C/ FM	SC FM	P <b>124</b>	L <b>20</b>	# 81	CI 30	SC 3	80.5.1.1.2	P <b>20</b>	L17	# 25	
Dawe, Piers		Nvidia			Huber, To	m		Nokia			
Comment Ty Missing t		Comment Status <b>D</b> at for some contents entries?		bucket		erm 'DWI		<i>Comment Status</i> <b>D</b> n' is not present in the corrected present here.	esponding text fo		<i>bucke</i> n
SuggestedRe Fix or re-	<i>emedy</i> ∙apply the tem	plate?			Suggester			be present here.			
Proposed Re	sponse	Response Status W					· ·	so the text reads 400GBAS least 80 km as specified in		BASE-ZR PMA o	ver a
There is	no page 124 ir	IN PRINCIPLE.	on the specific is	sue raised. Some	Proposed PROF	•	se ACCEPT.	Response Status W			
		ssues were noticed in the tab			C/ 116	SC 1	16.1.3	P <b>28</b>	L <b>13</b>	# 84	
	SC 1.4.110c	P19	L <b>9</b>	# 82	Dawe, Pie	ers		Nvidia			
Dawe, Piers		Nvidia			Comment	Туре	TR	Comment Status D			
	, imply that 400	Comment Status A GBASE-Z uses 400GBASE-F						00GBASE-Z is an "IEEE 80 d needs introduction here.	2.3 family of Phy	sical Layer device	s",
		ASE-R. A distinguishing feat t definition, for 400GBASE-Z			Suggeste	dRemedy	/				
		amplitude modulation and col			Add a	sentenc	e introduc	ing the 400GBASE-Z famil	<b>/</b> .		
There ha	is to be some	difference between 400GBAS			Proposed	Respons	se	Response Status W			
	ence is GMP.				PROF	POSED F	REJECT.				
SuggestedRe	-										~
modulatio	on" to "using	ASE-R encoding, a combinati   400GBASE-R encoding, GM e modulation".			Ether		ation over	corresponding text in 802.3 DWDM systems, and the s			
Response		Response Status C			C/ 116	SC 1	16.1.3	P <b>28</b>	L <b>23</b>	# 85	
ACCEPT	IN PRINCIPL	.E.			Dawe, Pie	ers		Nvidia			
Change "	"using 400GB	ASE-7 encoding" to "using 40	0GBASE-R enc	odina" No other	Comment		TR	Comment Status D			
Change "using 400GBASE-Z encoding" to "using 400GBASE-R encoding". No other changes to the text. This description aligns with the corresponding text in 802.3ct, which was the first project to define Etherent operation over DWDM systems, and the stated intention is to ensure that 802.3cw is aligned with 802.3ct.				using GMP	This says that 400GBASE-ZR uses 400GBASE-R encoding, while 1.4.110d says it uses using 400GBASE-Z encoding. As the encoding is not regular 400GBASE-R encoding but GMP retimed and framed, 400GBASE-Z encoding is right and 400GBASE-R encoding is wrong (seriously incomplete).						
					Suggeste	dRemedy	/				
					Chang	ge "400G	BASE-R	encoding" to "400GBASE-Z	encoding".		
					Proposed	Respons	se	Response Status W			
						•	REJECT.				
					Ether	ent opera	ation over	corresponding text in 802.3 DWDM systems, and the s See response to comment	tated intention is		

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general	C/ 116	Page 1 of 21
COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn	SC 116.1.3	5/17/2021 5:45:23 PM
SORT ORDER: Clause, Subclause, page, line		

r, Tom Nokia nent Type <b>T</b> Comment Status <b>A</b> robably best to split out 200G and 400G here, so that the 400G part can refer to both	Dawe, Piers Nvidia
19/120 and 155.	Comment Type E Comment Status D bu P802.3ck is changing this subclause and comes before this project in the list of amendments.
estedRemedy	SuggestedRemedy
evise the text to read as follows:	Update the draft to include P802.3ck's changes as necessary
he term 200GBASE-R refers to a specific family of Physical Layer implementations based pon the 64B/66B coding method specified in clause 119 and the PMA specifications efined in clause 120. The term 400GBASE-R refers to a specific family of Physical Layer performance the 64B/66B coding method specified in clause 110 are 120.	Proposed Response Response Status W PROPOSED ACCEPT.
nplementations based upon the 64B/66B coding method specified in clause 119 or 155 nd the PMA specifications defined in Clause 120 or 155. 200GBASE-R and 400GBASE-R	C/ 116 SC 116.2.5 P30 L25 # 87
CSs perform encoding (decoding) of data from (to) the 200GMII or 400GMII to 256B/257B ode blocks, apply FEC, distribute the data to multiple lanes, and transfer the encoded	Dawe, Piers Nvidia
ata to	Comment Type TR Comment Status D
ne PMA.	Clause 156 is for 400GBASE-ZR which isn't a 400GBASE-R PMD, it's a 400GBASE-Z PMD.
