved

Table 157-6. The 100G bidi PMDs should also support 100G AUI-1 C2M

SuggestedRemedy

add two columns for 100G AUI-1 C2C(CL120F) and 100G AUI-1 C2M(120G) respectively .

Response Response Status C

ACCEPT IN PRINCIPLE.

See comment #21.

CI 157 SC 157.2.1 P22 L30 # 21

Lusted, Kent

Synopsys

Comment Type T Comment Status A resolved

The 100GAUI-1 C2C and 100GAUI-1 C2M annexes should be referenced in Table 157-6.

SuggestedRemedy

Add references to 100GAUI-1 C2C (Annex 120F) and 100GAUI-1 C2M (Annex 120G).

Type = optional

Response Response Status C

ACCEPT IN PRINCIPLE.

Implement suggested remedy with editorial license.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 157 SC 157.2.1 P22 L31 # 32
 Ran, Adeo Cisco Systems, Inc.
 Comment Type TR Comment Status A resolved
 I believe the AUIs defined in 802.3ck (100GAUI-1 C2C and C2M) are very relevant for the 100GBASE-BRx PHYs. They should be included in Table 157-6.
 SuggestedRemedy
 Add columns for Annexes 120F and 120G, optional for all PHYs.
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 See comment #21.

Cl 157 SC 157.2.1 P22 L32 # 59
 Regev, Alon Keysight
 Comment Type E Comment Status A bucket_EZ
 The clause numbers in the column headers should be links to the clauses
 SuggestedRemedy
 change the column labels "81", "82", "91", "83", "83A", 83B", "83D", "83E", "135", "135D", "135E", "135F", and "135G" into links
 Response Response Status C
 ACCEPT.
 This will be done by 802.3 editor.

Cl 157 SC 157.2.1 P22 L41 # 66
 Maki, Jeffery Juniper Networks
 Comment Type T Comment Status A resolved
 100GAUI-1 C2C & 100GAUI-1 C2M are missing.
 SuggestedRemedy
 Add 100GAUI-1 C2C & 100GAUI-1 C2M
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 See comment #21.

Cl 157 SC 157.2.2 P23 L5 # 246
 Wienckowski, Natalie IVN Solutions LLC
 Comment Type E Comment Status A bucket_EZ
 Missing editorial instruction.
 SuggestedRemedy
 Add editorial instruction: Change 157.2.2 as follows:
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 Implement suggested remedy with editorial license.

Cl 157 SC 157.2.3 P23 L12 # 247
 Wienckowski, Natalie IVN Solutions LLC
 Comment Type E Comment Status A bucket_EZ
 Missing editorial instruction.
 SuggestedRemedy
 Add editorial instruction: Change 157.2.3 as follows:
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 Implement suggested remedy with editorial license.

Cl 157 SC 157.2.4 P23 L19 # 248
 Wienckowski, Natalie IVN Solutions LLC
 Comment Type E Comment Status A bucket_EZ
 Missing editorial instruction.
 SuggestedRemedy
 Add editorial instruction: Change the second and third paragraphs of 157.2.4 as follows:
 Delete the first paragraph as it doesn't have any changes.
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 Implement suggested remedy with editorial license.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 157 SC 157.2.4 P23 L20 # 164
Dawe, Piers Nvidia
Comment Type E Comment Status A bucket_EZ
medium independent
SuggestedRemedy
medium-independent
Response Response Status C
ACCEPT.

Cl 157 SC 157.2.5 P23 L34 # 249
Wienckowski, Natalie IVN Solutions LLC
Comment Type E Comment Status A bucket
Missing editorial instruction.
SuggestedRemedy
Add editorial instruction: Change 157.2.5 as follows:
Response Response Status C
ACCEPT IN PRINCIPLE.
Implement suggested remedy with editorial license.

Cl 157 SC 157.2.6 P23 L39 # 250
Wienckowski, Natalie IVN Solutions LLC
Comment Type E Comment Status A bucket_EZ
Unchanged subclause
SuggestedRemedy
Delete 157.2.6
Response Response Status C
ACCEPT IN PRINCIPLE.
See comment #102.

Cl 157 SC 157.2.7 P23 L43 # 251
Wienckowski, Natalie IVN Solutions LLC
Comment Type E Comment Status A bucket_EZ
Unchanged subclause
SuggestedRemedy
Delete 157.2.7
Response Response Status C
ACCEPT IN PRINCIPLE.
See comment #102.

Cl 157 SC 157.3 P23 L51 # 252
Wienckowski, Natalie IVN Solutions LLC
Comment Type E Comment Status A bucket_EZ
Missing editorial instruction.
SuggestedRemedy
Add editorial instruction: Insert paragraph at the end of 157.3 as follows:
Delete unchanged paragraphs.
Response Response Status C
ACCEPT IN PRINCIPLE.
Implement suggested remedy with editorial license.

Cl 157 SC 157.3 P24 L7 # 106
Zimmerman, George ADI,APLgp,Cisco,Marvell,OnSemi,Sony,SenTekse
Comment Type E Comment Status A bucket_EZ
80.3 should be an External cross reference or else bring it in to the draft (do changes need to be made? - the existing 80.3 does NOT reference that it applies to 100GBASE-BRx PHYs)
SuggestedRemedy
Mark 80.3 as External (green) or bring it into the draft with appropriate changes to refernece application to 100GBASE-BRx PHYs.
Response Response Status C
ACCEPT.
See comment #60.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

CI 157 SC 157.3 P24 L7 # 33
Ran, Adeel Cisco Systems, Inc.
Comment Type E Comment Status A Bucket_EZ
Missing period at the end of the last paragraph.
SuggestedRemedy
Add a period.
Response Response Status C
ACCEPT.

CI 157 SC 157.3 P24 L7 # 60
Regev, Alon Keysight
Comment Type E Comment Status A resolved
"80.3" should be a link
SuggestedRemedy
change "80.3" to a link to "80.3"
Response Response Status C
ACCEPT.
This will be done by 802.3 editor.

CI 157 SC 157.3 P24 L23 # 61
Regev, Alon Keysight
Comment Type E Comment Status A bucket_EZ
"80.4" should be a link
SuggestedRemedy
change "80.4" to a link to "80.4"
Response Response Status C
ACCEPT.
See comment #121.

