C/ FM SC FM P1 **L10** # 147 C/ FM SC FM P1 L24 # 86 Marris, Arthur Cadence Design Systems Grow, Robert **RMG** Consulting Comment Type ER Comment Status D Amd Comment Type Comment Status D Amd State this is amendment 11 and list the prior amendments The paragraph is dated. On the date of this comment, we now have 9 approved amendments, 6 of which are published, and at least 2 amendments likely to receive SuggestedRemedy amendment numbers 10 and 11 that are ahead of the 3 projects in initial WG ballot. "Amendment: 11" - "This draft is an amendment of IEEE Std 802.3-2018 as amended by SuggestedRemedy IEEE Std 802.3cb-2018, IEEE Std 802.3bt-2018, IEEE Std 802.3cd-2018, IEEE Std Add IEEE Std 802.3cr-20xx to the list as the 10th amendment (before IEEE Std 802.3cu-802.3cn-2019, IEEE Std 802.3cg-2019, IEEE Std 802.3cg-2020, IEEE Std 802.3cm-2020, IEEE Std 802.3ch-2020, IEEE Std 802.3ca-2020, and IEEE Std 802.3cr-20xx" 20xx). Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. PROPOSED ACCEPT. See #147 Group comments #147, 86, 50, 68, 281 Group comments #147, 86, 50, 68, 281 C/ FM SC FM P1 L13 # 11 C/ FM SC FM P1 L24 # 68 Charter Hajduczenia, Marek Xilinx Nicholl, Shawn Comment Type E Comment Status D Comment Status D Comment Type ER Amd Suggest to break title before "and 50" Missing some existing amendments in the frontmatter. SuggestedRemedy SuggestedRemedy Insert line break before "and 50" to make title look a bit better Propose to replace ", and IEEE Std 802.3cd-2018" with ",IEEE Std 802.3cd-2018, IEEE Std Proposed Response Response Status W 802.3cn-2019. IEEE Std 802.3ca-2019. IEEE Std 802.3ca-2020. IEEE Std 802.3cm-2020" as well as any other relevant in-progress amendments. PROPOSED ACCEPT. Proposed Response Response Status W C/ FM SC FM P1 1 23 # 50 PROPOSED ACCEPT IN PRINCIPLE. Lewis. Jon Dell FMC See #147 Comment Type ER Comment Status D Amd Group comments #147, 86, 50, 68, 281 The list of "as amended by" is not up to date. C/ FM SC FM P1 / 24 SuggestedRemedy Please align with the latest FM template available on the website. This should at a Lewis, Jon Dell EMC minimum include "IEEE Std 802.3cb-2018, IEEE Std 802.3bt-2018, IEEE Std 802.3cd-Comment Type Ε Comment Status D D2p1 2018, IEEE Std 802.3cn-2019, IEEE Std 802.3cq-2019, IEEE Std 802.3cq-2020, and IEEE This draft is for Initial Working Group ballot Std 802.3cm-2020" SuggestedRemedy Proposed Response Response Status W Change "Draft D1.3 is prepared for Task Force review [review/balloting stage]" to "Draft PROPOSED ACCEPT IN PRINCIPLE. D2.1 is prepared for the the first Working Group recirculation ballot" See #147 Proposed Response Response Status W PROPOSED ACCEPT. Group comments #147, 86, 50, 68, 281 Group comments #51, 12, 283, 284

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

C/ FM SC FM Page 1 of 52

7/8/2020 9:33:13 PM

C/ FM	SC FM	P1	L <b>24</b>	# 12		C/ FM	SC FM	P1	L <b>24</b>	# 281
Hajduczen	ia, Marek	Charter		-		Dawe, Pie	rs	Nvidia		
Comment Type ER Comment Status D This is not draft D1.3				D2p1	Comment [list to	,,	Comment Status <b>D</b> ring publication process]		LATE	
Proposed F	mmary must be f	Response Status W					ate it now, consis led during the pu	tent with lines 23-24. If necestication process.  Response Status W	ssary, say that	the list may be
See #5						See #1	OSED ACCEPT 147 comments #147			
C/ FM	SC FM	P <b>1</b>	L <b>24</b>	# 283		C/ FM	SC FM	P1	L25	# 284
Dawe, Pier Comment 7 D1.3		Nvidia Comment Status D			LATE	Dawe, Pier	rs Type <b>E</b>	Nvidia Comment Status D	L 25	# <u> 284</u> LATE
SuggestedRemedy Would be D2.1 next time					review Suggested Delete	•				
	OSED ACCEPT	Response Status W IN PRINCIPLE.				Proposed I	Response OSED ACCEPT	Response Status <b>W</b> IN PRINCIPLE.		
See #5 Group	comments #51,	12, 283, 284				See #5	51 comments #51,	12 202 204		
C/ FM	SC FM	P1	L <b>24</b>	# 282		C/ FM	SC FM	P2	<i>L</i> 1	# 99
Dawe, Pier	rs	Nvidia			-		ski, Natalie	General Motor		# 99
Comment 7		Comment Status <b>D</b>			LATE	Comment	•	Comment Status D	5	Abs
Suggested: Comple	•					Suggested	Remedy			
Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.						Change: Abstract: This amendment to IEEE Std 802.3-2018 [abstract text].  To: Abstract: This amendment to IEEE Std 802.3-2018 adds bidirectional 10 Gb/s, 25 Gb/s, and 50 Gb/s Optical Access PHYs.				
10 Gb/		is setence as "The purpose of 50 Gb/s Ethernet bidirectionals"				Proposed I	Response OSED ACCEPT.	Response Status W		
option according to the control of t						Comm	ent group #99, 2	85, 6, 148, 87, 13, 100, 286, 8	88	

C/ FM SC FM	P <b>2</b>	<i>L</i> 1	# 285	C/ FM SC FM P2 L1 # 87				
Dawe, Piers	Nvidia			Grow, Robert RMG Consulting				
Comment Type <b>E</b> Abstract	Comment Status D		LATE	Comment Type <b>E</b> Comment Status <b>D</b> Abs Front matter is incomplete.				
SuggestedRemedy Write it				SuggestedRemedy Add Abstract.				
Proposed Response PROPOSED ACCEPT	Response Status <b>W</b> IN PRINCIPLE.			Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.				
See#99, 100 Comment group #99, 2	285, 6, 148, 87, 13, 100, 286,	88		See#99, 100 Comment group #99, 285, 6, 148, 87, 13, 100, 286, 88				
C/ FM SC FM	P <b>2</b>	L1	# 6	C/ FM SC FM P2 L1 # 13				
Anslow, Pete	Self			Hajduczenia, Marek Charter				
Comment Type ER The abstract and keyw	Comment Status <b>D</b> words are not populated		Abs	Comment Type ER Comment Status D Abs Abstract and keywords should be filled in at this time				
SuggestedRemedy Add appropriate abstra	act text and suitable keywords			SuggestedRemedy Please fill in abstract and keywords				
Proposed Response PROPOSED ACCEPT	Response Status <b>W</b> IN PRINCIPLE.			Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.				
See#99, 100 Comment group #99, 2	285, 6, 148, 87, 13, 100, 286,	88		See#99, 100 Comment group #99, 285, 6, 148, 87, 13, 100, 286, 88				
C/ FM SC FM	P <b>2</b>	<i>L</i> 1	# 148	C/ FM SC FM P2 L2 # 100				
Marris, Arthur	Cadence Des	ign Systems	<u> </u>	Wienckowski, Natalie General Motors				
Comment Type ER	Comment Status D		Abs	Comment Type E Comment Status D Abs				
Missing abstract text				Keywords need to be completed.				
SuggestedRemedy				SuggestedRemedy				
Add abstract text				Change: Keywords: Ethernet; [keywords list].				
Proposed Response PROPOSED ACCEPT	Response Status <b>W</b> IN PRINCIPLE.			To: Keywords: Ethernet, rrGBASE-BRx-d, 10GBASE-BR10, 10GBASE-BR20, 10GBASE-BR40, and 10GBASE-BR40+, 25GBASE-BR10, 25GBASE-BR20, 25GBASE-BR40, and 25GBASE-BR40+, 50GBASE-BR10, 50GBASE-BR20, 50GBASE-BR40, and 50GBASE-BR40+, IEEE 802.3cp™				
See#99, 100 Comment group #99, 2	285, 6, 148, 87, 13, 100, 286,	88		Proposed Response Response Status W PROPOSED ACCEPT				
				Comment group #99, 285, 6, 148, 87, 13, 100, 286, 88				

C/ FM	SC FM	P <b>2</b>	L <b>2</b>	# 286	C/ FM SC FM	P <b>7</b>	L <b>9</b>	# 146	
Dawe, Piers Nvidia					Lusted, Kent	Intel Corporat	tion		
Comment Type E Comment Status D LATE Keywords					Comment Type ER Comment Status D  The IEEE 802.3 WG Recording Secretary is now "Jon Lewis", not "Pete Anslow"				
Suggested List th					SuggestedRemedy Change to "Jon Lewis"				
Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.					Proposed Response Response Status W PROPOSED ACCEPT.				
	99, 100 nent group #99,	, 285, 6, 148, 87, 13, 100, 286, 88			CI FM SC FM Lewis, Jon	P <b>7</b> Dell EMC	L <b>9</b>	# 49	
C/ FM	SC FM	P <b>2</b>	L <b>3</b>	# 88	Comment Type ER	Comment Status D			
Grow, Rol	bert	RMG Consulting			Pete Anslow is no longer the 802.3 WG secretary				
Comment Front	<i>Type</i> <b>E</b> matter is incom	Comment Status <b>D</b>	Abs	SuggestedRemedy Change "Pete Anslow" to "Jon Lewis"					
Suggested Add K	dRemedy Leywords.				Proposed Response PROPOSED ACCEPT.	Response Status W			
Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.					C/ FM SC FM Hajduczenia, Marek	P <b>7</b> Charter	L15	# <u>1</u> 4	
	99, 100 nent group #99,	, 285, 6, 148, 87, 13, 100, 286, 88			Comment Type E	Comment Status <b>D</b> is usual to designate them	ı separately as l	Phase 1 and Phase 2	
C/ FM	SC FM	P7	L <b>4</b>	# 89	editors				
Grow, Rol		RMG Consulting  Comment Status D			SuggestedRemedy Per comment				
This number of this standard is known.					Proposed Response	Response Status W			
SuggestedRemedy					PROPOSED ACCEPT IN PRINCIPLE.				
802.3	ср				See #231				
Proposed	Response	Response Status W							

PROPOSED ACCEPT.

C/ FM SC FM P7 L19 # 90 C/ FM SC FM P10 **L1** # 15 Grow, Robert **RMG** Consulting Hajduczenia, Marek Charter Comment Type Ε Comment Status D Comment Type ER Comment Status D The WG ballot group list is now known. Front Matter is not up to date SuggestedRemedy SuggestedRemedy Fill in WG list. Update FM text and content to match the latest amendments published. Yes, it is a constant process. Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT PROPOSED ACCEPT Get WG list and fill this on Page 7 See comment resoltuon with topics "Amd" and "4to10" 14 C/ FM SC FM P9 # 101 # 149 C/ FM SC FM P10 L47 Wienckowski Natalie General Motors Marris, Arthur Cadence Design Systems Comment Status D Comment Type E Comment Type ER Comment Status D 4to10 Amendment title is not added in box This list is missing amaendments 4 to 10 SuggestedRemedy SuggestedRemedy Change: Amendment: Amendment title (copy from PAR). Add descriptions of amendments 4 to 10 To: Amendment: Bidirectional 10 Gb/s, 25 Gb/s, and 50 Gb/s Optical Access PHYs Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT IN PRINCIPLE. C/ FM SC FM P9 L29 # 102 Group comments #149, 107, 104, 105, 103, 108, 106, 91, 109, 52, 150, 7, 158 Wienckowski. Natalie General Motors C/ FM SC FM P10 L48 # 107 Comment Type E Comment Status D Wienckowski, Natalie General Motors Ammendment identifier not added. Comment Type E Comment Status D 4to10 SuggestedRemedy Missing ammendment descriptions Change: IEEE Std 802.3xx-20xx SuggestedRemedy To: IEEE Std 802.3cp-20xx Add: IEEE Std 802.3ch™-2020 Proposed Response Response Status W Amendment 8—This amendment includes changes to IEEE Std 802.3-2018 and adds PROPOSED ACCEPT. Clause 149, Annex 149A, Annex 149B, and Annex 149C. This amendment adds physical layer specifications and management parameters for operation at 2.5 Gb/s, 5 Gb/s, and 10 Gb/s over a single balanced pair of conductors. Proposed Response Response Status W PROPOSED ACCEPT. Group comments #149, 107, 104, 105, 103, 108, 106, 91, 109, 52, 150, 7, 158

C/ FM SC FM P10 L48 # 104 Wienckowski. Natalie General Motors Comment Type E Comment Status D 4to10

Missing ammendment descriptions

SuggestedRemedy

Add: IEEE Std 802.3ca™-2019

Amendment 5—This amendment includes changes to IEEE Std 802.3-2018 and its amendments and adds Clause 146 through Clause 148 and Annex 146A and Annex 146B. This amendment adds 10 Mb/s Physical Layer specifications and management parameters for operation on a single balanced pair of conductors.

Proposed Response Response Status W

PROPOSED ACCEPT.

Group comments #149, 107, 104, 105, 103, 108, 106, 91, 109, 52, 150, 7, 158

C/ FM SC FM P10 / 48 # 105 Wienckowski, Natalie General Motors

Comment Type E Comment Status D 4to10

Missing ammendment descriptions

SuggestedRemedy

Add: IEEE Std 802.3ca™-2020

Amendment 6—This amendment includes editorial and technical corrections, refinements, and clarifications to Clause 33 and related portions of the standard.

Proposed Response Response Status W

PROPOSED ACCEPT.

Group comments #149, 107, 104, 105, 103, 108, 106, 91, 109, 52, 150, 7, 158

C/ FM SC FM P10 L48 # 103 Wienckowski. Natalie General Motors 4to10

Comment Type E Comment Status D

Missing ammendment descriptions

SuggestedRemedy

Add: IEEE Std 802.3cn™-2019

Amendment 4—This amendment includes changes to IEEE Std 802.3-2018 and adds 50 Gb/s, 200 Gb/s, and 400 Gb/s Physical Layer specifications and management parameters for operation over single-mode fiber with reaches of at least 40 km.

Proposed Response Response Status W

PROPOSED ACCEPT.

Group comments #149, 107, 104, 105, 103, 108, 106, 91, 109, 52, 150, 7

C/ FM SC FM P10 L48 # 108 Wienckowski, Natalie General Motors Comment Type E Comment Status D 4to10

Missing ammendment descriptions

SuggestedRemedy

IEEE Std 802.3ca™-2020

Amendment 9—This amendment to IEEE Std 802.3-2018 extends the operation of Ethernet Passive Optical Networks (EPONs) to multiple channels of 25 Gb/s providing both symmetric and asymmetric operation for the following data rates (downstream/upstream): 25/10 Gb/s. 25/25 Gb/s. 50/10 Gb/s. 50/25 Gb/s. and 50/50 Gb/s. This amendment specifies the 25 Gb/s EPON Multi-Channel Reconciliation Sublayer (MCRS), 25GBASE-Nx25G-EPON PHYsical Coding Sublayers (PCSs), Physical Media Attachments (PMAs), and Physical Medium Dependent sublavers (PMDs) that support both symmetric and asymmetric data rates while maintaining backward compatibility with already deployed 10 Gb/s EPON equipment. The EPON operation is defined for distances of at least 20 km, and for a split ratio of at least 1:32.

Proposed Response Response Status W

PROPOSED ACCEPT.