he 200GBASE-R PCS has almost the same functionality as the 200GXS, and therefore nay be configured as a 200GXS in order to implement part of the optional 200GMII	SuggestedRemedy
xtender (see Clause 118). The 400GBASE-R PCS has almost the same functionality as	Change "400GBASE-R" to "400GBASE" in this sentence.
ne 400GXS, and therefore may be configured as a 400GXS in order to implement part of the optional 400GMII Extender (see Clause 118).	Proposed Response Response Status W
onse Response Status C	PROPOSED REJECT.
CCEPT. 6 SC 116.2.4 P30 L17 # 27	The use of x00GBASE-R is consistent between 802.3ct, which was the first project to define Etherent operation over DWDM systems, and 802.3ct and the stated intention is t ensure that 802.3cw is aligned with 802.3ct.
r, Tom Nokia	C/ 116 SC 116.4 P30 L38 # 89
ment Type T Comment Status A	Dawe, Piers Nvidia
ince the 400GBASE-ZR PMA is different, it is perhaps easiest to just add a sentence in ont of the existing text.	Comment Type T Comment Status D
estedRemedy	As this table contains entries for both 400GBASE-R and 400GBASE-Z
hange from: "The 200GBASE-R and 400GBASE-R PMAs are specified in Clause 120."	SuggestedRemedy
	For footnotes a and b, change 400GBASE-R to 400GBASE
he 400GBASE-ZR PMA is specified in clause 155. The 200GBASE-R PMA and all other	Proposed Response Response Status W
00GBASE-R PMAs are specified in Clause 120	PROPOSED REJECT.
00GBASE-R PMAs are specified in Clause 120. 00se Response Status <b>C</b>	
	There is no 400GBASE-Z PMA.

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

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omment Type       T       Comment Status       D       bucket         Need an entry for the delay of the 400GBASE-Z PMA       Status       W       Massing a / between 548 and 668       Status       W         gagested/Remedy       Add a row for the delay of the 400GBASE-Z PMA       Response       Response       Response       Response       Status       W         PROPOSED REJECT.       There is no 400GBASE-Z PMA.       If is       SC 116.5       P 31       L9       # So         As the table contains entities for both 400GBASE-Z       Massing a / between 548 and 668       Status W       PROPOSED ACCEPT.         PROPOSED REJECT.       There is no 400GBASE-R* to 400GBASE-R       P 400GBASE-R* to 400GBASE-R*       P 400GBASE-R*       D accept the figure they are not status       D accept the figure they are not not status       D accept the figure they are not not status       D accept the figure they are not not status       D accept the figure they are not not status       D accept the figure they are not not not status       D accept the figure they are not not not not status       D accept the figure they are not	7 116 SC 116.4	P30	L <b>38</b>	# 88	C/ 155	SC 155.1.1	P33	3 L <b>20</b>	# 28
Need an entry for the delay of the 400GBASE-Z PMA         ggesteld/Remoty         Add a row for the delay of the 400GBASE-Z PMA         opposed Response       Response Status W         PROPOSED REJECT.         There is no 400GBASE-Z PMA.         116       S C116.5       P31       L9       # 30         awe, Piers       Nvidia       D       Huawel         change 4400GBASE-R and 400GBASE-Z       D       Bucket         opposed Response       Response Status W       PROPOSED ACCEPT.         Change 4400GBASE-R*1 to *400GBASE-R and 400GBASE-Z       AggestedRemedy       A are referred to as shaded, but in the figure they are not         As this table contains entities for both 400GBASE-R and 400GBASE-Z       # 91       D       D         opposed Response       Response Status W       PROPOSED ACCEPT.       C1 155       S C 155.1.2       P34       L19       # 1         This PHY called "400GBASE-Z* IN this draft is similar in intent to 10GBASE-LW*: the first postement Status D       nonenclosure       GagestedRemody         Remove the 400GBASE-ZY. Change 400GBASE-Z*. The this draft is similar in intent to 10GBASE-LW: the first postement Status D       nonenclosure         output from tabSt-FPC is Is transititient intecome style faming, NUB iz in the first postement Status D       SuggestedResponse       Responses Status W         <	Dawe, Piers	Nvidia			Huber, To	m	Nokia		
Add a row for the delay of the 400GBASE-Z PMA         goosed Response       Response Status W         PROPOSED REJECT:         There is no 400GBASE-Z PMA.         115       S C 116.5         P31       L9         geosed Response       Response Status W         PROPOSED REJECT:         There is no 400GBASE-R* to '400GBASE-R and 400GBASE-Z         ggestedRemedy         As this table contains entries for both 400GBASE-R and 400GBASE-Z         ggestedRemedy         Change *400GBASE-R* to '400GBASE-R* to '400GBASE-R*         PROPOSED REJECT:         There is no 400GBASE-R* to '400GBASE-R*         There is no 400GBASE-R* to '400GBASE-R*         We performed Type         There is no 400GBASE-R* to '400GBASE-R*         Model arow is table contains entries for both 400GBASE-R*         There is no 400GBASE-R* to '400GBASE-R*         There is no 400GBASE-R* to '400GBASE-R*         Make file         PROPOSED REJECT:         There is no 400GBASE-R* to '400GBASE-R*         There is no 400GBASE-R* to '100GBASE-R*         Make file         There is no 400GBASE-R* to '100GBASE-R*         There is no 400GBASE-R*         Make file         Make file         Model arow is table contains is initin in in	, , , , , , , , , , , , , , , , , , ,		A			51		D	bucket