CI 157 SC 157.4 P24 L10 # 253
Wienckowski, Natalie IVN Solutions LLC
Comment Type E Comment Status A bucket_EZ
Missing editorial instruction.
SuggestedRemedy
Add editorial instruction: Insert paragraph at the end of 157.4 as follows:
Delete unchanged paragraphs.
Response Response Status C
ACCEPT IN PRINCIPLE.
Implement suggested remedy with editorial license.

CI 157 SC 157.4 P24 L22 # 165
Dawe, Piers Nvidia
Comment Type T Comment Status A bucket
I think that the normative delay specs are in 168.3, and what is in 80.4 is sort of a restatement for clarity.
SuggestedRemedy
Change "in 80.4" to "in 168.3 (and see 80.4)"
Response Response Status C
ACCEPT IN PRINCIPLE.
Clause 80.4 and 168.3 specifications are the same.

CI 157 SC 157.4 P24 L23 # 121
Zimmerman, George ADI,APLgp,Cisco,Marvell,OnSemi,Sony,SenTekse
Comment Type E Comment Status A resolved
80.4 should be an active cross reference.
SuggestedRemedy
Replace 80.4 with an active cross reference
Response Response Status C
ACCEPT.
This will be done by 802.3 editor.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

CI 157 SC 157.4 P24 L24 # 166
Dawe, Piers Nvidia
Comment Type E Comment Status A resolved
Skew and Skew Variation is missing
SuggestedRemedy
Add text to refer to 168.3.2, and refer to 80.5
Response Response Status C
ACCEPT IN PRINCIPLE.
Copy Clause 167.3.2 into Clause 157.
Implement response with editorial license.

CI 157 SC 157.5 P24 L39 # 254
Wienckowski, Natalie IVN Solutions LLC
Comment Type E Comment Status A resolved
Unchanged subclause
SuggestedRemedy
Delete 157.5
Response Response Status C
ACCEPT IN PRINCIPLE.
See comment #102.

CI 157 SC 157.6 P24 L46 # 34
Ran, Adeo Cisco Systems, Inc.
Comment Type E Comment Status R resolved
This clause does not include a PICS - it only refers to other clauses that do.
This is very unusual. Subclause 157.6 should be removed (perhaps in maintenance,
because it would not be in scope), but even if it is not, there is no need to change it in this
amendment - it is not helpful for readers and only adds editorial burden.
Note that clauses 161 through 167, added by the change in this draft, are not related to this
clause at all.
SuggestedRemedy
Remove 157.6 from the draft.
Response Response Status Z
REJECT.

This comment was WITHDRAWN by the commenter.

CI 157 SC 157.6 P24 L47 # 255
Wienckowski, Natalie IVN Solutions LLC
Comment Type E Comment Status A bucket_EZ
Missing editorial instruction.
SuggestedRemedy
Add editorial instruction: Change the first paragraph of 157.6 as follows:
Delete the second paragraph as it doesn't have any changes.
Response Response Status C
ACCEPT IN PRINCIPLE.
Implement suggested remedy with editorial license.

CI 157 SC 157.6 P24 L49 # 256
Wienckowski, Natalie IVN Solutions LLC
Comment Type E Comment Status A bucket_EZ
broken link
SuggestedRemedy
fix the Clause 45 link as it is in the document. Correct links not in the document as already
requested.
Response Response Status C
ACCEPT.

CI 157 SC 157.6 P24 L50 # 128
Huber, Thomas Nokia
Comment Type T Comment Status A bucket
The change to replace clause 160 with 168 is not correct; clauses 161 to 167 are unrelated
to bidirectional PHYs.
SuggestedRemedy
Undo the replacement of 160 with 168, and add Clause 168 to the list, so it reads "...
Clause 114, Clause 158 through Clause 160, Clause 168, and related annexes..."
Response Response Status C
ACCEPT IN PRINCIPLE.
See comment #167.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 157 SC 157.6 P24 L50 # 167

Dawe, Piers

Nvidia

Comment Type E Comment Status A bucket

Clause 114, Clause 158 through Clause 160 Clause 168, and related annexes demonstrates

SuggestedRemedy

Clause 114, Clause 158 Xthrough Clause 160X , Clause 159, Clause 160, or _Clause 168, and related annexes demonstrates
[inserting a comma]

Response Response Status C

ACCEPT IN PRINCIPLE.

Change the description as:

Clause 45, Clause 49, Clause 73, Clause 74, Clause 106 through Clause 112, Clause 114, Clause 158 through Clause 160, Clause 168, and related annexes.

Cl 157 SC 157.6 P24 L51 # 103

Slavick, Jeff

Broadcom

Comment Type TR Comment Status A bucket

Clauses 161-167 are related to things other than the BiDi PMDs

SuggestedRemedy

Remove the strikethough of Clause 160 and insert a , between Clause 160 and Clause 168

Response Response Status W

ACCEPT IN PRINCIPLE.

See comment #167.

Cl 158 SC 158.2 P28 L12 # 63

Regev, Alon

Keysight

Comment Type E Comment Status A resolved

"80.3" should be a link

SuggestedRemedy

change "80.3" to a link to "80.3"

Response Response Status C

ACCEPT.

Cl 168 SC 168 P26 L0 # 257

Wienckowski, Natalie

IVN Solutions LLC

Comment Type E Comment Status A bucket_EZ

Missing editorial instruction.

SuggestedRemedy

Add editorial instruction: Insert Clause 168.

Response Response Status C

ACCEPT IN PRINCIPLE.

Implement suggested remedy with editorial license.

Cl 168 SC 168 P26 L1 # 35

Ran, Adele

Cisco Systems, Inc.

Comment Type ER Comment Status A bucket_EZ

Missing editorial instruction for clause 168.

SuggestedRemedy

Add an editorial instruction: "Insert new clause 168".

Response Response Status W

ACCEPT IN PRINCIPLE.

Implement suggested remedy with editorial license.

Cl 168 SC 168 P26 L1 # 117

Zimmerman, George

ADI,APLgp,Cisco,Marvell,OnSemi,Sony,SenTekse

Comment Type E Comment Status A bucket_EZ

Again, no editing instruction.

SuggestedRemedy

Insert editing instruction prior to header, "Insert Clause 168 after Clause 167."

Response Response Status C

ACCEPT IN PRINCIPLE.

Implement suggested remedy with editorial license.