Group comments #149, 107, 104, 105, 103, 108, 106, 91, 109, 52, 150, 7, 158

4to10

C/ FM SC FM P10 L48 # 106 Wienckowski. Natalie General Motors Comment Type E Comment Status D 4to10

Missing ammendment descriptions

SuggestedRemedy

Add: IEEE Std 802.3cm ™-2020

PROPOSED ACCEPT

Amendment 7—This amendment includes changes to IEEE Std 802.3-2018 and adds Clause 150. This amendment adds Physical Layer (PHY) specifications and management parameters for 400 Gb/s operation on four pairs (400GBASE-SR4.2) and eight pairs (400GBASE-SR8) of multimode fiber, over reaches of at least 100 m.

Proposed Response Response Status W

Group comments #149, 107, 104, 105, 103, 108, 106, 91, 109, 52, 150, 7, 158

C/ FM SC FM P10 / 49 # 91 Grow, Robert **RMG** Consulting

Comment Type TR Comment Status D

Incomplete list of amendment descriptions, including a self description for IEEE Std 802.3cp-20xx which others can copy into their front matter.

SuggestedRemedy

Add amendments 4 through 9 at a minimum, copying from the published or approved drafts. If properly written, this draft should also be dependent on P802.3cu. Recommend using Mr. Laws list of 24 June that has this project as Amendment 12.

Write a descripption of this amendment.

Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.

Add amd 4 to 10

Group comments #149, 107, 104, 105, 103, 108, 106, 91, 109, 52, 150, 7, 158

C/ FM SC FM P10 L49 # 109 Wienckowski. Natalie General Motors Comment Type E Comment Status D 4to10

Missing description of this ammendment.

SuggestedRemedy

Change: IEEE Std 802.3xx<sup>™</sup>-20xx This amendment includes [complete] To: IEEE Std 802.3cp™-20xx

This amendment includes includes changes to IEEE Std 802.3-2018 and adds Clause 157, Clause 158, Clause 159, and Clause 160. This ammendment adds bidirectional 10 Gb/s, 25 Gb/s, and 50 Gb/s Optical Access PHYs.

Proposed Response Response Status W

PROPOSED ACCEPT.

Group comments #149, 107, 104, 105, 103, 108, 106, 91, 109, 52, 150, 7, 158

C/ FM SC FM P10 L49 # 52 Lewis. Jon Dell EMC

Comment Type E Comment Status D 4to10

Template is still in the draft for additional ammendments.

SugaestedRemedy

Update from line 49 to include prior amendments to the base standard.

Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.

Group comments #149, 107, 104, 105, 103, 108, 106, 91, 109, 52, 150, 7, 158

C/ FM SC FM P10 / 50 # 150 Marris, Arthur

Cadence Design Systems

Comment Type ER Comment Status D

Missing description for "IEEE Std 802.3cp™-20xx"

SuggestedRemedy

Replace "[complete]" with suitable text

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Group comments #149, 107, 104, 105, 103, 108, 106, 91, 109, 52, 150, 7, 158

4to10

# 92

# 165

C/ FM SC FM P10 L51 C/ FM SC FM P13 L49 Anslow, Pete Self Grow, Robert RMG Consulting Comment Type ER Comment Status D 4to10 Comment Type Ε Comment Status D The amendment summary is not populated For some reason, a 43 is added to the end of the clause title. Same thing with clause 159 and clause 160. Each ends with "-BR40+", and each has a different number tacked onto SuggestedRemedy the title. Add appropriate summary text SuggestedRemedy Proposed Response Response Status W If this is a FrameMaker "feature" perhaps appending spaces or something to the end of the PROPOSED ACCEPT IN PRINCIPLE title may help eliinate the TOC problem. It is a mystery to me though what to do if this is a FrameMaker problem with a title ending in "+". Group comments #149, 107, 104, 105, 103, 108, 106, 91, 109, 52, 150, 7, 158 Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. C/ FM SC FM P12 / 1 # 110 Wienckowski Natalie General Motors Need to fix this Comment Status D Comment Type E C/ 00 SC Р There should not be blank pages in the document. Finisar/ /II-VI DeAndrea. John SuggestedRemedy Comment Type Comment Status D Ε Delete blank page (Instruction on how to do this are in the 802.3 template on page 15 of Table 159-4 The Table shows a value of -20 dBm for 25GBASE-BR10 and -26 dBm for version 4p2 25GBASE-BR-10. I believe there is a typo, because the PMD has (4) types, -BR10, -Also delete blank page 16, 20, 38, 64, and 82. BR20, -BR40, and -BR40+ Proposed Response Response Status W SuggestedRemedy PROPOSED ACCEPT. Suggest change: add other (2) PMD types and comment for power levels SC FM C/ FM P13 L28 # 287 Proposed Response Response Status W Dawe, Piers Nvidia PROPOSED ACCEPT IN PRINCIPLE. Comment Type E Comment Status D LATE See#1 Formatting problem with the contents list for the new clauses. Missing tab in the template? SC 0 C/ 00 P0**LO** SuggestedRemedy Fix Dawe, Piers Nvidia Comment Type Ε Comment Status D Proposed Response Response Status W **Editorial comments** PROPOSED ACCEPT IN PRINCIPLE. SuggestedRemedy To follow

Proposed Response

PROPOSED ACCEPT IN PRINCIPLE.

Place holder for LATE comments

Response Status W

C/ 00 SC 0 P0L 0 # 164 C/ 00 SC 0 P**7** L15 # 231 Dawe, Piers Nvidia Thompson, Geoff GraCaSI S.A./Independent Comment Type Comment Status D Т Comment Type ER Comment Status D Tecehnical comments Duane Remein is no longer an editor or this project. SuggestedRemedy SuggestedRemedy To follow Remove his name or revise the text. Proposed Response Proposed Response Response Status W Response Status W PROPOSED ACCEPT IN PRINCIPLE PROPOSED ACCEPT IN PRINCIPLE Place holder for LATE comments See #14 P1 SC 0 P9 / 15 C/ 00 SC 0 / 15 # 159 C/ 00 # 232 Maguire, Valerie The Siemon Company Thompson, Geoff GraCaSI S.A./Independent Comment Status D Comment Type E Comment Type E Comment Status D "50" and "Gb/s" should be on the same line The word "Ethernet" in this line is incorrect SuggestedRemedy SuggestedRemedy Insert non-breaking space between "50" and "Gb/s" in the title of the amendment See maintenance request 1350 Proposed Response Proposed Response Response Status W Response Status W PROPOSED ACCEPT. PROPOSED REJECT. C/ 00 SC 0 P7 L9 # 230 This is from the template document. Thompson, Geoff GraCaSI S.A./Independent C/ 00 SC 0 P10 / 49 # 158 Comment Type ER Comment Status D The Siemon Company Maguire, Valerie Pete Anslow is no longer 802.3 WG Secretary Comment Status D Comment Type E 4to10 SuggestedRemedy Missing the descriptive content for amendments 4 through 11 Replace "Pete Anslow" with "Jon Lewis" SuggestedRemedy Proposed Response Response Status W Replace content on lines 49 through 52 with descriptive content for amendments 4 through 11 in draft 2.0 of IEEE 802.3cv (lines 49 - 54 on page 10 and lines 1 -50 on page 11) PROPOSED ACCEPT Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.

Group comments #149, 107, 104, 105, 103, 108, 106, 91, 109, 52, 150, 7, 158

C/ 00 SC 0 P12 L1 Lewis, Jon Dell FMC Comment Type Comment Status D blank page SuggestedRemedy Remove the blank page. Also page 16, 20, 38 is blank. Please remove all blank pages in the document. The latest template has instructions for removing blank pages throughout the draft if necessary. Proposed Response Response Status W PROPOSED ACCEPT. See #110 # 16 C/ 1 SC 1.3 P18 **L1** Haiduczenia. Marek Charter Comment Status D Comment Type ER No normative references, no need for 1.3 SuggestedRemedy Strike 1.3 Proposed Response Response Status W PROPOSED ACCEPT. SC 1.3 C/ 1 P18 L1 # 111 Wienckowski, Natalie General Motors Comment Type E Comment Status D SuggestedRemedy Delete empty section. Proposed Response Response Status W PROPOSED ACCEPT. See #16

Cl 1 SC 1.4 P18 L8 # 228

D'Ambrosia, John Futurewei, U.S. Subsidiary of Huawei

Comment Type TR Comment Status D

Definition of all PHys in 1.4, indicate that each PHy includes two different specifications for -D and U. However, the scope of the approved PAR for 802.3cp states -

The scope of the project defines physical layer specifications and 50 Gb/s operation over single strand of single mode fiber of at least 10 km.

It does not appear that specifications for symmetric bidirectional links were defined, as there are different specifications for upstream and downstream.

Therefore, this specification is not per the scope of the approved PAR.

## SuggestedRemedy

It is assumed that different specifications are necessary for upstream / downstream. Therefore, the scope of the PAR needs to be updated.

Proposed Response Response Status W
PROPOSED REJECT

802.3cp BiDi links use different wavelengths for upstream and downstream.

As a good precedent, the PAR of 802.3av says "5.2 Scope of Proposed Standard: The scope of this project is to amend IEEE Std 802.3 to add physical layer specifications and management parameters for symmetric and/or asymmetric operation at 10 Gb/s on point-to-multipoint passive optical networks."

Cl 1 SC 1.4 P18 L12 # 288

Dawe, Piers Nvidia

Comment Type T Comment Status D LATE

"The link includes two different specifications": I know this is copied from before but it disagrees with the definition of "link" and anyway a link is a thing not a document; it does not contain specifications.

### SuggestedRemedy

Change to "There are different specifications for 10GBASE-BR10-D and 10GBASE-BR10-U; a link connects one to the other." ?

Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE.

Need group discussion

C/ 1 SC 1.4 P18 L13 # 18 C/ 1 SC 1.4 P18 L26 # 19 Hajduczenia, Marek Charter Hajduczenia, Marek Charter Comment Type ER Comment Status D Comment Type Comment Status D 40+ "10GBASE-BR40+-D" looks and reads terrible. Units need to be separated from numeric value/ SuggestedRemedy SuggestedRemedy Insert a space (non-breaking) before "km" Change the PMD name to "10GBASE-BR50-D" or any other combination that avoids the Scrub the draft use of + followed by - sign Scrub the draft Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT PROPOSED ACCEPT IN PRINCIPLE. Fix this in the entire draft Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217 C/ 1 SC 1.4 P18 / 14 As pointed out in Comment #229, "BR40" which is the same as ER, is really designed to Hajduczenia, Marek Charter handle 30km of loss. So LR = BR10 and ER = BR30. Propose to name the BiDi PHYs as -Comment Type ER Comment Status D BR10. -BR20. -BR30. and -BR40. We do not reference amendments, but baseline standard C/ 1 SC 1.4.52a P18 L12 # 69 SuggestedRemedy Nicholl, Shawn Xilinx Change "IEEE Std 802.3cp" to "IEEE Std 802.3", all definitions in 1.4 Comment Type Comment Status D Proposed Response Response Status W Definitions contain a reference to IEEE Std 802.3cp which should be IEEE Std 802.3 once PROPOSED ACCEPT the amendment is approved. SuggestedRemedy C/ 1 SC 1.4 P18 L20 # 229 Propose to replace "See IEEE Std 802.3cp" with "See IEEE Std 802.3" in this sub-clause D'Ambrosia John Futurewei, U.S. Subsidiary of Huawei and other sub-clauses found in sub-clause 1.4 Comment Type TR Comment Status D Proposed Response Response Status W Distinct Identiy concerns. Each of the speeds has two PHYs that address at least 40km PROPOSED ACCEPT. (BR40 and BR40+) which are noted as differing by -40+ having a larger loss budget, which means that there are two different solutions that can address the lower loss budget. C/ 1 SC 1.4.52a P18 / 12 # 289 SuggestedRemedy Dawe. Piers Nvidia Choose 1 solution for 40km for each rate. LATE Comment Type Comment Status D Proposed Response Response Status W 10km PROPOSED REJECT. SuggestedRemedy 40 and 40+ links are different. 40+ means legacy 40km link. 10 space km Several places Proposed Response Response Status W PROPOSED ACCEPT

C/ 1 SC 1.4.52d P18 L24 # 239 C/ 1 SC 1.4.52d P18 L25 # 70 Dawe, Piers Nvidia Nicholl, Shawn Xilinx Comment Type E Comment Status D LATE Comment Type TR Comment Status D 40+ Concerns about readability of "+-" in 10GBASE-BR40+-D and 10GBASE-B40+-U PMD with a larger loss budget: larger than what? SuggestedRemedy SuggestedRemedy with a larger loss budget than 10GBASE-BR40. Propose to replace "10GBASE-BR40+" with something else. Perhaps "10GBASE-BR40X", Proposed Response Response Status W where X is a letter A-Z (perhaps "L" for "Legacy" or "Long"). Perhaps "10GBASE-BR40-X". PROPOSED ACCEPT IN PRINCIPLE where X is a number (i.e. in the format of 400GBASE-LR4-6 found in P802.3cu). Proposed Response Response Status W Need group decision PROPOSED ACCEPT IN PRINCIPLE. C/ 1 SC 1.4.52d P18 1 24 # 219 See #19 Law. David Hewlett Packard Enterprise Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217 Comment Type Comment Status D TR C/ 1 # 233 SC 1.4.91d P18 L23 Please do not use '+' as part of the PHY name, due to its position it is resulting in the string '+-' in PHY names. Thompson, Geoff GraCaSI S.A./Independent Comment Type E Comment Status D SuggestedRemedy 40+ Please clarify the difference between the 40 and 40+ PHYs and based on the difference I believe that introducing a new symbol other than dash (and dash has been bad enough) choose an additional letter to add after the '40' separated with a dash. This would be of the will be problematical over the long haul in the popular press editorial sense. format 10GBASE-BR40-X, with a 10GBASE-BR40-X-D and 10GBASE-BR40-X-U where 'X' SuggestedRemedy is the chosen letter. Change from "25GBASE-BR40+" to "25GBASE-BR40plus" here and throughout the draft. Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. PROPOSED ACCEPT IN PRINCIPLE. See #19 Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217 Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217 See #19 C/ 1 P18 SC 1.4.128 L45 # 93 Grow, Robert **RMG** Consulting Comment Type Ε Comment Status D Insert point is wrong. SuggestedRemedy The insert should be after 1.4.128aac which was inserted by IEEE Std 802.3ca-20xx. Inserts are then numbered 1.4.128aad through 1.4.128aag. Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.

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

C/ 1

Need to check out subclause number

Page 12 of 52

SC 1.4.128

7/8/2020 9:33:13 PM

C/ 1 SC 1.4.128d P19 L5 # 234 C/ 30 SC 30.5.1.1.2 P22 **L1** # 166 Thompson, Geoff GraCaSI S.A./Independent Dudek, Mike Marvell Comment Type E Comment Status D 40+ Comment Type Comment Status D I believe that introducing a new symbol other than dash (and dash has been bad enough) All the other -D Phys are OLT will be problematical over the long haul in the popular press editorial sense. SuggestedRemedy SuggestedRemedy Change ONU to OLT Change from "50GBASE-BR40+" to "50GBASE-BR40plus" here and throughout the draft. Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT PROPOSED ACCEPT IN PRINCIPLE. C/ 30 P22 L14 SC 30.5.1.1.2 Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217 Hajduczenia, Marek Charter See #19 Comment Type Comment Status D C/ 30 SC 30.5.1.1.2 P21 L16 # 151 Cadence Design Systems Marris, Arthur SuggestedRemedy Comment Type Comment Status D Ε Fix line spacing in 30.5.1.1.2 Missing line feed Proposed Response Response Status W SuggestedRemedy PROPOSED ACCEPT. Change "...10GBASE-BR10-D" to "... 10GBASE-BR10-D" C/ 45 SC 45.2.1 P23 **L8** # 40 Proposed Response Response Status W Zimmerman, George ADI, Cisco, CommScope, Marvell, SenTekSe PROPOSED ACCEPT. Comment Type E Comment Status D Editing instruction lists modifying amendments to Table 45-3, and includes "802.3xx" which C/ 30 SC 30.5.1.1.2 P21 L16 # 20 does not exist. Additionally, omits at least 802.3cq-2019 and 802.3ch-2020, which Hajduczenia, Marek Charter modified this table. Since most amendments modify this table, the 'modified by' list is generally left out. Comment Type E Comment Status D SuggestedRemedy Seems like "..." should be in a separate line above? Delete "(as modified by ... 802.3xx)" from editing instruction SuggestedRemedy Proposed Response Fix the location of "..." Response Status W PROPOSED ACCEPT. Proposed Response Response Status W PROPOSED ACCEPT.