PROPOSED REJECT.         There is no 400GBASE-Z PMA.         116       SC 116.5       P31       L9       # 0         awe, Piers       Notidia       Bruckman, Loon       Huawei         Comment Type T       Comment Status D       Bruckman, Loon       Huawei         Comment Type T       Comment Status D       bucket         As this table contains entries for both 400GBASE-R and 400GBASE-Z       Bruckman, Loon       Huawei         Comment Type T       Comment Type T       Comment Status D       bucket         repersonse       Response Status W       PROPOSED ACCEPT.       PROPOSED REJECT.         There is no 400GBASE-Z PMA.       # 0       In following clauses the PCS and PMA blocks in Figure 155-1         PROPOSED REJECT.       P33       L2       # 0         This FHY called 400GBASE-ZP in this draft is similar in intent to 10GBASE-LW: the output from a BASE-R PCS is transmitted in telecoms style framing. While Z in the first project to define output from a BASE-R PCS is transmitted in telecoms style framing. While Z in the first project to define attemative to S. L or E, is familiar from unofficial spece Status W       PROPOSED ACCEPT.         Ci 155       S C 155.1.2       P34       L19       # 0         Mainter.       Gygested/Remedy       Comment Type E       Comment Status D       bucket         roopscal Response	SuggestedRemedy Add a row for the delay	y of the 400GBASE-Z PMA			00		4B/66B		
116       SC 116.5       P31       L9       # 00         awe, Piers       Nvidia       D       D       D       D         As this table contains entries for both 400GBASE-R and 400GBASE-Z iggested/Remedy       Change 400GBASE-R* to *400GBASE*       D       D       D         PROPOSED REJECT:       There is no 400GBASE-Z* PMA.       His darks D       Add shade to the PCS and PMA blocks in Figure 155-1       Proposed Response       Response Status W         PROPOSED REJECT:       There is no 400GBASE-Z* NA.       L19       # 0         1155       SC 155       P33       L2       # 01         awe, Piers       Nvidia       nomenclature       Froposed Response       Econment Status D       bucket         This PHY called *400GBASE-Z* in this draft is similar in intert to 10GBASE-LW: the optimal white is similar in intert to 10GBASE-ZW.       The figure 155-1 text       Proposed Response       Response Status W       PROPOSED ACCEPT.         ViggestedRemedy       Comment Type       Comment Status D       bucket       SuggestedRemedy       SuggestedRemedy         This PHY called *400GBASE-ZW.       Change 400GBASE-ZW. Change 400GBASE-ZR to 400GBASE-ZW.       The figure 155-1 text       Proposed Response       Response Status W       PROPOSED ACCEPT.         To better title: xongestedRemedy       Comment Type E       Comment Type E<	Proposed Response PROPOSED REJECT.	•			•	•	,	w	
The Schles       Part       Par       Par       Part       Part	There is no 400GBASE	E-Z PMA.			C/ 155	SC 155.1.2	P34	L3	# 1
adde, reiss       INVota         proment Type       T         As this table contains entries for both 400GBASE-R and 400GBASE-Z         gggestedRemedy         Change *400GBASE-R* to *400GBASE"         oposed Response       Response Status         PROPOSED REJECT.         There is no 400GBASE-Z PMA.         155       SC 155         Past       Nvidia         amment Type       T         Comment Status       D         nomenclature       Hollowing clauses the PCS and PMA are referred to as shaded, but in the figure they are not         SuggestedRemedy       Ad shade to the PCS and PMA blocks in Figure 155-1         Proposed Response       Response Status         mment Type       R         This FNY called *400GBASE-ZP* in this draft is similar in intent to 10GBASE-LW: the first postion as an alternative to 8, L or E, is familiar from unofficial specs as meaning 80 km or similar.         output from a BASE-R PCS.       Ad0GAUL-n is not mentioned in the figure 155-1 text         Proposed Response       Response Status         VPROPOSED REJECT.       Chi 155         SC 155.1.2       P34         L19       #2         Comment Type       Comment Status D         Complete the tilk: 400GBASE-ZW. Change 400GBASE-Z to 400GBASE-ZW throughout.	7 116 SC 116.5	P <b>31</b>	L <b>9</b>	# 90	Bruckman	, Leon	Huaw	ei	