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: Clause, Subclause, page, line

Cl 168

SC 168

Page 25 of 39

2025/4/28 22:41:12

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

CI 168 SC 168 P26 L16 # 9
 Maguire, Valerie Copperopolis (affl w/ CME Consulting and Cisco)
 Comment Type E Comment Status R resolved
 Consider using alternate sentence structure than a "shall" statement.
 SuggestedRemedy
 Replace, "a PMD shall be connected" with, "a PMD is connected"
 Response Response Status C
 REJECT.
 This "shall" is associated with PICS specified in 168.12.4.1, Items F1 and F2.

CI 168 SC 168.1 P26 L6 # 120
 Zimmerman, George ADI,APLgp,Cisco,Marvell,OnSemi,Sony,SenTekse
 Comment Type E Comment Status A resolved
 While the editor's notes on where things came from are helpful, they need eventually to be removed. They've probably served their purpose now, through d2.0, and may be deleted, but if you want to keep them around, they should be deleted prior to SA ballot.
 SuggestedRemedy
 Either: change editor's notes to say "Editor's note (to be removed prior to SA Ballot:" or delete Editor's notes on origin for subclauses.
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 The editor's notes will be removed.

CI 168 SC 168.1 P26 L7 # 62
 Regev, Alon Keysight
 Comment Type E Comment Status A resolved
 remove editor's notes prior to publication
 SuggestedRemedy
 remove editor's notes prior to publication
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 See comment #120.

CI 168 SC 168.1 P26 L7 # 259
 Wienckowski, Natalie IVN Solutions LLC
 Comment Type E Comment Status A resolved
 There should not be editor's notes in D2.0 or later.
 SuggestedRemedy
 Delete note indicating which subclause this is based on. Delete similar notes in 168.2, 168.3, 168.4, 168.5, 168.7, 168.8, 168.9, 168.10, and 168.12.
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 See comment #120.

CI 168 SC 168.1 P26 L7 # 100
 Slavick, Jeff Broadcom
 Comment Type TR Comment Status A resolved
 Remove all the Editors notes stating what the section was leveraged from. This note has no life span and should not be included in the publication.
 SuggestedRemedy
 Remove all the Editors notes stating which clause was used to create the current clause (10 occurrences).
 Response Response Status W
 ACCEPT IN PRINCIPLE.
 See comment #120.

CI 168 SC 168.1 P26 L19 # 260
 Wienckowski, Natalie IVN Solutions LLC
 Comment Type E Comment Status A bucket_EZ
 broken link
 SuggestedRemedy
 fix the Clause 45 link as it is in the document.
 Response Response Status C
 ACCEPT.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 168 SC 168.1 P26 L21 # 88
 Mi, Guangcan Huawei Technologies Co., Ltd
 Comment Type TR Comment Status A resolved
 Table 168-1. The 100G bidi PMDs should also support 100G AUI-1 C2M
 SuggestedRemedy
 add two rows for 100G AUI-1 C2C(CL120F) and 100G AUI-1 C2M(120G) respectively .
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 See comment #22.

Cl 168 SC 168.1 P26 L22 # 22
 Lusted, Kent Synopsys
 Comment Type T Comment Status A resolved
 The 100GAUI-1 C2C and 100GAUI-1 C2M annexes should be referenced in Table 168-1
 SuggestedRemedy
 Add references to 100GAUI-1 C2C (Annex 120F) and 100GAUI-1 C2M (Annex 120G)
 Type = optional
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 Implement suggested remedy with editorial license.

Cl 168 SC 168.1 P26 L33 # 69
 Opsasnick, Eugene Broadcom, Inc.
 Comment Type TR Comment Status A resolved
 Table 168-1 lists the Clause 91 RS-FEC as Required for 100GBASE-BR10, -BR20, and -BR40. Subclause 91.5.3.3.1 should be updated to add the 3 new PHYs using RS[544] to the list of PHYs using the optional FEC Degraded SER feature as defined in Clause 91.
 SuggestedRemedy
 In 91.5.3.3.1 add:
 Change the first paragraph of 91.5.3.3.1 (as modified by IEEE Std 802.3ck-2022) as follows:
 For 100GBASE-CR2, 100GBASE-KR2, 100GBASE-VR1, 100GBASE-SR2, 100GBASE-SR1, 100GBASE-DR, 100GBASE-FR1, 100GBASE-LR1, 100GBASE-CR1, and 100GBASE-KR1, 100GBASE-BR10, 100GBASE-BR20, and 100GBASE-BR40 PHYs an optional FEC degraded symbol error ratio function is available.
 Response Response Status W
 ACCEPT IN PRINCIPLE.
 Implement suggested remedy with editorial license.

Cl 168 SC 168.1 P26 L33 # 68
 Opsasnick, Eugene Broadcom, Inc.
 Comment Type TR Comment Status A resolved
 Table 168-1 lists the Clause 91 RS-FEC as Required for 100GBASE-BR10, -BR20, and -BR40. Clause 91 defines both RS[528] and RS[544], but there is no indication which of these two FEC codes should be used with the BR10/20/40 PMDs. Subclauses 91.5.2.7 and 91.5.3.3 list which PHYs use RS[528] and which use RS[544] along with some other features of each FEC code.

SuggestedRemedy
 Add Clause 91 to the standard and add the three PHYs of this standard to the list of PHYs that implement RS[544] as was done in 802.3ck for 100GBASE-CR1/KR1:

In 91.5.2.7 add:
 Change the second sentence of the second paragraph of 91.5.2.7 (as modified by IEEE Std 802.3ck-2022)
 as follows:

When used to form a 100GBASE-KP4, 100GBASE-CR2, 100GBASE-KR2, 100GBASE-VR1, 100GBASE-SR2, 100GBASE-SR1, 100GBASE-DR, 100GBASE-FR1, 100GBASE-LR1, 100GBASE-CR1, or 100GBASE-KR1, 100GBASE-BR10, 100GBASE-BR20, or 100GBASE-BR40 PHY, the RS-FEC sublayer shall implement RS(544,514).

In 91.5.3.3 add:
 Change the second sentence of the second paragraph of 91.5.3.3 (as modified by IEEE Std 802.3ck-2022)
 as follows:

When used to form a 100GBASE-KP4, 100GBASE-CR2, 100GBASE-KR2, 100GBASE-VR1, 100GBASE-SR2, 100GBASE-SR1, 100GBASE-DR, 100GBASE-FR1, 100GBASE-LR1, 100GBASE-CR1, or 100GBASE-KR1, 100GBASE-BR10, 100GBASE-BR20, or 100GBASE-BR40 PHY, the RS-FEC sublayer shall be capable of correcting any combination of up to t=15 symbol errors in a codeword.