C/ 45 SC 45.2.1 P23 **L8** # 112 CI 45 SC 45.2.1.6 P24 L12 # 115 Wienckowski. Natalie General Motors Wienckowski. Natalie General Motors Comment Type E Comment Status D Comment Type E Comment Status D Incorrect editor instructions. Cb and cd didn't make any changes that impact the changed missing rows above and below changed rows to show there are rows above and below that aren't changed. rows in cp. SuggestedRemedy SuggestedRemedy Make editor instruction: Change Table 45–3 as shown (unchanged rows not shown): Add row above and below the contented rows. "straddle" each row then add an "..." - See 45.2.1 in the 802.3 FM template for example. Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT C/ 45 SC 45.2.1 P23 **L8** # 152 CI 45 P25 L7 SC 45.2.1.7 # 41 Marris, Arthur Cadence Design Systems Zimmerman, George ADI, Cisco, CommScope, Marvell, SenTekSe Comment Type E Comment Status D Comment Type E Comment Status D What is IEEE Std 802.3xx? Tables 45-9 and 45-10 are commonly modified, modifying amendments are generally left SuggestedRemedy out. However, if they are to be included, at least 802.3cg and 802.3ch which modified these tables should be included Delete 802.3xx or correct it to the right amendment SuggestedRemedy Proposed Response Response Status W Delete "(as modified by ... )" from editing instructions for Tables 45-9 and 45-10 PROPOSED ACCEPT IN PRINCIPLE. Proposed Response Response Status W Delete "(as modified by ... 802.3xx)" PROPOSED ACCEPT. C/ 45 SC 45.2.1 P23 L15 # 113 CI 45 SC 45.2.1.7 P25 L18 # 42 Wienckowski. Natalie General Motors Zimmerman, George ADI, Cisco, CommScope, Marvell, SenTekSe Comment Type E Comment Status D Comment Type E Comment Status D missing rows above and below changed rows to show there are rows above and below that 130.6.8. 71.6.10. 113.4.2.2. and 137.8.9 should be marked as external references in Table aren't changed. 45-9. Similarly for 130.6.9, 71.6.11, 89.5.9, and 137.8.10 in Table 45-10, and 130.6.5, SuggestedRemedy 71.6.6. 113.4.2.3. and 137.8.10 in Table 45-12 Add row above and below the contented rows. "straddle" each row then add an "..." - See SuggestedRemedy 45.2.1 in the 802.3 FM template for example. Change references not in the draft to externals Proposed Response Response Status W

Proposed Response

PROPOSED ACCEPT.

PROPOSED ACCEPT

Response Status W

C/ 45 SC 45.2.1.7.1 P25 L 20 # 240 CI 45 SC 45.2.1.27a P28 L33 # 167 Dawe, Piers Nvidia Dudek. Mike Marvell Comment Type E Comment Status D LATE Comment Type Comment Status D This very long table can be laid out better All the other bits are RO this one is blank. SuggestedRemedy SuggestedRemedy Make the left column wider, at least wide enough to fit the contents, as done for Table 45-Make it RO 12. The right column could be narrower. Proposed Response Response Status W Also Table 45-10. PROPOSED ACCEPT Proposed Response Response Status W PROPOSED ACCEPT. Cl 45 SC 45.2.1.27a.4 P29 L25 # 168 Dudek. Mike Marvell Cl 45 SC 45.2.1.7.1 P25 / 20 # 8 Comment Type TR Comment Status D Anslow, Pete Self 25GBASE-BR20-U should not be described in a section titles 25GBASE-BR40-D and it Comment Type E Comment Status D needs its own bit Table 45-9 and Table 45-10 do not include "and" in any of the existing rows (although Table SuggestedRemedy 45-12 does). Make this paragraph a different section with its own bit and title and renumber the rest of SuggestedRemedy the sub-clauses. Delete all instances of "and" from Table 45-9 and Table 45-10 Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT IN PRINCIPLE. Make "25GBASE-BR20-U ability (1.34.11)" a subsection Question: CI 45 SC 45.2.1.27b P31 L7 # 22 In 802.3-2018, Tables 45-9 and 45-10 do not allow using "and" while Table 45-12 allows. Shall we delete or keep "and"? Charter Haiduczenia. Marek L4 # 153 Comment Type TR Comment Status D C/ 45 SC 45.2.1.16 P24 Title savs "25G" and all entries show "50GBASE Cadence Design Systems Marris. Arthur Comment Type E Comment Status D SuggestedRemedy

SuggestedRemedy

Delete reference to 802.3ct and review the changes indicated in the bit description in Table 45-7. Deleting both 11xxxxx and 1111001 does not seem right.

Proposed Response Response Status W

I thought 802.3ct was amending 802.3cp

PROPOSED ACCEPT IN PRINCIPLE.

Need to check this out

Use suggested remedy to fix Table 45-31b title. Also fix Table 45-31a title as "10G and 25G..."

Response Status W

Fix the table title to say "50G PMA/PMD"

PROPOSED ACCEPT IN PRINCIPLE.

Proposed Response

CI 56 SC 56.1 P33 L5 # 116 CI 56 SC 56.1 P33 L38 # 241 Wienckowski. Natalie General Motors Dawe. Piers Nvidia Comment Type E Comment Status D Comment Type Comment Status D IATE The editorial instruction includes (as changed by P802.3ca) which is not the correct way to Wrong PCS; wrong font. As the lower sublayers are rate-specific too, I don't know that we write this. need to give that detail in the figure. SuggestedRemedy SuggestedRemedy Change: (as changed by P802.3ca) Either change to 10GBASE-R PCS 25GBASE-R PCS 50GBASE-R PCS, in the usual font, To: (as modified by IEEE Std 802.3ca-2020) and make the stacks of boxes wider, or change to PCS PCS PCS, in the usual font. Proposed Response Response Status W Also Fig 157-1. PROPOSED ACCEPT. Proposed Response Response Status W P33 **L** 5 PROPOSED REJECT. CI 56 SC 56.1 # 154 Marris, Arthur Cadence Design Systems In 802.3-2018 Fig. 56-1, there are blocks such as "Cu PCS", "100BASE-X PCS", and "1000BASE-X PCS". Those fonts are smaller than the usual. Comment Type E Comment Status D Change P802.3ca to IEEE Std 802.3ca-2020 C/ 56 SC 56.1.1 P34 / 1 # 23 SuggestedRemedy Hajduczenia, Marek Charter Change P802.3ca to IEEE Std 802.3ca-2020 Comment Type E Comment Status D Proposed Response Response Status W What does text in {} mean? PROPOSED ACCEPT. SuggestedRemedy Use known designation for text and editorial instructions CI 56 SC 56.1 P33 L14 # 117 Proposed Response Response Status W Wienckowski. Natalie **General Motors** PROPOSED ACCEPT Comment Type E Comment Status D This should show the changes made by ca. Delete "{from IEEE Std 802.3-2018}." SuggestedRemedy CI 56 SC 56.1.1.1 P34 L18 # 24 Change: and Figure 56-5 for EPoC topologies To: Figure 56-5 for EPoC topologies, and Hajduczenia, Marek Charter Figure 56-5a for Nx25G-EPON topologies. Comment Type Comment Status D Proposed Response Response Status W External references (not live) are to be marked in Forest Green - "as defined in >>66.1<<" PROPOSED ACCEPT. SuggestedRemedy Multiple locations in the draft - please scrub accordingly. Proposed Response Response Status W PROPOSED ACCEPT. Line 18 "66.1". line 20 "66.2"

CI 56 SC 56.1.1.1 P34 L18 # 43 CI 56 SC 56.1.2.1 P34 **L40** # 61 Zimmerman, George ADI, Cisco, CommScope, Marvell, SenTekSe Kramer, Glen Broadcom Comment Type E Comment Status D Comment Type Ε Comment Status D 66.1 and 66.2 (line 20) should be external cross references Subclause number repeated twice SuggestedRemedy SuggestedRemedy Change references not in the draft to externals delete an extra "56.1.2.1" Proposed Response Proposed Response Response Status W Response Status W PROPOSED ACCEPT PROPOSED ACCEPT SC 56.1.1.1 L21 Cl 56 SC 56.1.2.1 P34 C/ 56 P34 # 242 L40 Dawe, Piers Nvidia Hajduczenia, Marek Charter Comment Type E Comment Status D LATE Comment Type E Comment Status D Too much "support" Seems like subclause number is doubled? SuggestedRemedy SuggestedRemedy Change remove one instance of 56.1.2.1 sublayers are used to support a bit rate Proposed Response Response Status W PROPOSED ACCEPT. sublayers are used for a bit rate four times C/ 56 SC 56.1.2.2 P34 L44 # 118 Proposed Response Response Status W Wienckowski. Natalie General Motors PROPOSED REJECT. Comment Type E Comment Status D This type of wording is used throughout 56.1.1 to describe all EFM P2P links. In order to ca was approved in 2020 make 56.1.1.1 and 56.1.1.2 the same style, suggest to change "sublayers are used to support a bit rate" to "sublayers support a bit rate" (5 places) SuggestedRemedy Change: 802.3ca-YYYY Cl 56 SC 56.1.1.1 P34 # 243 / 24 To 802.3ca-2020 Also P36L1 Dawe. Piers Nvidia Comment Type E Comment Status D LATE Proposed Response Response Status W Should mention the FEC sublayers too where they are required for all variants. PROPOSED ACCEPT. SuggestedRemedy

25GBASE-R PCS, RS-FEC, and PMA sublayers 50GBASE-R PCS, RS-FEC, and PMA sublayers

PROPOSED ACCEPT IN PRINCIPLE

25GBASE-R PCS, FEC, and PMA sublayers 50GBASE-R PCS, FEC, and PMA sublayers

Response Status W

Proposed Response

CI 56 SC 56.1.3 P35 **L9** # 26 CI 56 SC 56.1.3 P37 L # 245 Hajduczenia, Marek Charter Dawe. Piers Nvidia Comment Type E Comment Status D Comment Type Ε Comment Status D LATE None of the lists added in 56.1.3 need to be lettered, we do not reference them. Order: should go down the layers. Compare Table 44-1, Table 105-2, Table 131-3 and several others SuggestedRemedy SuggestedRemedy Convert lettered lists into bulleted ones 10GBASE-R PCS Other locations include page / line: 39/31, 10GBASE-R PMA Proposed Response Response Status W 10GBASE-BRx PMD PROPOSED ACCEPT 25GBASE-R PCS 25GBASE-R PMA Convert lettered lists in both places into bullets. 25GBASE-BRx PMD 50GBASE-R PCS Cl 56 SC 56.1.3 P37 L # 246 50GBASE-R PMA 50GBASE-BRx PMD Dawe, Piers Nvidia Proposed Response Response Status W Comment Type T LATE Comment Status D PROPOSED ACCEPT IN PRINCIPLE. RS-FEC is missing. Maybe EEE is missing. SuggestedRemedy CI 56 SC 56.1.3 P37 L18 # 244 OAM Dawe. Piers Nvidia EEE Comment Type E Comment Status D LATE 100BASE-LX10 PMD Sublayer names 10GBASE-R PCS SuggestedRemedy 25GBASE-R RS-FEC 108 10GBASE-R PMA Change: 10GBASE-BRx PMD 10GBASE-BRx PMA to 10GBASE-R PMA 25GBASE-R PCS 10GBASE-BRx PCS to 10GBASE-R PCS 10GBASE-R RS-FEC 108 25GBASE-BRx PMA to 25GBASE-R PMA 25GBASF-R PMA 25GBASE-BRx PCS to 25GBASE-R PCS 25GBASE-BRx PMD 50GBASE-BRx PMA to 50GBASE-R PMA 50GBASE-R PCS 50GBASE-BRx PCS to 50GBASE-R PCS 50GBASE-R RS-FEC 134 Proposed Response Response Status W 50GBASE-R PMA ... PROPOSED ACCEPT. Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. Group #244, 203, 204 EEE and RS-FEC are mentioned in Tables 158-1, 159-1, 160-1. Align Table 56-2 to the

three tables.

C/ 56 SC 56.1.3 P37 L21 # 203

Law, David Hewlett Packard Enterprise

Comment Type T Comment Status D

The title for Clause 49 is 'Physical Coding Sublayer (PCS) for 64B/66B, type 10GBASE-R' therefore the text in the Clause 49 heading in Table 56-2 should read '10GBASE-R PCS'. This matches the existing Clause 66 column wich is labelled '1000BASE-X PCS, PMA' even though the PCS is used to from the 1000BASE-LX10 and 1000BASE-BX10 PHYs. A similar changed needs to be made to the Clause 107 and 133 column headings.

#### SuggestedRemedy

Change '10GBASE-BRx PCS to read '10GBASE-R PCS' for the Clause 49 column heading, '25GBASE-BRx PCS' to read '25GBASE-R PCS' for the Clause 107 heading, and '50GBASE-BRx PCS' to read '50GBASE-R PCS' for the Clause 133 heading.

Proposed Response Status W

PROPOSED ACCEPT.

Group #244, 203, 204

C/ 56 SC 56.1.3 P37 L21 # 204

Law, David Hewlett Packard Enterprise

Comment Type T Comment Status D

The title for Clause 51 is 'Physical Medium Attachment (PMA) sublayer, type Serial' therefore the text in the Clause 51 heading in Table 56-2 should read '10GBASE-R PMA'. This matches the existing Clause 66 column wich is labelled '1000BASE-X PCS, PMA' even though the PCS is used to from the 1000BASE-LX10 and 1000BASE-BX10 PHYs. A similar changed needs to be made to the Clause 109 and 153 column headings.

#### SuggestedRemedy

Change '10GBASE-BRx PMA' to read '10GBASE-R PMA' for the Clause 51 column heading, '25GBASE-BRx PMA' to read '25GBASE-R PMA' for the Clause 109 heading, and '50GBASE-BRx PMA' to read '50GBASE-R PMA' for the Clause 133 heading.

Proposed Response Response Status W

PROPOSED ACCEPT.

Group #244, 203, 204

C/ 56 SC 56.1.4 P37 L50 # 27

Hajduczenia, Marek Charter

Comment Type E Comment Status D

56.1.4 is empty

SuggestedRemedy

Remove it please

Proposed Response Status W

PROPOSED ACCEPT.

Cl 78 SC 78.1.4 P L # 247

Dawe, Piers Nvidia

Comment Type T Comment Status D

Need to modify the EEE clause

SuggestedRemedy

Modify Table 78-1 to show which PHYs may optionally support EEE. For each, footnote b applies: The deep sleep mode of EEE is not supported for this PHY.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Modify Table 78-1 to show 25GBASE-BRx and 50GBASE-BRx BiDi PHYs may optionally support EEE. Footnode b applies to the aformentioned PHYs.

CI 108 SC 108 P L # 248

Dawe, Piers Nvidia

Comment Type T Comment Status D

Clause 108, Reed-Solomon Forward Error Correction (RS-FEC) sublayer for 25GBASE-R PHYs. will need some modifications for its new use as a 10G FEC.

SuggestedRemedy

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

In CI. 108, add a new paragrph to the end of 108.1.1 "This RS-FEC sublayer also applies to 10GBASE-BR20 and 10GBASE-BR40+ PHYs, specified in Clause 158. When applying it to 10GBASE-BR20 and 10GBASE-BR40+ PHYs, "25GBASE-R" and "25.78125 GBd" in this clause should be replaced by "10GBASE-BR20 or 10GBASE-BR40+" and "10.3125 GBd", respectively."