Imment Type T       Comment Status D         As this table contains entries for both 400GBASE-R and 400GBASE-Z         IggestedRemedy         Change "400GBASE-R" to *400GBASE"         opposed Response       Response Status W         PROPOSED REJECT.         There is no 400GBASE-Z PMA.         1155       SC 155       P33       L2       # 91         comment Type TR       Comment Status D       nomenclature         what?       This PHY called "400GBASE-Z*R" in this draft is similar in intent to 10GBASE-LW: the output from a BASE-R PCS is transmitted in telecoms style framing. While Z in the first position as an alternative to S, L or E, is familiar from unofficial specs as meaning 80 km or similar.       Remove the 400GAUI-n definition from the Figure 155-1 text         PROPOSED Response       Response Status W       PROPOSED ACCEPT.         Complete the title: 400GBASE-ZW in this draft is similar in intent to 10GBASE-LW: the output from a BASE-R PCS is transmitted in telecoms style framing. While Z in the first grogestedRemedy       Remove the 400GAUI-n definition from the Figure 155-1 text         PROPOSED Response       Response Status W       PROPOSED ACCEPT.         Complete the title: 400GBASE-ZW. Change 400GBASE-ZR to 400GBASE-ZW. throughout, change 400GBASE-ZW throughout.       Topsaed Response Response Status D       bucket         Maniloff. Eric       Cina       Comment Status D       bucket         400GAUI-n does	awe, Piers	Nvidia			Comment	Туре Е	Comment Status	D	bucket
ggestedRemedy       Change "400GBASE-R" to "400GBASE"       Add shade to the PCS and PMA blocks in Figure 155-1         opposed Response       Response Status       W         PROPOSED REJECT.       Cl 155       SC 155.1.2       P34       L19       # 2         There is no 400GBASE-Z PMA.       Image: Piers       Nvidia       D       D       D       D         Yop what?       This PHY called "400GBASE-ZP" in this draft is similar in intent to 10GBASE-LW: the output from a BASE-R PCS is transmitted in telecoms style framing. While Z in the first projection as an alternative to S, L or E, is familiar from unofficial specs as meaning 80 km or similar.       SuggestedRemedy         Complete the title: 400GBASE-ZP. CK.       Cl 155       SC 155.1.2       P34       L19       # 57         Good Response       Response Response Status W       PROPOSED ACCEPT.       Proposed Response       Response Status W       Proposed Response Cleana         Complete the title: 400GBASE-ZW throughout.       Conglete the title: 400GBASE-ZW throughout.       Cl 155       SC 155.1.2       P34       L19       # 57         This best aligned with 802.3ct.       W       PROPOSED ACCEPT.       Mailoff. Eric       Cleana       Comment Type E       Comment Status D       bucket         PROPOSED REJECT.       This text aligns with the corresponding text in 802.3ct, which was the first project to define leared with 802.3ct. <td></td> <td></td> <td></td> <td>7</td> <td></td> <td>wing clauses t</td> <td>he PCS and PMA are r</td> <td>eferred to as shaded,</td> <td>, but in the figure they are</td>				7		wing clauses t	he PCS and PMA are r	eferred to as shaded,	, but in the figure they are
Change *400GBASE-R* to *400GBASE'       Proposed Response       Response Status W         PROPOSED REJECT.       There is no 400GBASE-Z PMA.       PROPOSED REJECT.         1155       SC 155       P33       L2       # 91         135       SC 155       P33       L2       # 91         145       SC 155       P33       L2       # 91         145       SC 155       P33       L2       # 91         15       SC 155       P33       L2       # 91         15       Comment Status D       nomenclature       SuggestedRemedy         This PHY called *400GBASE-ZW       In this draft is similar in intent to 10GBASE-ZW       While Z in the first position as an alternative to S, L or E, is familiar from unofficial specs as meaning 80 km or similar.       SuggestedRemedy         Complete the title: 400GBASE-ZW. Change 400GBASE-ZR to 400GBASE-ZW throughout.       While Z in the first project to define Etherent operation over DWDM systems, and the stated intention is to ensure that 802.3cw       Ci 155       SC 155.1.2       P34       L19       # 57         PROPOSED REJECT.       This text aligns with the corresponding text in 802.3ct.       W       Proposed Response       Response Status D       bucket         PROPOSED REJECT.       This text aligns with the corresponding text in 802.3ct.       W       Proposed Response				-2	Suggested	lRemedy			