Change the third paragraph of 91.5.3.3 (as modified by IEEE Std 802.3ck-2022) as follows:

The Reed-Solomon decoder may provide the option to perform error detection without error correction to reduce the delay contributed by the RS-FEC sublayer. The presence of this option is indicated by the assertion of the FEC_bypass_correction_ability variable (see 91.6.8). When the option is provided, it is enabled by the assertion of the FEC_bypass_correction_enable variable (see 91.6.1). This option shall not be used when the RS-FEC sublayer is used to form part of a 100GBASE-CR2, 100GBASE-KR2, 100GBASE-VR1, 100GBASE-SR2, 100GBASE-SR1, 100GBASE-SR4, 100GBASE-DR, 100GBASE-FR1, 100GBASE-LR1, 100GBASE-CR1, or 100GBASE-KR1, 100GBASE-BR10, 100GBASE-BR20, or 100GBASE-BR40 PHY.

Change the last sentence of the last paragraph of 91.5.3.3 (as modified by IEEE Std 802.3ck-2022) as

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

follows:

When the RS-FEC sublayer is used to form a 100GBASE-KP4, 100GBASE-CR2, 100GBASE-KR2, 100GBASE-VR1, 100GBASE-SR2, 100GBASE-SR1, 100GBASE-DR, 100GBASE-FR1, 100GBASE-LR1, 100GBASE-CR1, or 100GBASE-KR1, 100GBASE-BR10, 100GBASE-BR20, or 100GBASE-BR40 PHY, the symbol error threshold shall be K=6380.

Response *Response Status* **W**
ACCEPT IN PRINCIPLE.
Implement suggested remedy with editorial license.

Cl **168** *SC* **168.1** *P26* *L33* # **23**

Lusted, Kent *Synopsys*

Comment Type **TR** *Comment Status* **A** *resolved*

The Table 168-1 states that Clause 91 RS-FEC is required for the 100GBASE-BRx PMDs. There is no specific mention in the draft specification of which RS-FEC is to be used with the 100GBASE-BRx PMDs. Note that Clause 91 defines two RS-FECs: RS(528) and RS(544).

SuggestedRemedy

Bring in Clause 91 into the draft. Specifically, Clause 91.5.2.7 and 91.5.3.3 as modified by 3ck and 3df. Update the relevant sub-clauses for RS(528) or RS(544)

Response *Response Status* **C**
ACCEPT IN PRINCIPLE.
See comment #161.

Cl **168** *SC* **168.1** *P26* *L34* # **168**

Dawe, Piers *Nvidia*

Comment Type **T** *Comment Status* **A** *resolved*

For these relatively long links, FEC latency is not an issue but robustness may be

SuggestedRemedy

Consider allowing Clause 161 RS-FEC-Int (with 91.6.7a 100G_RS_FEC_enable):
152—Inverse RS-FEC Optional b
161—RS-FEC-Int Optional
b Inverse RS-FEC is required to convert between RS-FEC and RS-FEC-Int (see 152.1.2).

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
The group reach consensus on this feature to have in the draft. However, no enough details to be implemented in the draft.
Add an Editor's note to Clause 168 in the draft: call for contributions related to the interleaved RS-FEC.

Cl **168** *SC* **168.1** *P26* *L47* # **36**

Ran, Adeel *Cisco Systems, Inc.*

Comment Type **TR** *Comment Status* **A** *resolved*

I believe the AUIs defined in 802.3ck (100GAUI-1 C2C and C2M) are very relevant for the 100GBASE-BRx PHYs. They should be included in Table 168-1.

SuggestedRemedy

Add rows for Annexes 120F and 120G, optional.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
See comment #22.

Cl **168** *SC* **168.1** *P26* *L48* # **67**

Maki, Jeffery *Juniper Networks*

Comment Type **T** *Comment Status* **A** *resolved*

100GAUI-1 C2C & 100GAUI-1 C2M are missing.

SuggestedRemedy

Add 120F-100GAUI-1 C2C & 120G-100GAUI-1 C2M

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
See comment #22.

Cl **168** *SC* **168.1** *P26* *L48* # **169**

Dawe, Piers *Nvidia*

Comment Type **T** *Comment Status* **A** *resolved*

Add 100GAUI-1 C2C and C2M

SuggestedRemedy

Insert 120F and 120G below 135G. Optional.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
See comment #22.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 168 SC 168.1 P26 L50 # 118
Zimmerman, George ADI,APLgp,Cisco,Marvell,OnSemi,Sony,SenTekse
Comment Type T Comment Status R resolved
The note doesn't quite hit the point. Physical implementation of the CGMII is optional. The logical description still applies (which is what the "However" says...)
SuggestedRemedy
Change "The CGMII is an optional interface." to "Physical implementation of the the CGMII is optional."
Response Response Status C
REJECT.
The proposed simplification is less clear.
Keep consistent with the latest amendment, e.g., CL162 in 802.3ck.

Cl 168 SC 168.1 P27 L3 # 170
Dawe, Piers Nvidia
Comment Type E Comment Status R resolved
Add reference to 157
SuggestedRemedy
Per comment
Response Response Status C
REJECT.
Keep consistent with other BiDi clauses, e.g., CL 160.

Cl 168 SC 168.1 P27 L19 # 2
D'Ambrosia, John Futurewei, U.S. Subsidiary of Huawei
Comment Type ER Comment Status A bucket_EZ
The bottom of the "Physical Layer" is incorrect - it includes the MDI and should be drawn to the top of the "Medium"
SuggestedRemedy
27
Response Response Status W
ACCEPT.
Maintenance required for Figure 140-1 in Clause 140.

Cl 168 SC 168.1 P27 L28 # 172
Dawe, Piers Nvidia
Comment Type E Comment Status A bucket_EZ
Layout
SuggestedRemedy
Left justify
Response Response Status C
ACCEPT IN PRINCIPLE.
Implement suggested remedy with editorial license.

Cl 168 SC 168.1 P27 L36 # 173
Dawe, Piers Nvidia
Comment Type E Comment Status A bucket_EZ
Blank line?
SuggestedRemedy
Remove?
Response Response Status C
ACCEPT.