LATE

LATE

C/ 157 SC P39 L1 C/ 157 SC 157 P39 **L1** # 249 Baggett, Tim Microchip Dawe. Piers Nvidia LATE Comment Type Ε Comment Status D Comment Type E Comment Status D The term BiDi is used extensively throughout the document, but it there isn't a clear 802.3 doesn't use Gbps definition, nor is it found anywhere else in the existing standard. SuggestedRemedy SuggestedRemedy Change to Gb/s (3 times) Consider if BiDi definition should be added to clause 1.4 Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT PROPOSED REJECT C/ 157 SC 157.1.1 P38 L11 See#144 Charter Hajduczenia, Marek BiDi is the abbreviation of bidirectional. Add it to 1.5 Comment Type Comment Status D Extra "-" in Net-work C/ 157 SC 157 P38 *L*1 # 28 SuggestedRemedy Hajduczenia, Marek Charter Scrub the draft, there are multiple instances where likely import from Word resulted in Comment Type E Comment Status D spurious "-" characters Title missing "and' when listing speeds Proposed Response Response Status W SuggestedRemedy PROPOSED ACCEPT. Change to "Introduction to 10 Gbps, 25 Gbps, and 50 Gbps BiDi PHYs" SC 157.1.1 C/ 157 P39 L10 # 144 Proposed Response Response Status W Lusted. Kent Intel Corporation PROPOSED ACCEPT. Comment Type TR Comment Status D / 1 C/ 157 SC 157 P39 # 9 the term "BiDi" is used repeatedly throughout the document as an abbreviation for Bidirectional. However, it is not defined as an abbreviation in the base standard. Anslow. Pete Self Comment Type Ε Comment Status D SugaestedRemedy 802.3 uses Gb/s rather than Gbps. See: Add "BiDi" as an abbreviation for "Bidirectional" in Clause 1.5 http://www.ieee802.org/3/WG tools/editorial/requirements/words.html#bps Proposed Response Response Status W which states: "only Mb/s and Gb/s should be used" PROPOSED ACCEPT SuggestedRemedy Change the title of Clause 157 to "Introduction to 10 Gb/s, 25 Gb/s, 50 Gb/s BiDi PHYs"

Proposed Response

PROPOSED ACCEPT IN PRINCIPLE.

See #28. add "and" before "50"

Response Status W

C/ 157 SC 157.1.1 P39 L11 # 250 C/ 157 SC 157.1.1 P39 L 23 # 197 Dawe, Piers Nvidia Law. David Hewlett Packard Enterprise Comment Type Ε Comment Status D LATE Comment Type Comment Status D Net-work The PMA sublayer is listed twice, yet the PMD sublayer is missing. In addition the list ends with '... Coding Sublayer (PCS) sublayers and ...'. SuggestedRemedy SuggestedRemedy Network Suggest the text '... Physical Medium Attachment (PMA), Physical Medium Attachment Proposed Response Response Status W (PMA), forward error correction (FEC), and Physical Coding Sublayer (PCS) sublayers ...' PROPOSED ACCEPT be changed to read '... Physical Coding Sublayer (PCS), forward error correction (FEC). physical medium attachment (PMA), physical medium dependent (PMD) sublayers ...'. C/ 157 SC 157.1.1 P39 L11 # 196 Proposed Response Response Status W Law. David **Hewlett Packard Enterprise** PROPOSED ACCEPT. Comment Type Ε Comment Status D C/ 157 SC 157.1.1 P39 L26 # 198 ... Net-work ...' should read '... Network ...'. Law. David Hewlett Packard Enterprise SuggestedRemedy Comment Type Ε Comment Status D See comment. ... model are shown in Table 157-1.' should read '... model are shown in Figure 157-1.'. Proposed Response Response Status W SuggestedRemedy PROPOSED ACCEPT. See comment. C/ 157 SC 157.1.1 P39 L11 # 71 Proposed Response Response Status W Nicholl, Shawn Xilinx PROPOSED ACCEPT Comment Type ER Comment Status D SC 157.1.2 P38 C/ 157 L31 Typo "Net-work" Hajduczenia, Marek Charter SuggestedRemedy Comment Type E Comment Status D Replace "Net-work" with "Network" Seems like "see Clause XXX" should be in (), or at least preceded with a comma Proposed Response Response Status W SuggestedRemedy PROPOSED ACCEPT. Add comma before "see" in lines 31, 33, and 35 Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.

Page number is 39

C/ 157 SC 157.1.2 P39 L26 # 223 C/ 157 SC 157.1.2 P41 L34 # 222 Trowbridge, Steve Nokia Trowbridge, Steve Nokia Comment Type E Comment Status D Comment Type E Comment Status D Reference to Table 157-1 should be reference to Figure 157-1. The wide rectangle at the top of the XGMII should be against the line for the bottom of the rectangle for the Reconciliation Sublayer, as are those for the other two rates. SuggestedRemedy SuggestedRemedy See comment See comment Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT PROPOSED ACCEPT. C/ 157 SC 157.1.2 L27 # 251 P39 C/ 157 SC 157.1.3 P38 L40 # 31 Dawe. Piers Nvidia Hajduczenia, Marek Charter Comment Type E Comment Status D LATE Comment Type ER Comment Status D 40+ are specified in 44.1.3 (for 10 Gb/s), 105.1.2 (for 25 Gb/s), and 131.1.2 (for 50 Gb/s) use the formatting for naming nomenclature defined in 802.3ca - it is way more readable apply - not grammatical. that way SuggestedRemedy SuggestedRemedy Delete "are" or "apply"? See 141.2.6 PMD naming for reference Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT IN PRINCIPLE. Delete "apply" See#19 C/ 157 SC 157.1.2 P39 L28 # 169 Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217 Dudek, Mike Marvell C/ 157 SC 157.1.3 P39 L37 # 252 Comment Type E Comment Status D Dawe, Piers Nvidia Sentence isn't correct (has two verbs) LATE Comment Type Ε Comment Status D SuggestedRemedy Space before "Nomenclature" Delete "apply" on the end of the sentence. SuggestedRemedy Proposed Response Response Status W Remove PROPOSED ACCEPT. Proposed Response Response Status W PROPOSED ACCEPT.

C/ 157 SC 157.1.3 P39 L39 # 253 C/ 157 SC 157.1.3 P39 L47 # 221 Dawe, Piers Nvidia Trowbridge, Steve Nokia LATE Comment Type Ε Comment Status D Comment Type E Comment Status D Within this clause the Multi-Gigabit Ethernet Bidi PHY device use the following The "x" should go as the next element of the list other than BR. The text describing x nomenclature. should retain the hanging indent instead of wrapping back to the next line. SuggestedRemedy SuggestedRemedy For Multi-Gigabit Ethernet Bidi PHYs, the following nomenclature is used. See comment Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT. C/ 157 C/ 157 SC 157.1.3 P39 L39 SC 157.1.3 P39 L47 # 254 Dawe, Piers Nvidia Baggett, Tim Microchip LATE Comment Type Ε Comment Status D Comment Type Ε Comment Status D There are six occurances of "Bidi" when I suspect the intention is "BiDi". encoding.x refers P39 L39 SuggestedRemedy P44 L11 encoding. P44 L17 x refers P44 L27 P44 L38 Proposed Response Response Status W P44 L45 PROPOSED ACCEPT. SuggestedRemedy Search for "Bidi" and replace with "BiDi" C/ 157 SC 157.1.3 P39 L47 # 143 Proposed Response Response Status W Lusted. Kent Intel Corporation PROPOSED ACCEPT Comment Type Comment Status D the variable "x" and its associated text is on the same line as the variable "BR" C/ 157 SC 157.1.3 P39 L41 # 155 SuggestedRemedy Marris, Arthur Cadence Design Systems Make the variable "x" and its associated text a separate line Comment Status D 40+ Comment Type Е Proposed Response Response Status W "rr" is hard to decipher in the nomenclature PROPOSED ACCEPT SuggestedRemedy Consider changing "rr" to "r" Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.

Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217

See#19

C/ 157 SC 157.1.3 P39 L47 # 63 C/ 157 SC 157.1.3 P39 Kramer, Glen Broadcom Dawe. Piers Nvidia Comment Type Т Comment Status D Comment Type Е Comment Status D In Sentence "Bidirectional 64B/66B encoding.x refers to the PHY reach: 10 (10 km), 20 (20 **GMII** km), 40 (40 km), or 40+ (legacy 40 km)" it is not clear what "legacy 40 km" means. Is SuggestedRemedy legacy 40 km different than a "new 40 km"? XGMII SuggestedRemedy Proposed Response Response Status W Either strike the "(legacy 40 km)" or add an explanation of what that means. PROPOSED ACCEPT Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. C/ 157 SC 157.1.3 P39 Dudek. Mike Marvell Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217 See#19 Comment Type T Comment Status D GMII is for 1G which isn't part of this project. C/ 157 SC 157.1.3 P39 L47 # 75 SuggestedRemedy Laubach, Mark Self Change GMII to XGMII Comment Type Ε Comment Status D Proposed Response Response Status W For readability, suggest a tab PROPOSED ACCEPT. SuggestedRemedy add tabs to align "(40 km)..." under "Bidirectional" C/ 157 SC 157.1.3 P40 Proposed Response Response Status W Zimmerman, George PROPOSED ACCEPT. Comment Type E Comment Status D C/ 157 SC 157.1.3 P39 / 48 # 215 Law. David Hewlett Packard Enterprise SuggestedRemedy Comment Type TR Comment Status D 40+ It is not clear what is mean by '40+ (legacy 40 km)', perhaps it is in reference to the optical Proposed Response Response Status W budget. PROPOSED ACCEPT. SuggestedRemedy

Please provide a description of the technical difference is between '40' and '40+'.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE

Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217 See #19

L53 # 255 LATE L 53 # 170 L5 # 44 ADI, Cisco, CommScope, Marvell, SenTekSe All phy names in Tables 157-1, 157-2, 157-3, and 157-4 have an extra hyphen (e.g., 10G-BASE-BR10-D should be 10GBASE-BR10-D as it is elsewhere). Change names in Table 157-1 to remove hyphen after speed

C/ 157 SC 157.1.3 P40 **L** 5 # 10 C/ 157 SC 157.1.3 P40 **L** 5 # 256 Anslow, Pete Self Dawe. Piers Nvidia Comment Type Ε Comment Status D Comment Type Comment Status D LATE The draft contains 52 instances of "xxG-BASE", which should all be "xxGBASE" fi-The first example is in Table 157-1 where "10G-BASE-BR10-D" should be "10GBASEber BR10-D" SuggestedRemedy SuggestedRemedy Make the right hand column wider, set the hyphenation fragment length to at least 3. Change all 52 instances of "xxG-BASE" to "xxGBASE" Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT. C/ 157 SC 157.1.3 P40 L12 # 199 C/ 157 SC 157.1.3 P40 L5 # 119 Law. David **Hewlett Packard Enterprise** Wienckowski, Natalie **General Motors** Comment Type TR Comment Status D 40+ Comment Type E Comment Status D The description of the 10G-BASE-BR40-D and 10G-BASE-BR40+-D both read '10 Gb/s There are "-" in the names after 10G/25G/50G here that aren't in the rest of the document. OLT PHY using 10GBASE-R encoding over one single-mode fiber, with reach up to at least 40 km (see Clause 158). This is also the case for the other five BR40 and BR40+ PHYs. SuggestedRemedy As their descriptions are identical it makes it very difficult for a user to decide which of Remove the "-" after the "G" in each of the names. these two PHYs to select. Proposed Response Response Status W SuggestedRemedy PROPOSED ACCEPT. Provide a distinct description for BR40 and BR40+ PHYs. Proposed Response Response Status W C/ 157 P40 **L** 5 # 257 SC 157.1.3 PROPOSED ACCEPT IN PRINCIPLE. Nvidia Dawe. Piers Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217 Comment Type Comment Status D LATE Ε See #19 This table is too long (spills over onto the next page) and too repetitive. C/ 157 SC 157.1.3 P41 **L1** # 258 SuggestedRemedy Add a sentence of introduction including the common information (over one single-mode Dawe, Piers Nvidia fiber), and instead of one Description column with a sentence in each cell, use columns for Comment Type Comment Status D LATE Е rate, position (OLT or ONU), coding, reach, and clause reference. If the table spills over onto a second page, the continuation header should say (continued) Proposed Response Response Status W in italics. PROPOSED ACCEPT IN PRINCIPLE. SuggestedRemedy There's a correct way to do this. Update Table 157-1 as suggested, also include the group decision on PHY nomenclature. Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. See #257, try to use one page for this table

C/ 157 SC 157.1.3 P41 L22 # 200 C/ 157 SC 157.1.3 P41 L37 # 202 Law. David Hewlett Packard Enterprise Law. David Hewlett Packard Enterprise Comment Type Ε Comment Status D Comment Type Comment Status D Move the four vertical dots on the right hand side of the layer diagram so that the lowest The PCS used for all three PHY speeds in a 'BASE-R PCS', not a 'BASE-X PCS'. aligns with the top of the LLC as they do on the left had side. SuggestedRemedy SuggestedRemedy Suggest that the text '10GBASE-X PCS' be changed to read '10GBASE-R PCS'. See comment. '25GBASE-X PCS' be changed to read '25GBASE-R PCS' and '50GBASE-X PCS' be changed to read '50GBASE-R PCS'. Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT. C/ 157 SC 157.1.3 P41 L37 # 145 C/ 157 SC 157.1.3 P41 / 40 # 211 Lusted. Kent Intel Corporation Law, David Hewlett Packard Enterprise Comment Type TR Comment Status D Comment Type T Comment Status D Figure 157-1 uses "10GBASE-X PCS", "25GBASE-X PCS", and "50GBASE-X PCS" in the architectural diagrams, which are not the correct names for these PCS layers. However, The MDI is part of the Physical Laver of the OSI reference model, see IEEE Std 802.3the PCS sections referenced in Table 157-2, 157-3, and 157-4 have them correct. 2018 figure 1-1. SuggestedRemedy SugaestedRemedy Change "10GBASE-X PCS" to "10GBASE-R PCS", "25GBASE-X PCS" to "25GBASE-R Move the dotted line from the bottom of the Physical Laver to the bottom of the PMD box to PCS", and "50GBASE-X PCS" to "50GBASE-R PCS" be from the bottom of the Physical Layer to the bottom of the MDI box. Proposed Response Proposed Response Response Status W Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT. C/ 157 P41 L37 # 156 C/ 157 P41 L47 SC 157.1.3 SC 157.1.3 # 32 Marris. Arthur Cadence Design Systems Hajduczenia, Marek Charter Comment Type TR Comment Status D Comment Type Comment Status D These are BASE-R PCSes GMII is defined in Figure 157-1, but not used in the figure. XGMII, 25GMII, and 50GMII are used and not defined SuggestedRemedy SuggestedRemedy Change BASE-X to BASE-R in Figure 157-1 Fix the xMII definition issues Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT.

INTERFACE"

In Figure 157-1, remove "GMII = GIGABIT MEDIA INDEPENDENT INTERFACE", add "XGMII = 10 GIGABIT MEDIA INDEPENDENT INTERFACE", "25GMII = 25 GIGABIT MEDIA INDEPENDENT INTERFACE", and "50GMII = 50 GIGABIT MEDIA INDEPENDENT

C/ 157 SC 157.1.4 P42 L5 # 33 C/ 157 SC 157.1.4 P42 L13 # 76 Hajduczenia, Marek Charter Laubach, Mark Self Comment Type ER Comment Status D Comment Type Ε Comment Status D In IEEE 802.3 standard, we do not use "must" except for specific cases outlined in Style "158" is indicated forest green, yet it is included in this addendum. Same respective issue on line 41 with "159". Manual SuggestedRemedy SuggestedRemedy "PHY types must meet the requirements" - change to "shall"? change clause numbers included in this addendum tp active cross references. Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. PROPOSED ACCEPT. In 802.3-2018, "must" is used is similar sentences in Cl. 116, 125, 80, "shall" is used in Cl. C/ 157 SC 157.1.4 P42 L13 # 120 105, 44. This needs a group decision. Wienckowski, Natalie General Motors C/ 157 SC 157.1.4 P42 L9 # 206 Comment Type E Comment Status D Clause 158 is in this draft. Hewlett Packard Enterprise Law David Comment Type E Comment Status D SuggestedRemedy 10G-BASE-BRx' should read '10GBASE-BRx'. Make the 158 in the heading a crosslink. SuggestedRemedy Proposed Response Response Status W See comment PROPOSED ACCEPT. Proposed Response Response Status W C/ 157 SC 157.1.4 P42 L13 # 34 PROPOSED ACCEPT. Hajduczenia, Marek Charter C/ 157 SC 157.1.4 P42 L9 # 259 Comment Type E Comment Status D Clause 158 should not be marked in gree, but linked live Dawe, Piers Nvidia Comment Type Е Comment Status D LATE SuggestedRemedy 10G-BASE Same applies to Tables 157-3, and 157-4 for Clauses 159, and 160, respectively SuggestedRemedy Proposed Response Response Status W PROPOSED ACCEPT.