opposed Response       Response Status       W         PROPOSED REJECT.       There is no 400GBASE-Z PMA.       PROPOSED ACCEPT.         1155       SC 155       P33       L2       # 91         awe, Piers       Nvidia       nomenclature       Huawei         output from a BASE-RPCS is transmitted in telecoms style framing. While Z in the first position as an alternative to S, L or E, Is familiar from undficial specs as meaning 80 km or similar.       suggestedRemedy       Ci 155       SC 155.1.2       P34       L19       # 57         Complete the title: 400GBASE-ZW. Change 400GBASE-ZR to 400GAUI-n definition figure       SuggestedRemedy         PROPOSED REJECT.       This text aligns with the corresponding text in 802.3ct, which was the first project to define Etherent operation over DWDM systems, and the stated intention is to ensure that 802.3cw is aligned with 802.3ct.       Remove 400GAUI-n from the acronym definitions list         Proposed Response       Response Status       W         PROPOSED REJECT. <td></td> <td></td> <td></td> <td></td> <td>Add sł</td> <td>nade to the PC</td> <td>S and PMA blocks in Fi</td> <td>gure 155-1</td> <td></td>					Add sł	nade to the PC	S and PMA blocks in Fi	gure 155-1	
PROPOSED REJECT.         There is no 400GBASE-Z PMA.         1 155       SC 155       P33       L2       # 91         awe, Piers       Nvida       Huawei       Comment Status D       bucket         proposed Response       Response Status W       PROPOSED ACCEPT.       Cl 155       SC 155.1.2       P34       L19       # 2         This PHY called "400GBASE-ZR" in this draft is similar in intent to 10GBASE-LW: the output from a BASE-R PCS is transmitted in telecoms style framing. While Z in the first position as an alternative to S, L or E, is familiar from unofficial specs as meaning 80 km or similar.       SuggestedRemedy       SuggestedRemedy       Comment Type E       Comment Type E       Comment Status D       bucket         reposed Response       Response Status W       PROPOSED ACCEPT.       Cl 155       SC 155.1.2       P34       L19       # 57         Maniloff, Eric       Clena       Clena       bucket       400GAUI-n deninitions list       bucket         PROPOSED REJECT.       This text aligns with the corresponding text in 802.3ct, which was the first project to define       SuggestedRemedy       Remove 400GAUI-n from the acronym definitions list       Proposed Response       Response Status W       Bucket         PROPOSED REJECT.       This text aligns with the corresponding text in 802.3ct, which was the first project to define       Cl 155       P2 45       P34	0				Proposed	Response	Response Status	w	
There is no 400GBASE-Z PMA.       Its so 400GBASE-Z PMA.       Its So C 155       P 33       L 2       # 91         There is no 400GBASE-Z PMA.       Its So C 155       P 33       L 2       # 91       Its So C 155       P 33       L 2       # 91         awe, Piers       Nvidia       Its So C 155       P 33       L 2       # 91       Its So C 155       D so control to the so co		,			PROP	OSED ACCEP	т.		
There is no 400GBASE-Z PMA.       There is no 400GBASE-Z PMA.         1155       SC 155       P33       L2       # 91         awe, Piers       Nvidia       nomenclature       for a BASE-R PCS is transmitted in telecoms style framing. While Z in the first position as an alternative to S, L or E, is familiar from unofficial specs as meaning 80 km or similar.       SuggestedRemedy       SuggestedRemedy       SuggestedRemedy         Complete the title: 400GBASE-ZW. Change 400GBASE-ZR to 400GAU-R forment Type E Comment Type E SuggestedRemedy         PROPOSED REJECT.       This text aligns with the corresponding text in 802.3ct, which was the first project to define Etherent operation over DWDM systems, and the stated intention is to ensure that 802.3cw       SuggestedRemedy       Remove 400GAU-In from the acronym definitions list       Proposed Response Response Response Status W       PROPOSED ACCEPT.         (PE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general       C/ 155       Page 3 of 21	PROPOSED REJECT.					00 455 4 0			# 0
155       SC 155       P33       L2       # Image: transmitted in telesconses with a comment transmitted in telesconses with the statuse of the statu	There is no 400GBASE	E-Z PMA.					-		# 2
ave, Piers       Nvidia       Nvidia <td></td> <td>D<b>??</b></td> <td>12</td> <td># 01</td> <td></td> <td>·</td> <td></td> <td></td> <td></td>		D <b>??</b>	12	# 01		·			
The text aligns with the corresponding text in 802.3ct, which was the first project to define       Suggested Remedy         Comment Type       TR       Comment Status       D         through ut, from a BASE-R PCS is transmitted in telecoms style framing. While Z in the first project to gested Remedy       Suggested Remedy       Remove the 400GAUI-n definition from the Figure 155-1 text         uggested Remedy       Complete the tilt: 400GBASE-ZW. Change 400GBASE-ZR to 400GBASE-ZW throughout.       PROPOSED ACCEPT.       C/         Maniloff, Eric       Ciena       Comment Type       E       Comment Status       D       bucket         PROPOSED REJECT.       PROPOSED REJECT.       Suggested Remedy       Suggested Remedy       Suggested Remedy       Suggested Remedy         (PE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general       C/       155       Page 3 of 21			LZ	# 91				D	bucket