Cl 168 SC 168.3.2 P28 L52 # 107
Zimmerman, George ADI,APLgp,Cisco,Marvell,OnSemi,Sony,SenTekse
Comment Type E Comment Status A bucket_EZ
Active cross references to sections 80.5, Figure 80-9, 83.5.3.4, all point nowhere, they are not in the draft.
I will not comment more on cross references - however, there are numerous ones missed and they need to be checked.
SuggestedRemedy
Mark cross references as external. Editor to check the draft for external cross references globally and fix.
Response Response Status C
ACCEPT IN PRINCIPLE.
Implement suggested remedy with editorial license and discretion.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 168 SC 168.4 P29 L26 # 82
 Simms, William NVIDIA
 Comment Type E Comment Status A bucket_EZ
 strage break in body text and insertion of Tables
 SuggestedRemedy
 Leave text at line 23 and picking up at line 49 unbroken and move tables to appropriate location
 Response Response Status C
 ACCEPT IN PRINCIPLE.
 Implement suggested remedy with editorial license.

Cl 168 SC 168.4 P29 L27 # 261
 Wienckowski, Natalie IVN Solutions LLC
 Comment Type E Comment Status A bucket_EZ
 tables should not be in the middle of a paragraph
 SuggestedRemedy
 Move Tables 168-2 and 168-3 after the paragraph text.
 Response Response Status C
 ACCEPT.

Cl 168 SC 168.5.2 P30 L43 # 10
 Maguire, Valerie Copperopolis (affl w/ CME Consulting and Cisco)
 Comment Type E Comment Status R resolved
 Consider using alternate sentence structure than a "shall" statement.
 SuggestedRemedy
 Replace, "Transmit function shall convert" with, "Transmit function converts"
 Replace, "The optical signal shall then be delivered" with, "The optical signal is then delivered"
 Replace, "from lowest to highest shall correspond " with, "from lowest to highest corresponds"
 Response Response Status C
 REJECT.
 These "shall" in Clause 168.5.2 (PMD transmit function) are associated with PICS specified in 168.12.4.1, Items F4 and F5

Cl 168 SC 168.5.3 P30 L51 # 11
 Maguire, Valerie Copperopolis (affl w/ CME Consulting and Cisco)
 Comment Type E Comment Status R resolved
 Consider using alternate sentence structure than a "shall" statement.
 SuggestedRemedy
 Replace, "The PMD receive function shall convert" with, "The PMD receive function converts"
 Replace, "from lowest to highest shall correspond" with, "from lowest to highest corresponds"
 Response Response Status C
 REJECT.
 These "shall" in Clause 168.5.3 (PMD receive function) are associated with PICS specified in 168.12.4.1, Items F6, F7, and F8

Cl 168 SC 168.5.4 P31 L19 # 12
 Maguire, Valerie Copperopolis (affl w/ CME Consulting and Cisco)
 Comment Type E Comment Status R resolved
 Consider using alternate sentence structure than a "shall" statement.
 SuggestedRemedy
 Replace, "global signal detect function shall report" with, "global signal detect function reports"
 Replace, "SIGNAL_DETECT shall be a global indicator" with, "SIGNAL_DETECT is a global indicator"
 Replace, "SIGNAL_DETECT parameter shall be generated" with, "SIGNAL_DETECT parameter is generated"
 Response Response Status C
 REJECT.
 These "shall" in Clause 168.5.4 (PMD global signal detect function) are associated with PICS specified in 168.12.4.1, Items F9 and F10.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 168 SC 168.5.4 P31 L23 # 175
Dawe, Piers Nvidia
Comment Type T Comment Status A bucket_EZ
inter-sublayer service interface primitives defined in 131.3.
SuggestedRemedy
inter-sublayer service interface primitives defined in 80.3.
Response Response Status C
ACCEPT.

Cl 168 SC 168.5.4 P31 L31 # 177
Dawe, Piers Nvidia
Comment Type E Comment Status A bucket_EZ
This "base text" does not agree with the published 160.5 and similar sections in other clauses such as 140 and 167. "Must" is deprecated.
SuggestedRemedy
Change "an unavoidable consequence" to "a consequence". Change "must" to "need to".
Make any other changes to align with the published 802.3 as appropriate.
Response Response Status C
ACCEPT.

Cl 168 SC 168.5.5 P31 L42 # 13
Maguire, Valerie Copperopolis (aff'l w/ CME Consulting and Cisco)
Comment Type E Comment Status R resolved
Consider using alternate sentence structure than a "shall" statement.
SuggestedRemedy
Replace, "the PMD shall be reset" with, "the PMD is reset"
Response Response Status C
REJECT.
The "shall" in Clause 168.5.5 (PMD reset function) is associated with PICS specified in 168.12.4.1, Item F11.

Cl 168 SC 168.5.6 P31 L47 # 14
Maguire, Valerie Copperopolis (aff'l w/ CME Consulting and Cisco)
Comment Type E Comment Status R resolved
Consider using alternate sentence structure than a "shall" statement.
SuggestedRemedy
Replace, "compliant with this clause shall include" with, "compliant with this clause includes"
Replace, "this function shall turn off" with, "this function turns off"
Response Response Status C
REJECT.

These "shall" in 168.5.6 (PMD global transmit disable function) are associated with PICS specified in 168.12.4.2, Item M2.

Cl 168 SC 168.5.7 P32 L6 # 15
Maguire, Valerie Copperopolis (aff'l w/ CME Consulting and Cisco)
Comment Type E Comment Status R resolved
Consider using alternate sentence structure than a "shall" statement.
SuggestedRemedy
Replace, "the PMD shall set" with, "the PMD sets"
Replace, "PMD_fault shall be mapped to" with, "PMD_fault is mapped to"
Response Response Status C
REJECT.
These "shall" in 168.5.7 (PMD fault function) are associated with PICS specified in 168.12.4.2, Item M3.

Cl 168 SC 168.5.8 P32 L13 # 16
Maguire, Valerie Copperopolis (aff'l w/ CME Consulting and Cisco)
Comment Type E Comment Status R resolved
Consider using alternate sentence structure than a "shall" statement.
SuggestedRemedy
Replace, "the PMD shall set" with, "the PMD sets"
Replace, "PMD_transmit_fault shall be mapped to" with, "PMD_transmit_fault is mapped to"
Response Response Status C
REJECT.
These "shall" in 168.5.8 (PMD transmit fault function) are associated with PICS specified in 168.12.4.2, Item M4.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 168 SC 168.5.9 P32 L21 # 17
Maguire, Valerie Copperopolis (affl w/ CME Consulting and Cisco)
Comment Type E Comment Status R resolved
Consider using alternate sentence structure than a "shall" statement.
SuggestedRemedy
Replace, "100GBASE-BRx-U PMD shall include" with, "100GBASE-BRx-U PMD includes"
Replace, "the PMD shall set the" with, "the PMD sets the"
Replace, "PMD_receive_fault shall be mapped" with, "PMD_receive_fault is mapped"
Response Response Status C
REJECT.
These "shall" in 168.5.9 (PMD receive fault function) are associated with PICS specified in 168.12.4.2, Item M5.