Proposed Response

See #206

PROPOSED ACCEPT IN PRINCIPLE.

Response Status W

C/ 157 SC 157.1.4 P42 L19 # 260 C/ 157 SC 157.1.4 P42 L36 # 235 Dawe, Piers Nvidia Thompson, Geoff GraCaSI S.A./Independent Comment Type E Comment Status D LATE Comment Type ER Comment Status D As it's Fast Wake only, EEE is above PCS the PCS at least; I believe it's above the RS. The way Table 157-3 is split across the page break is, at a minimum, confusing. It needs to be controlled appropriately. SuggestedRemedy SuggestedRemedy Move the EEE column to between "Nomenclature" and RS. Keep the table on a single page or pro-actively control the row split at a logical point with Proposed Response Response Status W new column headings on the new page. Change the title on the 2nd piece to Table 157-3 PROPOSED ACCEPT IN PRINCIPLE (continued). Proposed Response Response Status W Table columns are in the ascending order of Clause number, see 802.3-2018 Tables 80-2, PROPOSED ACCEPT IN PRINCIPLE. 105-2, 125-2 Try to keep table on a single page # 201 C/ 157 SC 157.1.4 P42 L20 Hewlett Packard Enterprise Law. David C/ 157 SC 157.1.4 P42 L36 # 207 Comment Type T Comment Status D Hewlett Packard Enterprise Law. David As the title for Clause 49 is 'Physical Coding Sublayer (PCS) for 64B/66B, type 10GBASE-Comment Type E Comment Status D R', and since the 'PCS' column for Table 157-3 and 157-4 are labelled '25GBASE-R PCS' 25G-BASE-BRx' should read '25GBASE-BRx'. and '50GABSE-R PCS' respectively, please change the Table 157-2 'PCS' column to '10GBASE-R PCS'. SugaestedRemedy SuggestedRemedy See comment. Suggest that the text '64B/66B PCS' be changed to read '10GBASE-R PCS'. Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT C/ 157 SC 157.1.4 P42 L41 # 121 C/ 157 SC 157.1.4 P42 L 20 # 205 Wienckowski, Natalie General Motors Hewlett Packard Enterprise Law. David Comment Type E Comment Status D Comment Type T Comment Status D Clause 159 is in this draft. Clause 46 specifies the XGMII, not the GMII. SuggestedRemedy SuggestedRemedy Make the 159 in the heading a crosslink.

Proposed Response

PROPOSED ACCEPT.

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

Change the text 'GMII' to read 'XGMII' in the right hand Clause 46 column.

Response Status W

Proposed Response

PROPOSED ACCEPT.

C/ **157** SC **157.1.4** 

Response Status W

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C/ 157 SC 157.1.4 P43 **L1** # 122 C/ 157 SC 157.1.4 P43 L21 # 123 Wienckowski. Natalie General Motors Wienckowski, Natalie General Motors Comment Type E Comment Status D Comment Type E Comment Status D Clause 160 is in this draft. The table title needs (continued) in it. SuggestedRemedy SuggestedRemedy See instructions in 200.1.1.1.1 in the 802.3 FM template. Make the 160 in the heading a crosslink. Proposed Response Proposed Response Response Status W Response Status W PROPOSED ACCEPT IN PRINCIPLE PROPOSED ACCEPT. See #235 C/ 157 SC 157.2 P44 L1 # 236 Thompson, Geoff GraCaSI S.A./Independent SC 157.1.4 P43 L1 C/ 157 # 209 Comment Type ER Comment Status D Law. David Hewlett Packard Enterprise The definition of "syblayers" is unknown to me. Comment Type E Comment Status D SuggestedRemedy 25G-BASE-BRx' should read '25GBASE-BRx'. Change "syblayers" to "sublayers." SuggestedRemedy Proposed Response Response Status W See comment. PROPOSED ACCEPT. Proposed Response Response Status W PROPOSED ACCEPT. C/ 157 SC 157.2 P44 **L1** # 261 Dawe. Piers Nvidia C/ 157 SC 157.1.4 P43 L18 # 208 LATE Comment Type Comment Status D Law, David Hewlett Packard Enterprise syblayers Comment Type E Comment Status D SuggestedRemedy 50G-BASE-BRx' should read '50GBASE-BRx'. sublayers SuggestedRemedy Proposed Response Response Status W See comment. PROPOSED ACCEPT. Proposed Response Response Status W PROPOSED ACCEPT C/ 157 SC 157.2.1 P44 L11 # 45 Zimmerman, George ADI, Cisco, CommScope, Marvell, SenTekSe Comment Type E Comment Status D Is it BiDi or Bidi...? SuggestedRemedy Change Bidi to BiDi on P44, Lines 11, 17, 24, 38, 45, and page 39 line 39 Proposed Response Response Status W

PROPOSED ACCEPT.

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

C/ **157** SC **157.2.1**  Page 29 of 52 7/8/2020 9:33:14 PM

C/ 157 SC 157.2.2 P44 L15 # 214 Law. David Hewlett Packard Enterprise Comment Type Т Comment Status D Suggest that '... the MII ...' should be changed to read '... the xMII ...' hear and on line 17. SuggestedRemedy See comment. Proposed Response Response Status W PROPOSED ACCEPT SC 157.2.2 # 65 C/ 157 P44 L16 Kramer, Glen Broadcom Comment Type Ε Comment Status D The draft uses "sublayer" everywhere except in three places on page 44, where it uses "sub-laver" SuggestedRemedy Remove hyphens in "sub-layer" on lines 16 (two ninstances) and line Proposed Response Response Status W PROPOSED ACCEPT. C/ 157 SC 157.2.3 P44 L10 # 263 Dawe. Piers Nvidia Comment Type E Comment Status D LATE specific RS and xMII specified SuggestedRemedy particular RS and xMII specified or, delete the second "specified" Also in 157.2.2. 157.2.3. 157.2.4 and 157.2.5. Proposed Response Response Status W PROPOSED ACCEPT. Delete the seocnd "specified" in all places

C/ 157 SC 157.2.3 P44 L11 # 264 Dawe. Piers Nvidia Comment Type Е Comment Status D LATE for a given ... is given SuggestedRemedy Change "for a given" to "for each". Also in 157.2.2, 157.2.3, 157.2.4 and 157.2.5. Proposed Response Response Status W PROPOSED ACCEPT. C/ 157 SC 157.2.3 P44 L22 # 262 Dawe, Piers Nvidia Comment Type T Comment Status D LATE Now that FEC is required for some PMDs, "An FEC sublayer is available for all Multi-Gigabit BiDi PHYs" is too weak. SuggestedRemedy An FEC sublayer is optional for 10G-BASE-BR10 and 10G-BASE-BR40, and required for all other Multi-Gigabit BiDi PHYs. Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. Change to "An FEC sublayer is required for all Multi-Gigabit BiDi PHYs except 10G-BASE-BR10 and 10G-BASE-BR40" C/ 157 SC 157.2.4 # 237 P44 L35 Thompson, Geoff GraCaSI S.A./Independent Comment Type TR Comment Status D The statement "The PMA also may provide an observable electrical interface for the 25GAUI or 50GAUI chip-to-chip 35 (C2C) or chip-to-module (C2M)," has no meaning within the scope of the standard. Anything that is not forbidden in the standard may be provided. SuggestedRemedy If optional standardized test points are specified or called out then say so. If that is not the case then delete the text. Proposed Response Response Status W PROPOSED REJECT.

This follows last sentence in 105.3.4

CI 157 SC 157.3 P45 L25 # 124

Wienckowski, Natalie General Motors

Comment Type E Comment Status D

Either PHYs should be possessive or the s should be removed.

SuggestedRemedy

Change: PHYs sublayers To: PHY's sublayers Or To: PHY sublayers Also on L27 and L29

Proposed Response Status W

PROPOSED ACCEPT.

Change it to PHY sublayers

CI 157 SC 157.4 P45 L18 # 238

Thompson, Geoff GraCaSI S.A./Independent

Comment Type TR Comment Status D

I believe that PAUSE operation is not the only reason that demands that there be an upper bound on the propagation delays through the network. I am given to understand that both maximum and minimum transit time need to be specified to support TSN.

SuggestedRemedy

Generalize the reasons for specifying delay and include specification of minimum delay as well.

Proposed Response Status W

PROPOSED REJECT.

Remedy is not specific enough.

Can you please provide an 802.3 reference clause for the minimum delay constrain spec?

CI 157 SC 157.4 P45 L25 # 72

Nicholl, Shawn Xilinx

Comment Type ER Comment Status D

Currently, the sentence reads "The maximum delay ... are specified". This is improper grammar.

SuggestedRemedy

Proposed to replace "The maximum delay for" with "The maximum delay values for". Another alternative is "The maximum delay constraints for".

Proposed Response Response Status W

PROPOSED ACCEPT.

Replace it with "The maximum delay constraints for" in 3 places

Cl 157 SC 157.4 P45 L25 # 265

Dawe, Piers Nvidia

Comment Type T Comment Status D LATE

44.3 will need modification to include FEC delay

SuggestedRemedy

Modify Table 44-2.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Add a new line "10GBASE-BRx RS-FEC" to Table 44-2, reuse time values in Table 105-3, line "25GBASE-R RS-FEC" for 10GBASE-BR20 and BR40+, bit time needs adjustment to 10G

C/ 157 SC 157.6 P45 L43 # 66

Kramer, Glen Broadcom

1) indicate the receive status of the PCS (see 49.2.14.1 and 45.2.3.15.1), and

Comment Status D

2) disable the PHYs transmitter(see 45.2.1.8)."

As described, both OLT and ONU will disable the transmitter. This is not what should happen.

### SuggestedRemedy

Comment Type

The setting to use silent mode must be pre-configured before a device is connected to a network. Using PCS registers or variables is an implementation choice irrelevant here. It is better to introduce Active/Passive Mode for all BRx PHY. If BRx is pre-configured to be in Active Mode, it does not disable the TX. In Passive Mode, the TX disabled until a valid Rx is confirmed. (see 57.2.9 for a similar issue resolved for OAM peers)

Proposed Response Status W

PROPOSED REJECT.

Group decided to provide PCS registers.

Cl 157 SC 157.6 P45 L45 # 213

Law, David Hewlett Packard Enterprise

Comment Type ER Comment Status D

I'm not sure if it is the case that 'The access network ... by nature, are less well controlled than other telecommunications networks.'. but I don't see a need to provide this text.

#### SuggestedRemedy

Replace the entire first paragraph of subclause 157.6 with the text 'Silent Start is provided by Multi-Gigabit Ethernet BiDi ONU PHYs to reduce the likelihood of disruption to established services if a Multi-Gigabit Ethernet BiDi ONU PHY is inadvertently attached to a Point-to-Multipoint network.'.

Proposed Response Status W

PROPOSED ACCEPT.

CI 157 SC 157.6 P45 L46 # 212

Law, David Hewlett Packard Enterprise

Comment Type E Comment Status D

If my comment to replace this paragrpah is not accepted, suggest that '... are, by nature, less well ...' should be changed to read '... are, by their nature, less well ...'.

SuggestedRemedy

Proposed Response Status W

PROPOSED REJECT.

See #213 resolution

CI 157 SC 157.6 P45 L52 # 35

Hajduczenia, Marek Charter

Comment Type ER Comment Status D

A hidden "shall" in "All members of the Multi-Gigabit Ethernet BiDi PHY family are required

to include PCS registers"

SugaestedRemedy

convert this text into "shall" statement if this is intended as a requirement. Otherwise, soften the language.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Need group decision

CI 157 SC 157.6 P46 L1 # 36

Hajduczenia, Marek Charter

Comment Type E Comment Status D

Missing space in "transmitter(see"

SuggestedRemedy

Add missing space

Proposed Response Response Status W

PROPOSED ACCEPT.

<sup>&</sup>quot;All members of the Multi-Gigabit Ethernet BiDi PHY family are required to include PCS registers or variable equivalents that:

CI 157 SC 157.6 P46 L10 # 67

Kramer, Glen Broadcom

Comment Type T Comment Status D

"Once transmission is enable it should not be disabled until the receive signal is lost."

SuggestedRemedy

This sentence is not intended as an optional requirement and no corresponding PICS exists. Also, a typo in "is enable".

Rephrase as "Once transmission is enabled, it is not be disabled until the receive signal is lost "

A better explanation would be this:

"Once transmission is enabled, it remains enabled until the optical receive power is lost, even if the PCS detects the received signal fault."

Proposed Response Response Status W
PROPOSED ACCEPT.

CI 157 SC 157.6 P46 L10 # 37

Hajduczenia, Marek Charter

Comment Type ER Comment Status D

Is this intended to be an optional requirement: "Once transmission is enable it should not be disabled until the receive signal is lost."

SuggestedRemedy

Add to PICS if intended, or change the language to avoid "should"

Proposed Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

See #67

CI 158 SC 158 P L # 181

Stassar, Peter Huawei

Comment Type TR Comment Status D

Requirements for interoperability between the various PMDs are missing. See latest version of P802.3cu D2.2. Also for 159 and 160.

SuggestedRemedy

Add requirements for interoperability for various PMDs in 158, 159 and 160

Proposed Response Status W

PROPOSED REJECT.

As wavelengths, codings, and FEC are different for PHYs, group decided to remove interop requirement subclauses from .3cp.

Cl 158 SC 158 P46 L2 # 163

Dawe, Piers Nvidia

Comment Type ER Comment Status D

10GBASE-BR40+ is a bad name and 10GBASE-BR40+-U is even worse

SuggestedRemedy

Choose something else e.g. 10GBASE-BR40p, 10GBASE-BR50

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217 See#19

CI 158 SC 158 P47 L1 # 62

Kramer, Glen Broadcom

Comment Type E Comment Status D 40+

PMD name 50GBASE-BR40+-D is confusing as it reads like BR40 "plus/minus" D.

SuggestedRemedy

Consider the following PMD names instead:

50GBASE-BR41 - "BR41" PMD class slightly better than class "BR40".

50GBASE-BR40XB - "XB" for "eXtended Budget"

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217 See#19

40+

C/ 158 SC 158.1 P47 L7 # 186 C/ 158 SC 158.1 P47 L17 Stassar, Peter Huawei Zimmerman, George ADI, Cisco, CommScope, Marvell, SenTekSe Comment Type ER Comment Status D Comment Type E Comment Status D Despite the fact that in the past for 10G PHYs reference was made to "baseband medium" "defined in 45" - the cross reference should read "Clause 45" (same thing in 159.1 and in more recent optical PMDs this term has not been used, as in new clauses 159 and 160. 160.1) Also no reference is made to "serial" in 159.1 and 160.1, so it shouldn't be needed in 158.1. SuggestedRemedy Thus comments also applies to 159.1 and 160.1 Change cross reference to read "Clause 45" SuggestedRemedy Proposed Response Response Status W Make wording consistent with 159.1 and 160.1 PROPOSED ACCEPT. Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. C/ 158 SC 158.1 P47 L25 Wienckowski, Natalie General Motors Change first sentence in 158.1 to "This clause specifies the 10GBASE-BR10, 10GBASE-BR20, 10GBASE-BR40, and 10GBASE-BR40+ PMDs together with the single-mode fiber Comment Type E Comment Status D medium." All the "Associated clause"s in the table are not included in the draft and should be external. P47 C/ 158 SC 158.1 **L8** # 114 SuggestedRemedy Change the character tag on "46" (2x), "47", "49", "51", "108" to External which will turn Wienckowski. Natalie **General Motors** them green. Comment Status D Comment Type Ε Proposed Response Response Status W typo PROPOSED ACCEPT. SuggestedRemedy Change: 10BASE-BR10 To: 10GBASE-BR10 Proposed Response Response Status W PROPOSED ACCEPT. C/ 158 SC 158.1 P47 L17 # 266 Dawe, Piers Nvidia LATE Comment Type Т Comment Status D Not the usual wording SuggestedRemedy

Change "defined in 45" to "defined in Clause 45, or equivalent"

PROPOSED ACCEPT IN PRINCIPLE.