type what?         This PHY called "400GBASE-ZR" in this draft is similar in intent to 10GBASE-LW: the output from a BASE-R PCS is transmitted in telecoms style framing. While Z in the first position as an alternative to S, L or E, is familiar from unofficial specs as meaning 80 km or similar. <i>uggestedRemedy</i> Complete the title: 400GBASE-ZW. Change 400GBASE-ZR to 400GBASE-ZW throughout, change 400GBASE-Z to 400GBASE-W throughout. <i>roposed Response Response Status</i> PROPOSED REJECT.       Comment Type         This text aligns with the corresponding text in 802.3ct, which was the first project to define Ethernic operation over DWDM systems, and the stated intention is to ensure that 802.3ct.       SuggestedRemedy         (PE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general       C/ 155       Page 3 of 21	,						ntioned in the figure		
This PHY called "400GBASE-ZR" in this draft is similar in intent to 10GBASE-LW: the output from a BASE-R PCS is transmitted in telecoms style framing. While Z in the first position as an alternative to S, L or E, is familiar from unofficial specs as meaning 80 km or similar. <i>Proposed Response</i> Response Status W		Comment Status D		nomenclature	00				
position as an alternative to S, L or E, is familiar from unofficial specs as meaning 80 km or similar.       PROPOSED ACCEPT.         uggestedRemedy       Cl 155 SC 155.1.2 P34 L19 # 57         Complete the title: 400GBASE-ZW. Change 400GBASE-ZR to 400GBASE-ZW throughout. change 400GBASE-Z to 400GBASE-W throughout.       Cl 155 SC 155.1.2 P34 L19 # 57         voposed Response       Response Status W         PROPOSED REJECT.       Maniloff, Eric       Ciena         This text aligns with the corresponding text in 802.3ct, which was the first project to define Etherent operation over DWDM systems, and the stated intention is to ensure that 802.3cw is aligned with 802.3ct.       Response Response Response Status W       Remove 400GAUI-n from the acronym definitions list         Proposed Response       Response Status W       Proposed Response Response Status W       Proposed Response Response Status W       Proposed Response Response Status W         PROPOSED ACCEPT.       SuggestedRemedy       Remove 400GAUI-n from the acronym definitions list       Proposed Response Response Status W         PROPOSED ACCEPT.       Proposed Response Response Status W       Proposed Response Response Status W         PROPOSED ACCEPT.       Page 3 of 21	<i></i>	BASE-ZR" in this draft is sin	ilar in intent to 1	0GBASE-LW: the			II-n definition from the H	-igure 155-1 text	
similar.       Image: Similar.         uggestedRemedy       C/       155       SC 155.1.2       P34       L19       # 57         Complete the title: 400GBASE-ZW throughout.       Maniloff, Eric       Ciena       Comment Status D       bucket         roposed Response       Response Status W       PROPOSED REJECT.       Maniloff, Eric       Ciena       SuggestedRemedy         This text aligns with the corresponding text in 802.3ct, which was the first project to define       Etherent operation over DWDM systems, and the stated intention is to ensure that 802.3cw       Remove 400GAUI-n from the acronym definitions list       Proposed Response       Response Status W         PROPOSED REJECT.       VPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general       C/       155       Page 3 of 21							•	w	
Aggeneration only       Complete the title: 400GBASE-ZW. Change 400GBASE-ZR to 400GBASE-ZR to 400GBASE-ZW throughout.       Maniloff, Eric       Ciena         Complete the title: 400GBASE-Z to 400GBASE-W throughout.       Maniloff, Eric       Ciena         coposed Response       Response Status       W       400GAUI-n does not appear in this figure       bucket         PROPOSED REJECT.       SuggestedRemedy       Remove 400GAUI-n from the acronym definitions list       bucket         Proposed Response       Response Status       W       PROPOSED REJECT.       SuggestedRemedy         This text aligns with the corresponding text in 802.3ct, which was the first project to define Etherent operation over DWDM systems, and the stated intention is to ensure that 802.3cw       Proposed Response       Response Status       W         (PE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general       C/       155       Page 3 of 21	similar.			Ū					
throughout, change 400GBASE-Z to 400GBASE-W throughout. roposed Response Response Status W PROPOSED REJECT. This text aligns with the corresponding text in 802.3ct, which was the first project to define Etherent operation over DWDM systems, and the stated intention is to ensure that 802.3cw is aligned with 802.3ct. (PE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general (PE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general	uggestedRemedy								# 57