Cl 168 SC 168.5.10 P32 L31 # 18
Maguire, Valerie Copperopolis (affl w/ CME Consulting and Cisco)
Comment Type E Comment Status R resolved
Consider using alternate sentence structure than a "shall" statement.
SuggestedRemedy
Replace, "Silent start shall be provided" with, "Silent start is provided"
Response Response Status C
REJECT.
The "shall" in 168.5.10 (ONU silent start) is associated with PICS specified in 168.12.4.1, Item F12.

Cl 168 SC 168.6.1 P33 L # 268
Maniloff, Eric Ciena
Comment Type TR Comment Status R resolved
Currently the OMA (Max) values for 100GBASE-BR10/BR20/BR40 are 5/0/8.3dBm. At max TDECQ the OMA (Min) values for these are 3.1/-0.3/7.8 dBm. This leaves 0.3 dB difference between Min and Max for BR20 and 0.5dB difference between Min and Max for BR40. This is not sufficient difference for manufacturing yield, lifetime, thermals.
SuggestedRemedy
Increase the OMA Max for 100GBASEBR20 and BR40 to allow a larger difference between min and max values. Alternatively the minimum OMA could be reduced. Ensure a minimum of 1.5dB difference between Min and Max values.
Response Response Status C
REJECT.
Draft is not broken, no consensus to make the change.
Call for contribution to improve the values of BR20 and BR40.

Cl 168 SC 168.6.1 P33 L15 # 89
Mi, Guangcan Huawei Technologies Co., Ltd
Comment Type ER Comment Status A bucket_EZ
the labe of wavelength is currently written as 100GBASE-BRx-D center wavelengths (range) or 100GBASE-BRx-U center wavelengths (range). This doesn't seem right. The upstream and down stream would only have one wavelength each. The wavelength can not be precisely controlled, thus a range is specified allowing the center wavelength to drift or shift. It is however a single wavelength, therefore the plural form here is not appropriate.
SuggestedRemedy
change wavelengths to wavelength in both cases of upstream and downstream.
Response Response Status W
ACCEPT IN PRINCIPLE.
Implement suggested remedy to Table 168-6 and Table 168-7.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 168 SC 168.6.1 P33 L19 # 178
Dawe, Piers Nvidia
Comment Type E Comment Status A bucket_EZ
For improved readability, where the parameter limits seem likely to remain the same for all 3 (6) PMDs...
SuggestedRemedy
As for the first four rows, merge and straddle the triple entries for
Side-mode suppression ratio (SMSR), (min)
Transmitter transition time (max)
RINxOMA (max)
Transmitter reflectance (max)
Response Response Status C
ACCEPT.

Cl 168 SC 168.6.1 P33 L24 # 70
Johnson, John Broadcom
Comment Type TR Comment Status R resolved
At ER(min) = 3.5 dB and OMA(max) = 5 dBm, maximum TX Pavg would be 6.2 dBm, which exceeds the PAVG(max) spec of 4.8dBm for 100G-BR10.
SuggestedRemedy
Minimum required TX OMA at TDECQ(max) = 3.1 dBm, corresponding to PAVG = 4.3dBm at ER(min). To conform to TX Pavg(max) = 4.8 dBm, propose to change TX OMA(max) from 5 dBm to 3.6 dBm in Table 168-6, and RX OMA(max) from 5 dBm to 3.6dBm in Table 168-7.
Response Response Status C
REJECT.
The maximum TX Pavg, OMA(max) and ER(min) don't have to be met simultaneously. Refer to 3dk_jackson_2407_1b.pdf.

Cl 168 SC 168.6.1 P33 L38 # 71
Johnson, John Broadcom
Comment Type TR Comment Status A resolved
The transmitter power excursion (TPE) maximum limits are inconsistent with the specified OMA(max) and maximum overshoot (OS) = 22%. As discussed in johnson_3dj_01a_2411, OS should roll off to ~14.6% at OMA(max) to be consistent with other 100G PAM4 PMDs.
SuggestedRemedy
Assuming ideal linearity, TPE(max) = OMA(max)*(OS+0.5), where OS = 14.6%. Based on this, change the spec limits for TPE(max) as follows:

100G-BR10: from 2.8 dBm to 1.7 dBm (assuming acceptance of TX OMA(max) = 3.6 dBm)
100G-BR20: from 3.9 dBm to -0.5 dBm
100G-BR40: from 6.1 dBm to 7.8 dBm
Response Response Status C
ACCEPT IN PRINCIPLE.
Based on the formula: TPE(max) = OMA(max)*(OS+0.5), where OS = 14.6% at OMA(max).

Change the TPE values in Table 168-6 as:
100G-BR10: 3.1 dBm
100G-BR20: -1.9 dBm
100G-BR40: 6.4 dBm

Cl 168 SC 168.6.1 P33 L39 # 179
Dawe, Piers Nvidia
Comment Type E Comment Status A bucket_EZ
Use the emerging standard order for these parameters (see Clause 151)
SuggestedRemedy
Move Average launch power of OFF transmitter (max)
to after Transmitter transition time (max)
Response Response Status C
ACCEPT.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 168 SC 168.6.1 P33 L50 # 72
Johnson, John Broadcom
Comment Type TR Comment Status A bucket_EZ
It's unnecessary to compare with Cl. 139 in footnote (b).
SuggestedRemedy
Delete "Even though the representation of the OMAouter requirement is different from that in Clause 139, they are consistent." from footnote (b).
Response Response Status W
ACCEPT IN PRINCIPLE.
See comment #41.