Change "defined in 45" to "defined in Clause 45"

Response Status W

Proposed Response

# 46

# 126

C/ 158 SC 158.1 P47 L32 # 210

Law. David Hewlett Packard Enterprise

Comment Type TR Comment Status D

According to Table 158–1. Clause 108 RS—FEC is optional for both a 10GBASE-BR10 and 10GBASE-BR40 PHY. It is not clear that a 10GBASE-BR10 PHY that implements the optional RS-FEC sublaver can interoperate with a 10GBASE-BR10 PHY that does not implement the optional RS-FEC sublayer. Since the IEEE P802.3cp nomenclature doesn't provide a way to indicate if a 10GBASE-BR10 or a 10GBASE-BR40 PHY does or does not implement optional FEC, it appears that user has no way to know if a 10GBASE-BR10 or a 10GBASE-BR40 PHY implements RS-FEC or not. This seems to mean that a user won't know if one particular 10GBASE-BR10 PHY will interoperate with another 10GBASE-BR10 PHY. similarly for any two 10GBASE-BR40 PHYs.

### SuggestedRemedy

If a 10GBASE-BR10 (or 10GBASE-BR40) PHY that implements the optional RS-FEC sublaver can't interoperate with a 10GBASE-BR10 (or 10GBASE-BR40) PHY that does not implement the optional RS-FEC sublayer, add a way to indicate if the optional RS-FEC sublayer is implemented to the IEEE P802.3cp nomenclature.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE

BR10 and BR40 do not need RS-FEC. Suggest changing the cell in Table 158-1 from "optional" to "not required"

C/ 158 SC 158.1 P47 L32 # 267 Dawe. Piers Nvidia

Comment Type E Comment Status D LATE

Order of sublayers should be top to bottom.

SuggestedRemedy

Move the row "108 RS-FEC Optional Required" to between PCS and PMA (as it is in 159 and 160).

Proposed Response Response Status W PROPOSED ACCEPT.

C/ 158 SC 158.1 P47 L34

L34

# 125

Wienckowski. Natalie General Motors

Comment Type E Comment Status D

Clause 108 should be marked as an external link as it isn't in this draft.

SuggestedRemedy

Change the character tag on "Clause 108" to External which will turn it green.

Proposed Response Response Status W PROPOSED ACCEPT

SC 158.1 P47 C/ 158 Self

Comment Type Е Comment Status D

Cross reference not colored in table footnote.

SuggestedRemedy

Laubach, Mark

Change "Clause 108" for forest green.

Proposed Response Response Status W

PROPOSED ACCEPT.

C/ 158 SC 158.1 P47 L34 # 157

Marris. Arthur Cadence Design Systems

Comment Type TR Comment Status D

Is it really adequate to just say "Clause 108 describes an FEC for 25 Gb/s PHY, but the

same scheme can be applied to 10 Gb/s PHYs"?

SuggestedRemedy

Consider opening up clause 108 to explain how it works with 10G PMDs

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE

See#248

Group comments #248, 157, 171, 225

FEC

C/ 158 SC 158.1 P47 L34 # 171 C/ 158 SC 158.1.1 P47 L45 # 47 Dudek. Mike Marvell Zimmerman, George ADI, Cisco, CommScope, Marvell, SenTekSe Comment Type TR Comment Status D FEC Comment Type TR Comment Status D The footnote says the 108 RS-FEC is described for 25Gb/s. It should not be left to the The BER is specified to be at the "PHY service interface" - I can't find any other reference reader to work out how to apply it to 10Gb/s to a "PHY service interface" in this draft. Clauses 58, 59, and 75 use the term as well, but it is undefined. Clause 113 (25GBASE-T) defines its PHY service interface as the 25GMII SuggestedRemedy (see 113.1.2). However, this clause is only specifying a PMD sublayer, and references a Bring appropriate edits to Clause 108 into the document. E.g. The delays in ns are PMD service interface elsewhere - as just a PMD. Clause 158 cannot specify a BER at the probably wrong. The introduction would need work etc. Whether this RS FEC meets the xMII. Is the PMD service interface meant? (otherwise this requirement needs to go in the delay constraints for 10G networks in Clause 44 should also be investigated if this has not PMA, and something needs to be partitioned to the PMD) already been done. SugaestedRemedy Proposed Response Response Status W Change "PHY service interface" to "PMD service interface" PROPOSED ACCEPT IN PRINCIPLE Proposed Response Response Status W See#248 PROPOSED ACCEPT. Group comments #248, 157, 171, 225 C/ 158 SC 158.1.1 P48 L1 # 268 C/ 158 SC 158.1 P48 L13 # 224 Dawe. Piers Nvidia Trowbridge, Steve Nokia Comment Status D Comment Type Comment Type E Comment Status D Blank line Sloppy alignment of rectangles for XGMII, PCS, RS-FEC in Figure 158-1 SuggestedRemedy SuggestedRemedy Remove Fix it Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT C/ 158 SC 158.1.1 P48 L30 # 269 C/ 158 SC 158.1 P48 L14 # 225 Dawe, Piers Nvidia Trowbridge, Steve Nokia Comment Type Е Comment Status D Comment Type T Comment Status D **FEC** Blank lines I'm not aware there is an RS-FEC for 10GBASE-R PHYs SugaestedRemedy SuggestedRemedy Remove I suspect you may have intended Clause 74 Firewire FEC. Provide an appropriate Proposed Response reference to the correct FEC type and clause reference Response Status W

PROPOSED ACCEPT.

Proposed Response

PROPOSED ACCEPT IN PRINCIPLE.

Group comments #248, 157, 171, 225

It is RS-FEC in Cl. 108. see #248

Response Status W

LATE

I ATF

C/ 158 SC 158.5.1 P49 L37 # 64 C/ 158 SC 158.5.2 P49 L44 # 79 Kramer, Glen Broadcom Laubach, Mark Self Comment Type Ε Comment Status D Comment Type Т Comment Status D and line 50. The constant "ONE" is not defined in this draft. There are only these two Per IEE style manual, the word "will" is deprecated. occurences. SuggestedRemedy SuggestedRemedy Change the sentences containing "will" to use present tense at the following locations: Definitions should be fixed when implementing the proposed change for P49-L37 PMD UNITDATA.request and PMD UNITDATA.indication. P56-L20 P56-L21 Proposed Response Response Status W P68-L2 PROPOSED ACCEPT IN PRINCIPLE. P86-L37 Proposed Response Response Status W 52.1.1.1 defines PMD UNITDATA.request, 52.1.1.2 defines PMD UNITDATA.indication. Use them as cross references PROPOSED ACCEPT. P51 C/ 158 SC 158.5.6 L11 # 127 C/ 158 SC 158.5.2 P49 L40 # 78 General Motors Wienckowski. Natalie Laubach, Mark Self Comment Type E Comment Status D Comment Type Т Comment Status D This sentence isn't clear. What's optional, the function? Th PMD? The optical transmitter? PMD UNITDATA request is neither defined or referenced in this draft. Same for PMD UNITDATA indication on line 49. SugaestedRemedy SuggestedRemedy Change: PMDs compliant with this clause shall include the PMD global transmit disable function which allows the optical transmitter to be disabled is optional. Either provide the definitions of these functions in this draft or a cross reference to where To: Change: PMDs compliant with this clause shall include the they are defined. PMD global transmit disable function which allows the optical transmitter to be disabled. Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT. 52.1.1.1 defines PMD UNITDATA.request, 52.1.1.2 defines PMD UNITDATA.indication. P51 Use them as cross references in Lines 40 and 49. C/ 158 SC 158.5.6 L11 # 48 Zimmerman, George ADI, Cisco, CommScope, Marvell, SenTekSe Comment Type E Comment Status D It seems the font size in 158.5.6 has gotten smaller. SuggestedRemedy Correct font size in 158.5.6 to be consistent with the rest of the draft Proposed Response Response Status W PROPOSED ACCEPT.

C/ 158 SC 158.5.6 P51 L11 # 73 C/ 158 Nicholl, Shawn Xilinx Dawe. Piers Comment Type ER Comment Status D Small font in paragraphs in this sub-clause. It looks different than surrounding sub-clauses. SuggestedRemedy Check the font and paragraph spacing in this sub-clause. Proposed Response Response Status W PROPOSED ACCEPT Р # 187 C/ 158 SC 158.6 Stassar, Peter Huawei Comment Type TR Comment Status D 40+ It is very confusing why 2 PMDs 40km and 40+km are specified to satisfy a single 40km objective, also considering that in Table 158-5 only one 40km distance is given. It is also C/ 158 not clear what "+" refers to. If the 40+km spec is technically and economically feasible, delete the 40km spec. This comment also applies to 159 and 160. Dawe, Piers SuggestedRemedy Blank line Remove one of 40km/40+km and create a single 40km specification optimized for lowest cost. This can be done via a single power budget with 2 distance options as in Clause 114 for 25GBASE-ER. Applies to 158, 159 and 160 Remove Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. BR40 and BR40+ are difference classes, see #19 Group comments #19, 219, 70, 233, 234, 31, 155, 63, 215, 199, 163, 62, 187, 217 C/ 158 Law. David P C/ 158 SC 158.6 # 188 Stassar, Peter Huawei Comment Type Comment Status D For several parameters in Table 158-6, 158-7 and 158-8 there is a "zero" after the decimal point. Remove the decimal point and "zero" after it. SuggestedRemedy Remove the decimal point and "zero" after it for those parameters with integer values

Response Status W

Proposed Response

PROPOSED ACCEPT.

SC 158.6 P51 L45 # 270 Nvidia Comment Type Т Comment Status D IATE There should be something about the possibilities (or not) for interoperation between the different grades of PMD. Also for Clause 159. The text in 160 needs attention, a minimum insertion loss would be needed. I think. SuggestedRemedy See P802.3cu for examples of how to do this Proposed Response Response Status W PROPOSED REJECT. Group decided to remove interop subclauses as they do not make sense to BiDi PHYs. In addition, some PHYs use different wavelengths, codings, FEC, these make interop impossible SC 158.6.1 P52 / 19 # 271 Nvidia Comment Type Ε Comment Status D I ATF SuggestedRemedy Proposed Response Response Status W PROPOSED ACCEPT. SC 158.6.1 P52 L 29 # 218 Hewlett Packard Enterprise Comment Type TR Comment Status D Doesn't the -D PHY Tx centre wavelength range have to match the -U PHY Rx centre wavelength range, and vice versa? As an example, the 10GBASE-BRx-D PHY Tx centre wavelength (range) is 1320 to 1340 nm in Table 158-6 (page 52, line 29) which is the same as the 10GBASE-BRx-D PHY Rx centre wavelength (range) of 1320 to 1340 nm in Table

158-7 (page 53, line 24), while the 10GBASE-BRx-U PHY Rx centre wavelength (range) is 1260 to 1280 nm in Table 158-7 (page 53, line 26). This doesn't seem correct.

#### SuggestedRemedy

Correct here, and for other PHYs, if necessary.

Proposed Response Response Status W

PROPOSED REJECT.

BRx-U and BRx-D use different wavelengths

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general C/ 158 Page 38 of 52 COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn SC 158.6.1 7/8/2020 9:33:15 PM SORT ORDER: Clause, Subclause, page, line

Comment Type T Comment Status D

and line 50. The unit cells are blanks for eye mask. Same for Table 159–6 on page 71, Table 159–7 on page 72.

SuggestedRemedy

Insert "UI" for the Unit value in the table for these two rows (or other appropriate unit value).

Proposed Response Response Status W

PROPOSED REJECT.

The transmitter eye mask definition spec doesn't use unit. See Tables 52-7, 52-16, 114-6, 114-7

C/ 158 SC 158.6.1 P52 L49 # 272

Dawe, Piers Nvidia

Comment Type T Comment Status D LATE

Definition B is preferable

SuggestedRemedy

Suggest remove the obsolete transmitter eye mask definition A

Proposed Response Status W

PROPOSED REJECT.

Definitions A and B are in 10GBASE spec. Clause 158 copies both. Need group decision

C/ 158 SC 158.6.2 P53 L40 # 182

Stassar, Peter Huawei

Comment Type TR Comment Status D

In latest optical PMD specifications no longer "Receive electrical 3 dB upper cutoff frequency (max)" is included because it cannot be measured at TP3 and is part of the implementation

SuggestedRemedy

Remove row for "Receive electrical 3 dB upper cutoff frequency (max)"

Proposed Response Response Status W

PROPOSED REJECT

This copies from published 10G clauses

Need group decision

CI 158 SC 158.6.2 P53 L49 # 273

Dawe, Piers Nvidia

Comment Type T Comment Status D LATE

Extinction ratio: 3.5 dB is OK for 10GBASE-L, 3 dB for 10GBASE-E, 3 for 25GBASE-LR, 4 for 25GBASE-ER, why would 10GBASE-BR40 need 5.5 dB? Is this a typo?

SuggestedRemedy

Reduce to lower than 10GBASE-BR20 and 10GBASE-BR40+, e.g. 4.5 or 4 dB.

Proposed Response Response Status W

PROPOSED REJECT.

P52 L42

ER 5.5 copies from 10GBASE-ER spec. BR20 and BR40+ specs are new.

CI 158 SC 158.6.3 P54 L14 # 192

Stassar, Peter Huawei

Comment Type TR Comment Status D

It doesn't make sense to have 15 dB for 20km and 18 dB for 40km. 15 dB would rather be a channel loss for a 30km channel as in clause 114 for 25GBASE-ER. Also applies to 159 and 160

SuggestedRemedy

Define an appropriate channel insertion loss for 20km, e.g. 11 or 12 dB, and optimize power values in Table 158-6 and Table 158-7. Also in 159 and 160

Proposed Response Status W

PROPOSED REJECT.

15 dB is for 20 km, 18 dB is actually for 30 km

Suggest to update values in Row "Operating distance" of Table 158-8 to reflect the distance. Do the same thing for Clauses 159 and 160.

C/ 158 SC 158.6.3 P54 L14 # 191 C/ 158 SC 158.6.3 P54 L22 # 190 Stassar, Peter Huawei Stassar, Peter Huawei Comment Type TR Comment Status D Comment Type TR Comment Status D Channel insertion loss numbers do not add up using the attenuation coefficient and the An attenuation of 0.4 dB/km is used, 0.43 dB/km in Table 159-8 and 0.5 dB/km in Table allocation for connector and splice loss of 2 dB. This comment is related to another 160-6. Use a single value for all 3 clauses, preferably 0.5 dB/km to make the specifications comment requesting a change in attenuation coefficient. Compare with other recent optical consistent. Now they are all different. Applies similarly to 159 and 160 PMDs and make numbers consistent between Clauses 158, 159 and 160. SuggestedRemedy SuggestedRemedy Change loss to 0.5 dB/km consistent with other recent PMDs like P802.3cu in 158 and 159 Make numbers consistent for channel insertion loss in Clauses 158, 159 and 160 and with clause 160 Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. PROPOSED ACCEPT IN PRINCIPLE. Remove the footnote with attenuation values 6.2 dB follows the same number in Clause 52 for 10GBASE-LR Group #190, 191 Remove the footnote with attenuation values SC 158.6.3 C/ 158 P54 L22 # 189 Group #191, 190 Stassar, Peter Huawei Comment Status D Comment Type TR C/ 158 SC 158.6.3 P54 / 21 # 81 Reference is made to Table 52-11 and cross reference is missing. Change to Table 158-5 Laubach, Mark Self with cross reference Comment Type E Comment Status D SuggestedRemedy Suggest a cross reference for table footnote c. Change to Table 158-5 with cross reference SuggestedRemedy Proposed Response Response Status W Add a cross reference to CL158.11.1 PROPOSED ACCEPT IN PRINCIPLE.

Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.

How and where to add this cross reference?

Check with the group

LATE

C/ 158

Dawe. Piers

The minimum dispersion for a 40 km PMD was set at zero in 52.9.10.2 because the 1550

nm signal was always at a longer wavelength than the dispersion zero. Here, we don't

know that. All we know is that the 10GBASE-BRx-U signal is always at a shorter

Comment Type T Comment Status D

Comment Type T Comment Status D

SC 158.8

"shall be conducted" isn't suitable wording, as there is no requirement to conduct the test. Here is example wording based on what has been used in 802.3ba and later projects:

SuggestedRemedy

The table could be split for U and D. If not, the simple solution is:

PMD Min Max

wavelength than the dispersion zero.

BR10 min(f1(lambda), 0) max(f2(lambda), 0)

BR0 min(f3(lambda), 0) max(f4(lambda), 0)

BR40 min(f5(lambda), 0) max(f6(lambda), 0)

where f1 2 3 4 6 are as now, f5 is 0.93.lambda.[1- (1324 / lambda)^4]

Proposed Response

Response Status W

PROPOSED ACCEPT IN PRINCIPLE

Table 158-9, change cell "0" into "0.93\*lambda\*[1- (1324 / lambda)^4]"

 C/ 158
 SC 158.8
 P 54
 L 33
 # 274

 Dawe, Piers
 Nvidia

 Comment Type
 T
 Comment Status
 D
 LATE

"Optical measurement requirements" this was copied from Clause 38 to 52 then 58-60 but later it was decided that this was incorrect; 802.3 is not a test spec, the measurements are not required, only the compliance is. So Clause 68 and later optical PMD clauses use different wording.

SuggestedRemedy

Change to:

Definition of optical parameters and measurement methods

Proposed Response Response Status W

PROPOSED ACCEPT.

SuggestedRemedy

Stressed receiver sensitivity shall be within the limits given in Table 158-7 if measured using the method defined by 52.9.9, with the additional condition that the transmitted optical signal and the reflectance of the optical link are at their maximum levels.

P 54

Nvidia

L37

# 275

LATE

IATE

Proposed Response Status W

PROPOSED ACCEPT.

Also check clauses 159 and 160

Cl 158 SC 158.8 P54 L38 # 276

Dawe, Piers Nvidia

Comment Type T Comment Status D

What does "condition that the transmitted optical signal and ... should be at their maximum levels" mean?

SuggestedRemedy

Should this say that the transmitter reflectance should be at maximum?

Proposed Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

See #275

CI 158 SC 158.8 P54 L47 # 178

Stassar, Peter Huawei

Comment Type TR Comment Status D

The dispersion equation provides too high values for current latest G.652 fibers. Value of 0.2325 should be 0.23. Applies also to 160.7

SugaestedRemedy

Change 0.2325 to 0.23. In Clauses 158 and 160

Proposed Response Status W

PROPOSED REJECT.

0.2325 is widely used in 802.3-2018, examples are Table 122–16, Table 52–23, Table 58–12, Table 75–13, Table 87–12, and Table 88–12

Comment Type TR Comment Status D

The dispersion equation provides too high values for current latest G.652 fibers. Value of 0.465 should be 0.46. Applies also to 160.7

SuggestedRemedy

Change 0.465 to 0.46. In Clauses 158 and 160

Proposed Response Response Status W

PROPOSED REJECT.

0.465 is widely used in 802.3-2018, examples are Table 122–16, Table 52–23, Table 58–12. Table 75–13. Table 87–12. and Table 88–12

Cl 158 SC 158.8 P54 L51 # 180

Stassar, Peter Huawei

Comment Type TR Comment Status D

The dispersion equation provides too high values for current latest G.652 fibers. Value of 0.93 should be 0.92. Plus the negative dispersion is not zero but similar equation as for minimum dispersion for 20km but with 0.92 as a coefficient. Applies also to 160.7

SuggestedRemedy

Change 0.93 to 0.92, plus add equation for minimum dispersion. In Clauses 158 and 160

Proposed Response Response Status W

PROPOSED REJECT.

See #178, 179

Cl 158 SC 158.9 P55 L6 # 184

Stassar, Peter Huawei

TR

Safety requirements have recently been changed. Please refer to P802.3cu requirements. Also applies to 159 and 160

SuggestedRemedy

Comment Type

Implement safety requirements as in P802.3cu D2.2 151.9. Also in 159.8 and 160.8

Comment Status D

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

802.3cu D2.2 151.9 has an editor note saying "Align this text with changes to P802.3cr". Which document is the best reference?

Suggest using references to either .3cu or .3cr

CI 158 SC 158.9 P55 L6 # 94

Grow, Robert RMG Consulting

Comment Type TR Comment Status D

An indirect reference like this should not be used because of the difficulty of properly maintaining the document. Because the subclauses of 52.10 specifically reference port types, it could be argued that the requirements do not apply because clause 52 does not reference 10BASE-BRx port types.

#### SuggestedRemedy

A general safety subclause should copy P802.3cr 52.10.1, and the other clauses can copy the relevant subclauses of the latest revision or amendment that changes the text of the relevant subclause.

If indirection is still desired, the port type lists in Clause 52 need to be deleted (preferred) or expanded to include 10GBASE-BRx.

Proposed Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

See #184

C/ 158 SC 158.10 P56 L4 # 216

Law, David Hewlett Packard Enterprise

Comment Type T Comment Status D

The vertical bar separating the top two rows of Table 158–10 'Fiber optic cabling (channel) characteristics' seem to exclude the fibre type and wavelength rows for 40+ which doesn't seem to be correct.

#### SuggestedRemedy

Delete the vertical bar separating the top two rows of Table 158–10.

Proposed Response Response Status W
PROPOSED ACCEPT.

40+

C/ 158 SC 158.10 P56 L7 # 217 Law. David

Hewlett Packard Enterprise

Comment Status D

The operating distance (max) specified in Table 158–10 'Fiber optic cabling (channel) characteristics' is really a 'minimum operating distance (max)', for example a 10GBASE-BR20 PHY that can operate at 25 km is a conformant 10GBASE-BR20 PHY even though it exceeds the 20 km operating distance (max) specified in Table 158-10 for that PHY type. For the same reason a 10GBASE-BR40 PHY that can operate in excess of 40 km is a conformant 10GBASE-BR40 PHY. It is therefore not clear what the difference is between a 10GBASE-BR40 PHY and a 10GBASE-BR40+ PHY as it is conformant for both to operate in excess of 40 km.

#### SuggestedRemedy

Comment Type

Please clarify what the reach difference is between a 10GBASE-BR40 PHY and a 10GBASE-BR40+ PHY, as well as for the 25GBASE-BR40 PHY and a 25GBASE-BR40+ PHY and the 40GBASE-BR40 PHY and a 40GBASE-BR40+ PHY.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

TR

BR40 is for 30 km. BR40+ is for 40 km. See #19 Group comments #19, 219, 70, 234, 31, 155, 63, 214, 199, 163, 62, 187, 217

C/ 158 # 193 SC 158.10 P56 L12

Stassar, Peter Huawei Comment Type TR Comment Status D

Reference is made to Table 158-9 so that the reader will need to calculate maximum dispersion numbers themselves. Chromatic dispersion values at nominal wavelengths are likely to provide too optimistic estimates for worst case TDP (or TDECQ in 160). The applicable values at extreme wavelengths need to be in this Table as in other recent optical PMDs. Also applies to 159 and 160

#### SuggestedRemedy

Add chromatic dispersion numbers at extreme wavelengths for each PMD, e.g. as in Clause 114. Table 114-11 for 25GBASE-LR/ER and use similar Table formatting as for Clause 114.

Proposed Response Response Status W

PROPOSED REJECT.

Table 114-11 contains "Positive dispersionb (max)" and "Negtive dispersionb (min)" while Table 158-10 contains "Dispersion (max)" and "Dispersion (min)". If converting to Table 114-11, it needs group discussion to decide the new values.

C/ 158 SC 158.10 P56 L25 # 278 Dawe. Piers Nvidia Comment Type Е Comment Status D LATE Blank line SuggestedRemedy Remove Proposed Response Response Status W PROPOSED ACCEPT C/ 158 SC 158.11.1 P56 L33 # 194 Stassar, Peter Huawei Comment Type TR Comment Status D

For recent optical PMDs, reference is made to ITU-T G.652 or G.657 fibers as in P802.3cu. Also applies to 159.10 and 160.10

#### SuggestedRemedy

Change to fiber types in P802.3cu, D2.2, Subclause 151.11.1 "The optical fiber cable requirements are satisfied by cables containing ITU-T G.652.B (dispersion unshifted), type G.652.D (low water peak, dispersion unshifted), or type G.657.A1, or type G.657.A2 (bend insensitive) fibers...." or similar. In 158, 159 and 160

Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE

Need group review on the proposed text

C/ 158 SC 158.11.1 P56 L37 # 279 Dawe, Piers Nvidia

Comment Type T Comment Status D

SuggestedRemedy

Needs review because different wavelength here

Proposed Response Response Status W

This NOTE was written for a 1550 nm PMD.

PROPOSED ACCEPT IN PRINCIPLE

Delete the note as it is not relevant

I ATF

C/ 158 SC 158.12 P58 L1 # 280 C/ 158 SC 158.12.4.3 P61 L19 # 82 Dawe, Piers Nvidia Laubach, Mark Self Comment Type Ε Comment Status D LATE Comment Type Ε Comment Status D Subclause title is shorter than past clauses, which is an improvement. However, "for 158" This subclause looks empty. Same for 158.12.4.5 on the next page. And same for 158.12.4.8. is too abrupt. SuggestedRemedy SuggestedRemedy Change the format of the cross-reference to 158 so that the title becomes: Adjust framemaker to have the tables flow properly with the headings. Protocol implementation conformance statement (PICS) proforma for Clause 158 Proposed Response Response Status W PROPOSED ACCEPT. Protocol implementation conformance statement (PICS) proforma for Clause 158, Physical Medium Dependent (PMD) sublayer and medium, types 10GBASE-BR10, 10GBASE-BR20, 10GBASE-BR40, and 10GBASE-BR?? Similarly for 159.11 and 160.11. C/ 158 SC 158.12.4.3 P61 L21 # 55 Proposed Response Response Status W Lewis, Jon Dell EMC PROPOSED ACCEPT. Comment Type Ε Comment Status D Headings are listed with the tables out of order. Table with BR101 should be before Add "Clause" before "158". Do same changes to Clauses 159 and 160. 158.12.4.4 # 54 C/ 158 SC 158.12.2.2 P58 L40 SuggestedRemedy Move Table with BR101 above the heading line for 158.12.4.4 Lewis. Jon Dell FMC Comment Type E Comment Status D Proposed Response Response Status W Date is shown specifically and should be 202x as the draft isn't published PROPOSED ACCEPT. SuggestedRemedy C/ 158 SC 158.12.4.5 P62 L3 # 56 Change "IEEE Std 802.3cp-2020" to "IEEE Std 802.3cp-202x" Lewis. Jon Dell FMC Proposed Response Response Status W Comment Type E Comment Status D PROPOSED ACCEPT. Headings are listed with the tables out of order. Table with BR401 should be before 158.1.4.6 Global update of this item SuggestedRemedy C/ 158 SC 158.12.4.3 P61 L19 # 38 Move Table with BR401 above the heading line for 158.12.4.6 Hajduczenia, Marek Charter Proposed Response Response Status W Comment Type ER Comment Status D PROPOSED ACCEPT.

Empty subclause or table anchor was moved?

The same applies for 158.12.4.5, 158.12.4.8

Response Status W

SuggestedRemedy

Proposed Response

Fix the table placement

PROPOSED ACCEPT.

C/ 158 SC 158.12.4.7 P62 L32 # 39 C/ 158 SC 158.12.4.9 P63 **L8** # 95 Hajduczenia, Marek Charter Grow, Robert **RMG** Consulting Comment Type E Comment Status D Comment Type TR Comment Status D Text format in 158.12.4.7 table is incosistent with the rest of PICS tables In E1 through E4, the subclause should not be pointing to something in clause 52. SuggestedRemedy SuggestedRemedy Align the formatting Point to whatever the result is in clause 158 based on changes from other comments. Proposed Response Proposed Response Response Status W Response Status W PROPOSED ACCEPT PROPOSED ACCEPT Point to 158.9 SC 158.12.4.8 P63 L3 # 57 C/ 158 Dell EMC Lewis, Jon C/ 158 SC 158.12.4.9 P63 **L8** # 96 Comment Type Ε Comment Status D Grow. Robert **RMG** Consulting Headings are listed with the tables out of order. Table with ES1 should be before Comment Type TR Comment Status D 158.12.4.9 E1 is not properly written. P802.3cr is eliminating references to IEC 60950-1. SuggestedRemedy SuggestedRemedy Move Table with ES1 above the heading line for 158.12.4.9 The PICs should point to J.2 which is being inserted by P802.3cr. If indirection is retained, Proposed Response Response Status W the PICs could be written more like E1 in Clause 159 to eliminate a contradiction to PROPOSED ACCEPT. P8023cr. Proposed Response Response Status W C/ 158 SC 158.12.4.8 P63 **L8** # 58 PROPOSED ACCEPT IN PRINCIPLE. Dell FMC Lewis. Jon Change table content similar to that of the table in 159.11.4.8 Comment Type TR Comment Status D Clause 52 is currently part of P802.3cr. The referenced text needs to align with P802.3cr. C/ 158 SC 158.12.4.9 P64 / 1 # 160 SuggestedRemedy Maguire, Valerie The Siemon Company Change the Value/Comment field to "Conforms with J.2" where J.2 is green for external Comment Type E Comment Status D cross reference. Extra blank page Proposed Response Response Status W SuggestedRemedy PROPOSED ACCEPT Delete blank page Need to confirm the exact cell

Proposed Response

PROPOSED ACCEPT.

Response Status W

C/ 159 SC 5.4 P69 **L9** C/ 159 SC 159.3 P67 **L** 5 # 161 DeAndrea, John Finisar/ /II-VI Maguire, Valerie The Siemon Company Comment Type Ε Comment Status D Comment Type E Comment Status D Table 159-4, SIGNAL DETECT value, FAIL, outlines (2) average powers for the PMD "1" and "pause quantum" should be on the same line options, of (4) types, -10, -20, -40, and -40+ SuggestedRemedy SuggestedRemedy Insert non-breaking space between "1" and "pause\_quantum" Suggested change: add other (2) PMD types and comment for power levels Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT PROPOSED ACCEPT IN PRINCIPLE. C/ 159 SC 159.5.4 P69 L13 # 172 Change text to show -20 dBm is for BR10, -26 dBm is for BR20/40/40+ Dudek. Mike Marvell C/ 159 SC 5.4 P69 19 # Comment Type TR Comment Status D Finisar/ /II-VI It is inappropriate in a standard to say "and poor 25GBASE-BR20 is left to the wind". DeAndrea, John Comment Type T Comment Status D SuggestedRemedy Table 159-4 The Table shows a value of -20 dBm for 25GBASE-BR10 and -26 dBm for This problem needs to be fixed to create an inter-operable standard. 25GBASE-BR-10. I believe there is a typo, because the PMD has (4) types, -BR10, -Proposed Response Response Status W BR20, -BR40, and -BR40+ PROPOSED ACCEPT IN PRINCIPLE. SuggestedRemedy Suggest modifying, from "-26 dBm for 25GBASE-BR-10" to "-26 dBm for 25GBASE-BR-20" See #1 Proposed Response Response Status W C/ 159 SC 159.5.9 P70 **L9** # 128 PROPOSED ACCEPT IN PRINCIPLE. Wienckowski. Natalie **General Motors** See #1 Comment Type Ε Comment Status D typo SC 159.1 C/ 159 P65 **L8** # 74 SuggestedRemedy Xilinx Nicholl, Shawn Change: 25BASE-BRx-U Comment Type ER Comment Status D To: 25GBASE-BRx-U PMDS should have a lowercase "S". Proposed Response Response Status W SugaestedRemedy PROPOSED ACCEPT. Replace "PMDS together" with "PMDs together" Proposed Response

Response Status W

PROPOSED ACCEPT.