roposed Response       Response Status       W       400GAUI-n does not appear in this figure         PROPOSED REJECT.       SuggestedRemedy         This text aligns with the corresponding text in 802.3ct, which was the first project to define       Remove 400GAUI-n from the acronym definitions list         Etherent operation over DWDM systems, and the stated intention is to ensure that 802.3ct.       Proposed Response       Response Status       W         (PE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general       C/       155       Page 3 of 21				GBASE-ZW					
PROPOSED REJECT.       SuggestedRemedy         This text aligns with the corresponding text in 802.3ct, which was the first project to define       Remove 400GAUI-n from the acronym definitions list         Proposed Response       Response Status       W         PROPOSED REJECT.       Proposed Response       Response Status       W         PROPOSED ACCEPT.       PROPOSED ACCEPT.       Page 3 of 21	0		throughout.			51		D	bucket
This text aligns with the corresponding text in 802.3ct, which was the first project to define Etherent operation over DWDM systems, and the stated intention is to ensure that 802.3cw is aligned with 802.3ct. (PE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general G/general G/general C/ 155 Page 3 of 21		,			400GA	AUI-n does not	appear in this figure		
This text aligns with the corresponding text in 602.5ct, which was the first project to define         Etherent operation over DWDM systems, and the stated intention is to ensure that 802.3cw       Proposed Response       Response Status       W         is aligned with 802.3ct.       PROPOSED ACCEPT.       PROPOSED ACCEPT.       V         (PE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general       C/       155       Page 3 of 21	PROPOSED REJECT.				00	,			
is aligned with 802.3ct.  PROPOSED ACCEPT.  (PE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general  C/ 155 Page 3 of 21					Remov	ve 400GAUI-n	from the acronym defin	itions list	
			ated intention is	to ensure that 802.3cw	•		•	w	
	YPE: TR/technical require	ed ER/editorial required GR	general required	T/technical E/editorial G/	general			C/ 155	Page 3 of 21
	•	•			0	Z/withdrawn			5/17/2021 5:45:29

C/ 155	SC 155.1.3	P <b>34</b>	L <b>38</b>	# 94	C/ 155 SC 155.1.
Dawe, Pie	ers	Nvidia			Huber, Tom
	s so complicated	Comment Status <b>D</b> and relies so heavily on refer ve and reference risks ambig		<i>GMP</i> 802.3 document that	Comment Type <b>T</b> While it is true that streams of 16QAM
S <i>uggested</i> Add a	•	able examples (see Annex 11	9A for the idea)	. Large examples	and not really consistent what creates the 16
		vailable separately on the web	).		SuggestedRemedy
	Response POSED ACCEPT	Response Status W			State the nominal rate per polarization
	COLD ACCEL 1				Proposed Response
For ta	sk force discussion	on.			PROPOSED ACCE
		decide whether an informative eed a proposed baseline for t		P examples is needed.	Change from:
C/ 155	SC 155.1.4	P <b>35</b>	L <b>1</b>	# 3	"The 400GBASE-ZF (28/29) Gsymbol/s o
Bruckman		Huawei			to:
approx	indicate the rate ximate nominal ra	Comment Status <b>D</b> with its tolerance and use Gb ate (as done in other clauses			"The 400GBASE-ZF Gb/s +/- 20 ppm."
	ct clause 153.3.2	.2.2			C/ 155 SC 155.1.
Suggested	2	SE-ZR PCS has a nominal ra	ato at the DMA	convice interface of	Huber, Tom
		/mbol/s on each of two polaria			Comment Type T
	rate at the PMA son each of two po	service interface of (28/29) x s blarizations"	59.84375 GBd ±	20 ppm (~57.7802	While clause 117 m 400GBASE-ZR is o
Proposed	Response	Response Status W			SuggestedRemedy
PROP	POSED ACCEPT	IN PRINCIPLE.			Delete 200GMII from
		ch makes the case for expres ot formed by the PCS but by t			Proposed Response PROPOSED ACCE
Chang	ge from:				
		CS has a nominal rate at the each of two polarizations."	PMA service int	erface of 59.84375 x	
to:					
	400GBASE-ZR P +/- 20 ppm."	CS has a nominal rate at the	PMA service int	erface of 462.2414	
		d ER/editorial required GR/g	general required	T/technical E/editorial	G/general

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

C/ 155	SC 155.1.4	P <b>35</b>	L <b>2</b>	# 29
Huber, Tom	1	Nokia		
streams and not	is true that the of 16QAM sym	Comment Status <b>D</b> interface between PCS and bols, and that two polarizati ht with how the Tx path is su M symbols.	ons are used, the	at seems too detailed
SuggestedF	Remedy			
	e nominal rate polarization.	at the PMA service interface	as ~462 Gbit/s r	rather than as a symbol
Proposed R	esponse	Response Status W		
PROPC	SED ACCEPT	IN PRINCIPLE.		