Cl 168 SC 168.6.1 P33 L50 # 41
Ran, Adeo Cisco Systems, Inc.
Comment Type TR Comment Status A bucket_EZ
Footnote b of Table 167-7 refers to clause 139, but this clause is for a 50 Gb/s PMD and is irrelevant. The relevant clause may be 140 instead (assuming it is consistent; if not, further changes need to be made).
Also, external references should be indicated by "forest green" text color.
SuggestedRemedy
Change "Clause 139" to "Clause 140" and format as external reference (forest green).
Response Response Status W
ACCEPT.

Cl 168 SC 168.6.1 P33 L51 # 181
Dawe, Piers Nvidia
Comment Type T Comment Status A bucket_EZ
A comparison with Clause 139 (50GBASE-FR LR ER) doesn't seem relevant; saying this is consistent doesn't seem correct.
SuggestedRemedy
Delete the sentence "Even though the representation of the OMAouter requirement is different from that in Clause 139, they are consistent."
Response Response Status C
ACCEPT IN PRINCIPLE.
See comment #41.

Cl 168 SC 168.6.1 P34 L1 # 182
Dawe, Piers Nvidia
Comment Type E Comment Status A bucket_EZ
In equations, functions and abbreviations of words should be upright not italic
SuggestedRemedy
Change max to upright, three times
Response Response Status C
ACCEPT IN PRINCIPLE.
Follow the style manual.
Implement suggested remedy with editorial license.

Cl 168 SC 168.6.3 P35 L # 269
Maniloff, Eric Ciena
Comment Type T Comment Status A resolved
Penalty allocations include 0.9dB more than TDECQ for the 10km spec, but only 0.5dB more for the 20 & 40km specs. Penalty allocations normally include allocations for DGD and MPI penalties. DGD is 3.1/3.9/5.0 ps for 10/20/40km specs. The expectation would be that penalties for 20 & 40 kms would be \geq those for 10 km.
SuggestedRemedy
Adjust the penalties and corresponding related specifications to align with the link impairments.
Response Response Status C
ACCEPT IN PRINCIPLE.
Add Editor's note in the draft: call for further check of the penalty values.

Cl 168 SC 168.6.3 P35 L # 270
Maniloff, Eric Ciena
Comment Type E Comment Status A resolved
Penalty allocations include values for DGD and MPI. In 802.3dj there was a decision to explicitly state the allocations for these, which is useful information to include.
SuggestedRemedy
Add a footnote to the Penalty allocations specifying the values for DGD and MPI
Response Response Status C
ACCEPT IN PRINCIPLE.
See comment #269.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 168 SC 168.6.3 P35 L11 # 110
 Zimmerman, George ADI,APLgp,Cisco,Marvell,OnSemi,Sony,SenTekse
 Comment Type T Comment Status R bucket_EZ
 The unit for a power budget can't be dB - power has units - dBm, for example.... dB is only good for ratios.
 SuggestedRemedy
 Either rename "Power budget" so it is clear it is a ratio, or change units to reflect a unit of power (e.g., dBm)
 Response Response Status Z
 REJECT.
 This comment was WITHDRAWN by the commenter.

Power budget (dB)=channel insertion loss (dB) + allocation for penalties (dB)

Cl 168 SC 168.7.1 P36 L7 # 65
 Regev, Alon Keysight
 Comment Type E Comment Status A bucket_EZ
 "sidn" should be "side"
 SuggestedRemedy
 change "sidn-mode" to "side-mode"
 Response Response Status C
 ACCEPT.

Cl 168 SC 168.7.1 P36 L7 # 184
 Dawe, Piers Nvidia
 Comment Type E Comment Status A bucket_EZ
 Sidn
 SuggestedRemedy
 Side
 Response Response Status C
 ACCEPT.

Cl 168 SC 168.7.1 P36 L7 # 45
 Ran, Adee Cisco Systems, Inc.
 Comment Type E Comment Status A bucket_EZ
 Typo in "Sidn"
 SuggestedRemedy
 Change to "Side"
 Response Response Status C
 ACCEPT.

Cl 168 SC 168.7.4 P37 L2 # 185
 Dawe, Piers Nvidia
 Comment Type E Comment Status A bucket_EZ
 Blank line(s)?
 SuggestedRemedy
 Remove. Set the figure to float.
 Response Response Status C
 ACCEPT.

Cl 168 SC 168.7.5.3 P38 L50 # 46
 Ran, Adee Cisco Systems, Inc.
 Comment Type ER Comment Status A bucket_EZ
 Reference to 121.8.5.3 is not a functional link. It should be formatted as an external reference.
 Other similar external references appear in 168.7.13.1, 168.7.13.2, 168.7.13.3, 168.7.7 (3 references), 168.7.11, 168.8.1, and maybe other places.
 SuggestedRemedy
 Format all external references in forest green text color.
 Response Response Status W
 ACCEPT.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 168 SC 168.7.5.4 P39 L3 # 83

Simms, William

NVIDIA

Comment Type E Comment Status A bucket_EZ

strange break in text between line 3 and 17 with figure n the middle.

SuggestedRemedy

move figure to after the completed text

Response Response Status C

ACCEPT IN PRINCIPLE.

Implement suggested remedy with editorial license.

Cl 168 SC 168.7.5.4 P39 L3 # 47

Ran, Adeel

Cisco Systems, Inc.

Comment Type E Comment Status A bucket_EZ

"5 tap, T spaced" should be "5-tap, T-spaced".
(see for example 167.8.6.1 in 802.3db)

I am aware that the same text exists in many previous clauses, but an error should not be carried over to a new clause.

SuggestedRemedy

Change per comment.

Response Response Status C

ACCEPT.

Cl 168 SC 168.7.5.4 P39 L27 # 262

Wienckowski, Natalie

IVN Solutions LLC

Comment Type E Comment Status A bucket_EZ

figures should not be in the middle of a paragraph

SuggestedRemedy

Move Figure 168-5 after the paragraph text.

Response Response Status C

ACCEPT.

Cl 168 SC 168.7.6 P39 L27 # 92

Mi, Guangcan

Huawei Technologies Co., Ltd

Comment Type ER Comment Status A bucket_EZ

"The TECQ of each lane is measured using the methods specified for TDECQ in 168.7.5, except that the test fiber is not used."

There is only one lane in BRx PMDs in each direction.

SuggestedRemedy

delete " of each lane"

Response Response Status W

ACCEPT.

Cl 168 SC 168.7.7 P39 L33 # 189

Dawe, Piers

Nvidia

Comment Type E Comment Status A bucket_EZ

There is only one limit for this in the table

SuggestedRemedy

Change limits to limit

Response Response Status C

ACCEPT.