C/ 159 SC 159.6 P73 L19 # 83 C/ 159 SC 159.6.1 P71 L21 Laubach, Mark Self Wey, Jun Shan 7TF TX Inc. Comment Type Comment Type Comment Status D TR Comment Status D 88.11.2.1 needs to be an indicated cross reference. Propose to revise Optical Modulation Amplitude (min) for BR20 in Table 159-6 in order to align with the ITU-T G.9806 SuggestedRemedy SuggestedRemedy Change text color to forest green Table 159-6 Proposed Response Response Status W Revise the Optical Modulation Amplitude (min) spec from -3.0 dBm to -4.5 dBm PROPOSED ACCEPT Proposed Response Response Status W PROPOSED ACCEPT. C/ 159 P71 L15 # 133 SC 159.6.1 ZTE TX Inc Wey, Jun Shan P71 C/ 159 SC 159.6.1 L21 Comment Type TR Comment Status D Wey, Jun Shan ZTE TX Inc Propose to revise Average launch power (min) for BR20 in Table 159-6 in order to align Comment Type TR Comment Status D with the ITU-T G.9806 Propose to revise Optical Modulation Amplitude (min) for BR40+ in Table 159-6 in order to SuggestedRemedy align with the ITU-T G.9806 Table 159-6 SuggestedRemedy Revise the average launch power (min) spec from -6 dBm to -7.5 dBm Table 159-6 Proposed Response Response Status W Revise the Optical Modulation Amplitude (min) spec from +5.0 dBm to +3.5 dBm PROPOSED ACCEPT. Proposed Response Response Status W PROPOSED ACCEPT. C/ 159 SC 159.6.1 P71 L15 # 134 Wey, Jun Shan 7TF TX Inc. C/ 159 SC 159.6.1 P71 L22 Comment Type TR Comment Status D Wey, Jun Shan ZTE TX Inc Propose to revise Average launch power (min) for BR40+ in Table 159-6 in order to align Comment Type TR Comment Status D with the ITU-T G.9806 Propose to revise Launch power OMA minus TDP (min) for BR20 in Table 159-6 in order to SuggestedRemedy align with the ITU-T G.9806 Table 159-6 SuggestedRemedy

Revise the average launch power (min) spec from +2 dBm to +0.5 dBm

Proposed Response Response Status W

SORT ORDER: Clause, Subclause, page, line

PROPOSED ACCEPT.

PROPOSED ACCEPT.

Table 159-6

Proposed Response

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 C/ 159 SC 159.6.1

Revise the Launch power OMA minus TDP (min) spec from -4.0 dBm to -5.5 dBm

Response Status W

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# 135

# 136

# 137

C/ 159 SC 159.6.1 P71 L22 # 138 C/ 159 SC 159.6.2 P72 L23 # 141 Wey, Jun Shan 7TF TX Inc. Wey, Jun Shan 7TF TX Inc. Comment Type Comment Status D Comment Type TR Comment Status D Propose to revise Launch power OMA minus TDP (min) for BR40+ in Table 159-6 in order Propose to revise Rx sensitivity (max) in OMA for BR 20 in Table 159-7 in order to align to align with the ITU-T G.9806 with the ITU-T G.9806 SuggestedRemedy SuggestedRemedy Table 159-6 Table 159-7 Revise the Launch power OMA minus TDP (min) spec from +4.0 dBm to +2.5 dBm Revise the Rx sensitivity (max) in OMA spec from -19.0 dBm to -20.5 dBm Proposed Response Response Status W Proposed Response Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT. P72 C/ 159 P72 L23 C/ 159 SC 159.6.2 L17 # 140 SC 159.6.2 # 142 Wey, Jun Shan ZTE TX Inc. Wey, Jun Shan ZTE TX Inc Comment Status D Comment Type TR Comment Status D Comment Type TR Propose to revise Rx sensitivity (max) in OMA for BR 40+ in Table 159-7 in order to align Propose to revise Average receive power (min) for BR 40+ in Table 159-7 in order to align with the ITU-T G.9806 with the ITU-T G.9806 SuggestedRemedy SuggestedRemedy Table 159-7 Table 159-7 Revise the Average receive power (min) spec from -21.0 dBm to -22.5 dBm Revise the Rx sensitivity (max) in OMA spec from -19.0 dBm to -20.5 dBm Proposed Response Proposed Response Response Status W Response Status W PROPOSED ACCEPT. PROPOSED ACCEPT. P72 L17 C/ 159 SC 159.6.3 P73 L20 C/ 159 SC 159.6.2 # 139 # 129 ZTE TX Inc Wienckowski, Natalie General Motors Wey, Jun Shan Comment Type TR Comment Status D Comment Type E Comment Status D Propose to revise Average receive power (min) for BR 20 in Table 159-7 in order to align 88.11.2.1 should be marked as an external link as it isn't in this draft. with the ITU-T G.9806 SuggestedRemedy SuggestedRemedy Change the character tag on "88.11.2.1" to External which will turn it green. Table 159-7

Proposed Response

PROPOSED ACCEPT.

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

Revise the Average receive power (min) spec from -21.0 dBm to -22.5 dBm

Response Status W

Proposed Response

PROPOSED ACCEPT.

C/ **159** SC **159.6.3** 

Response Status W

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C/ **159** SC **159.7** P**73** L**20** # 183
Stassar, Peter Huawei

Comment Type TR Comment Status D

By referring to 114.7 automatically all the requirements of 114 are followed, introducing a lot of differences with the values in 159.6. Add full details as in other reject optical PMDs and apply all changes appropriate for 159. Especially the channel requirement in 114.7 refer to 88.8.5.2. Missing are requirements for 20km. Also applies to 158.8 referring to 52.9 and 160.7 referring to 139.7

#### SuggestedRemedy

Add full details as in other reject optical PMDs and apply all changes appropriate for 159, and also 158 and 160. Including table for Transmitter compliance channel specifications

Proposed Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Line number should be 26.

It refers to 114.7 to reuse 25GBASE-LR/ER optical parameters and measurement methods. Suggest to add "The transmitter is tested using an optical channel that meets the requirements listed in Table 158–9." as the second sentence. Then the second and third sentences show differences from 114 to 159.

Line 26

C/ 159 SC 159.8 P73 L33 # 97

Grow, Robert RMG Consulting

Comment Type ER Comment Status D

The indirection is getting a bit absurd. This points to 114.8, and 114.8 points to 112.8. Then you have the same problem of 112.8 specifications being specific to 25GBASE-SR.

#### SuggestedRemedy

If still using indirection, remove the two levels of indirection and poiint to 112.8. Fix corresponding PICS items in 159.11.4.8.

Proposed Response Status W

PROPOSED ACCEPT

Refer to 112.8 and update PICS

Cl 159 SC 159.9 P73 L48 # 173

Dudek, Mike Marvell

Comment Type E Comment Status D

Table 159-9 is split across a page break which makes it hard to read.

SuggestedRemedy

Put it all on one page.

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 159 SC 159.9 P74 L1 # 130

Wienckowski, Natalie General Motors

Comment Type E Comment Status D

The table title needs (continued) in it.

SuggestedRemedy

See instructions in 200.1.1.1.1 in the 802.3 FM template.

Proposed Response Response Status W

PROPOSED ACCEPT.

C/ 159 SC 159.11.2.2 P76 L42 # 59

Lewis, Jon Dell EMC

Comment Type E Comment Status D

Date is shown specifically and should be 202x as the draft isn't published

SuggestedRemedy

Change "IEEE Std 802.3cp-2020" to "IEEE Std 802.3cp-202x"

Proposed Response Status W

PROPOSED ACCEPT.

C/ 160 SC 160.1 P83 L16 # 131

Wienckowski, Natalie General Motors

Comment Type E Comment Status D

When refering to the "top" of a Clause, you need to include "Clause" in the reference.

SuggestedRemedy

Change: 45 To: Clause 45

Proposed Response Response Status W

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general C/ 160 Page 49 of 52 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 Page 49 of 52 7/8/2020 9:33:15 PM

C/ 160 SC 160.3 P85 L # 195 C/ 160 SC 160.6 Р Stassar, Peter Huawei Stassar, Peter Huawei Comment Type TR Comment Status D Comment Type TR Comment Status D Skew constraints as in 139.3.2 as missing Specification methodology and parameters for PAM4 optical signals have recently been modified in P802.3cu. Parameters have been deleted, added or modified. Often to simplify SuggestedRemedy the specification. Align with P802.3cu D2.2. Especially TDECQ - 10log10(Ceq)c (max) has Add skew constraints consistent with 139.3.2 been removed as Tx parameter and SECQ - 10log10(Ceq)f (max) as Rx parameter. TECQ has been added, as well as TDECQ - TECQ, Transmitter over/under-shoot (max), Proposed Response Response Status W Transmitter peak-to-peak power (max). "OMA minus TDECQ = value" has been modified to PROPOSED ACCEPT IN PRINCIPLE "OMA = value + TDECQ". In a similar way receiver sensitivity specification has been modified. Etcetera Add "and Skew" to the title. Add the sentence: "Skew (or relative delay) can be introduced SuggestedRemedy between lanes by both active and passive elements of a 50GBASE-R link. The Skew between the lanes must be kept within the limits specified in 131.5 and its references." Align PAM4 specification methodology with P802.3cu D2.2. Note that 25GBASE-R standard does not mention Skew, which is strange. Proposed Response Response Status W C/ 160 SC 160.3 P85 / 36 # 162 PROPOSED ACCEPT. Maguire, Valerie The Siemon Company C/ 160 P88 SC 160.6 L52 Comment Type E Comment Status D Law. David Hewlett Packard Enterprise "2" and "pause quantum" should be on the same line Comment Type Comment Status D SuggestedRemedy The text 'A PMD that exceeds the operating range requirement ...' is followed by the Insert non-breaking space between "2" and "pause quantum" example 'e.g., a 50GBASE-BR10 PMD operating at 2.5 km ...'. This however isn't an example of a PMD that exceeds the operating range requirement as 2.5 km is within the Proposed Response Response Status W operating range requirement of 2 m to 10 km. PROPOSED ACCEPT. SuggestedRemedy Suggest that the text '... at 2.5 km ...' be changed to read '... at 12.5 km ...'. C/ 160 SC 160.5.4 P87 L42 # 174 Dudek, Mike Marvell Proposed Response Response Status W PROPOSED ACCEPT Comment Type TR Comment Status D The average receive power min fo BR20 etc. is -17.6dB. So a power of -17dB should have P88 C/ 160 SC 160.6 L53 signal detect =OK, but the other line says <-16dB is Fail. It can't meet both lines Maki, Jeffery Juniper Networks SuggestedRemedy Comment Type TR Comment Status D Change the signal detect FAIL level from <-16dBm to <-20dBm for BR20 etc. The provide example (e.g., a 50GBASE-BR10 PMD operating at 2.5 km meets the Proposed Response Response Status W operating PROPOSED ACCEPT. range requirement of 2 m to 10 km) has a typo. SuggestedRemedy

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

C/ 160

Response Status W

Replace 2.5km with 12.5km.

PROPOSED ACCEPT.

Proposed Response

See #220

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# 185

# 220

# 226

SC 160.6

SORT ORDER: Clause, Subclause, page, line

C/ 160 SC 160.6 P88 L 54 # 227 C/ 160 SC 160.6.1 P90 L14 Maki, Jeffery Juniper Networks Wienckowski. Natalie General Motors Comment Type TR Comment Status D Comment Type E Comment Status D "The 50GBASE-BR40 PMD interoperates with the 50GBASE-BR10...". The 50GBASE-121.8.5.3 should be marked as an external link as it isn't in this draft. BR40 transmit and receive wavelength is not compatible with 50GBASE-BR10. SuggestedRemedy 50GBASE-BR10-D center wavelengths (range): 1320nm to 1340 mm Change the character tag on "121.8.5.3" to External which will turn it green. 50GBASE-BR10-U center wavelengths (range): 1260nm to 1280 nm 50GBASE-BR40-D center wavelengths (range): 1306nm to 1322nm Also on P91L8 50GBASE-BR40-U center wavelengths (range): 1281nm to 1297nm Proposed Response Response Status W SuggestedRemedy PROPOSED ACCEPT. Remove 50GBASE-BR10 PMD as an example of interoperability with the 50GBASE-BR40 PMD leaving one example, the 50GBASE-BR20 PMD. C/ 160 SC 160.6.2 P90 L42 Proposed Response Response Status W Dudek. Mike Marvell PROPOSED ACCEPT IN PRINCIPLE. Comment Type TR Comment Status D The receive power (OMAouter) max values are wrong for BR20 and BR40+. (or the Tx Remove this sentence as group decided to delete interop content OMA outer max values are wrong) The min attenuation for 20km is 0dB, for 40km 10dB. C/ 160 SC 160.6.1 P89 L14 # 84 SuggestedRemedy Change BR20 to 4.4dBm, and BR40+ to 2.4dBm. Laubach, Mark Self Comment Status D Proposed Response Comment Type Ε Response Status W 121.8.5.3 needs to be an indicated cross reference. Same in footnote of next table. PROPOSED ACCEPT IN PRINCIPLE. SuggestedRemedy BR20's MAX OMA should be 4.4 dBm. BR40 remains at -2.6 dBm. BR40+ should be 2.4 Change text color to forest green C/ 160 SC 160.7 P91 L35 Proposed Response Response Status W Dudek. Mike Marvell PROPOSED ACCEPT. Comment Type T Comment Status D C/ 160 SC 160.6.1 P89 L51 # 175 The sentence is wrong. Measurements don't meet the specifications and there are exceptions. Dudek, Mike Marvell SuggestedRemedy Comment Type TR Comment Status D Change to "Optical measurement methods are defined in 139.7 with the following The Average launch power of OFF transmitter must be less than the Fail level of the Signal detect for the signal detect to work properly. SuggestedRemedy Table 160-9 Change the value for BR20 etc. to -20dBm (see other comment for why -20 not -16)

1 The transmitter is tested using an optical channel that meets the requirements listed in

2 The stressed receiver conformance test shall be conducted under the additional condition that the transmitted optical signal and the reflectance of the optical link should be at their maximum levels."

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE

Proposed Response

PROPOSED ACCEPT.

Response Status W

# 132

# 176

# 177

C/ 160 SC 160.8 P**92 L6** # 98 Grow, Robert RMG Consulting Comment Type TR Comment Status D Another example of indirection problems. Laser safety descriptions include port types in the description. General safety is changed by P802.3cr, etc. SuggestedRemedy Change (or not) consistent with changes made to 158 and 159. Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE. C/ 160 SC 160.11.2.2 P94 L40 # 60 Lewis, Jon Dell EMC Comment Type E Comment Status D Date is shown specifically and should be 202x as the draft isn't published SuggestedRemedy Change "IEEE Std 802.3cp-2020" to "IEEE Std 802.3cp-202x" Proposed Response Response Status W PROPOSED ACCEPT. C/ 160 SC 160.11.3.1 P96 **L1** # 85 Self Laubach, Mark Comment Type E Comment Status D The heading text is broken across two pages. SuggestedRemedy Keep the entire heading text on the same page. Proposed Response Response Status W

PROPOSED ACCEPT.