Cl 168 SC 168.7.10 P40 L36 # 190

Dawe, Piers

Nvidia

Comment Type E Comment Status A bucket_EZ

There is only one limit for this in the table

SuggestedRemedy

Change limits to limit

Response Response Status C

ACCEPT.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 168 SC 168.7.11 P40 L53 # 19
Maguire, Valerie Copperopolis (affl w/ CME Consulting and Cisco)
Comment Type E Comment Status R resolved
Consider using alternate sentence structure than a "shall" statement.
SuggestedRemedy
Replace, "RIN shall be as defined" with, "RIN is defined "
Response Response Status C
REJECT.
The "shall" is associated with PICS specified in 168.12.4.6, Item M1.

Cl 168 SC 168.7.13.1 P42 L35 # 263
Wienckowski, Natalie IVN Solutions LLC
Comment Type E Comment Status A bucket_EZ
Figure 168-7 is part of 168.7.13.1, not 168.7.13.
SuggestedRemedy
Move Figure 168-7 after the first paragraph of 168.7.13.1.
Response Response Status C
ACCEPT.

Cl 168 SC 168.7.13.1 P43 L2 # 200
Dawe, Piers Nvidia
Comment Type E Comment Status A bucket_EZ
100
MHz
SuggestedRemedy
Use non-breaking space
Response Response Status C
ACCEPT IN PRINCIPLE.
See comment #79.

Cl 168 SC 168.8.1 P44 L3 # 203
Dawe, Piers Nvidia
Comment Type E Comment Status A bucket_EZ
Links to be made by staff
SuggestedRemedy
Should be forest green. Also in 168.12.4.
Response Response Status C
ACCEPT.

Cl 168 SC 168.8.2 P44 L17 # 204
Dawe, Piers Nvidia
Comment Type E Comment Status A bucket_EZ
Most sections like this have a footnote:
A host system that fails to meet the manufacturer's requirements and/or usage restrictions
may emit laser radiation in excess of the safety limits of one or more safety standards. In
such a case, the host manufacturer is required to obtain its own laser safety certification.
SuggestedRemedy
If this footnote is required, add it
Response Response Status C
ACCEPT IN PRINCIPLE.
Implement suggested remedy with editorial license.

Cl 168 SC 168.9 P45 L17 # 85
Simms, William NVIDIA
Comment Type E Comment Status A bucket_EZ
another break in text for table
SuggestedRemedy
move table after text
Response Response Status C
ACCEPT.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

CI 168 SC 168.9 P45 L19 # 264
Wienckowski, Natalie IVN Solutions LLC
Comment Type E Comment Status A bucket_EZ
tables should not be in the middle of a paragraph
SuggestedRemedy
Move Table 168-12 after the paragraph text.
Response Response Status C
ACCEPT.

CI 168 SC 168.9 P45 L44 # 207
Dawe, Piers Nvidia
Comment Type T Comment Status A bucket_EZ
Other clauses have changed to the IEC definition
SuggestedRemedy
Change "ANSI/TIA/EIA-526-7/method A-1" to "the IEC 61280-4-2 one-cord reference method"
Response Response Status C
ACCEPT.

CI 168 SC 168.10 P46 L1 # 208
Dawe, Piers Nvidia
Comment Type E Comment Status A bucket_EZ
Table 168-12 contains numbers not definitions
SuggestedRemedy
Change "defined in" to "given in" or "of"
Response Response Status C
ACCEPT IN PRINCIPLE.
Change "defined in" to "given in".

CI 168 SC 168.10 P46 L9 # 209
Dawe, Piers Nvidia
Comment Type E Comment Status A bucket_EZ
...), or type G.657.A1 or type G.657.A2 (bend insensitive) fibers or the requirements in ...
SuggestedRemedy
Insert comma, as in 151.11.1:
...), or type G.657.A1 or type G.657.A2 (bend insensitive) fibers, or the requirements in ...
Response Response Status C
ACCEPT.

CI 168 SC 168.12.1 P48 L14 # 213
Dawe, Piers Nvidia
Comment Type E Comment Status A bucket_EZ
Links to be made by staff
SuggestedRemedy
Should be forest green. Also at like 47
Response Response Status C
ACCEPT.

CI 168 SC 168.12.1 P48 L28 # 214
Dawe, Piers Nvidia
Comment Type E Comment Status A bucket_EZ
Blank sub-row?
SuggestedRemedy
Remove. Also in 168.12.3, twice
Response Response Status C
ACCEPT.

CI 168 SC 168.12.3 P49 L13 # 215
Dawe, Piers Nvidia
Comment Type E Comment Status A bucket_EZ
The ONU silent start applies to the U PHYs but not the D PHYs
SuggestedRemedy
Create major options for U and D. Status of F12 ONU silent start becomes U:M
Response Response Status C
ACCEPT.

IEEE 802.3dk D2.0 Bidirectional 100Gb/s Optical Access PHYs Initial Working Group ballot comments

Cl 168 SC 168.12.3 P49 L15 # 104
Slavick, Jeff Broadcom
Comment Type TR Comment Status A bucket_EZ
INS is used as a conditional in 168.12.4.8 so it needs a *
SuggestedRemedy
Add a * before INS in the item column in 168.12.3
Response Response Status W
ACCEPT.

Cl Content SC Contents P12 L0 # 133
Dawe, Piers Nvidia
Comment Type E Comment Status A bucket_EZ
Contents is missing
SuggestedRemedy
Add Contents
Response Response Status C
ACCEPT.
See comment #258.

Cl Introduc SC Introduction P8 L4 # 56
Regev, Alon Keysight
Comment Type E Comment Status A bucket_EZ
"802.3xx" should be "802.3dk"
SuggestedRemedy
"802.3xx" should be "802.3dk"
Response Response Status C
ACCEPT.

Cl Introduc SC Introduction P8 L31 # 55
Regev, Alon Keysight
Comment Type E Comment Status A bucket_EZ
"802.3xx" should be "802.3dk"
SuggestedRemedy
"802.3xx" should be "802.3dk"
Response Response Status C
ACCEPT.
See comment #27.

Cl Particip SC Participants P7 L4 # 54
Regev, Alon Keysight
Comment Type E Comment Status A bucket_EZ
"P802.3xx" should be "P802.3dk"
SuggestedRemedy
change "P802.3xx" to "P802.3dk"
Response Response Status C
ACCEPT.