	0GBASE-ZR P	CS has a nominal rate at the	PMA service int	terface of 59.84375 x
"The 40 (28/29) to: "The 40 Gb/s +/-	0GBASE-ZR P Gsymbol/s on e 0GBASE-ZR P - 20 ppm."	each of two polarizations." CS has a nominal rate at the	PMA service inf	terface of 462.2414
"The 40 (28/29) to: "The 40 Gb/s +/- C/ <b>155</b>	0GBASE-ZR P Gsymbol/s on e 0GBASE-ZR P - 20 ppm." SC <b>155.1.4.1</b>	CS has a nominal rate at the P <b>35</b>		
"The 40 (28/29) to: "The 40 Gb/s +/- C/ 155 Huber, Tom Comment T While c	0GBASE-ZR P Gsymbol/s on e 0GBASE-ZR P - 20 ppm." SC <b>155.1.4.1</b> ype <b>T</b>	CS has a nominal rate at the P <b>35</b> Nokia <i>Comment Status</i> <b>D</b> specify both 200GMII and 40	PMA service inf	terface of 462.2414 # <u>30</u> <i>MII descriptio</i>
"The 40 (28/29) to: "The 40 Gb/s +/- C/ 155 Huber, Tom Comment T 400GB/ SuggestedF	0GBASE-ZR P Gsymbol/s on e 0GBASE-ZR P - 20 ppm." SC 155.1.4.1 SC 155.1.4.1 ype T lause 117 may ASE-ZR is only Remedy	CS has a nominal rate at the P <b>35</b> Nokia <i>Comment Status</i> <b>D</b> specify both 200GMII and 40	DPMA service int	terface of 462.2414 # <u>30</u> <i>MII descriptio</i>

C/ 155 SC 155.1.4.1 Page 4 of 21 5/17/2021 5:45:29 PM

C/ <b>155</b>	SC 155.2.1	P <b>36</b>	L <b>11</b>	# 31	C/ 155	SC 1	55.2.2	P <b>37</b>	L <b>51</b>	# 33
Huber, Tom	ı	Nokia			Huber, To	m		Nokia		
<i>Comment T</i> The tex	51	Comment Status <b>D</b> the Tx interface between the	PCS and PMA	<i>PMA inputs</i> as two streams of 4-bit	<i>Comment</i> Missin	<i>Type</i> g a B in	<b>E</b> 64/66B	Comment Status D		bi
symbols describe polariza	es how the PMA	nd other text in 155.2.x desc creates the 16QAM symbols	ribes it as 8 bits and distributes	treams, and 155.3 them to the two	Suggested	- IRemed				
SuggestedF	Remedy				Proposed	Respon	se	Response Status W		
		t is that the interface betwee ns, and the PMA is responsit			PROP	OSED A	ACCEPT.			
16QAM	symbols. Chan	ge "When communicating wi	th the PMA in th	ne transmit direction,	C/ 155	SC 1	55.2.4.1	P38	L <b>12</b>	# 58
		provides two streams of 4-b mbols." to "When communic			Maniloff, E	Eric		Ciena		
directio	n, the 400GBASI	E-ZR PCS provides 8 digital	lanes, which the	e PMA encodes into 2	Comment	Туре	т	Comment Status D		GMP descri
streams Proposed R	s of 16QAM syml Response	ools." Response Status W						matching isn't required is co is not needed because AM's		
	SED ACCEPT I				Suggested	Remed	V			
	-	s on page 37 line 11.					ce to indica ded blocks	ate that rate-matching is not s.	needed becaus	e AM's are not inse
	communicating v s two streams of	vith the PMA in the transmit 4-bit 16-state quadrature an			Proposed PROP	,		Response Status W N PRINCIPLE.		
to:					Chang					
		vith the PMA in the transmit which the PMA encodes into						ning described at 119.2.4.1 i mapping process takes care		
C/ 155	SC 155.2.1	P37	L <b>47</b>	# 32	to:					
Huber, Tom	ı	Nokia						ning described at 119.2.4.1 i		
Comment T	Уре <b>Т</b>	Comment Status D		bucket	PCS b	ecause	alignment	markers are not inserted in	to the transcode	d blocks."
This sei being in	ntence would fit l test-pattern mo	petter as part of the earlier pa de.	aragraph about	the transmit channel						
0	Remedy	e end of the paragraph on lir	ne 29.							
00	he sentence to th	1 5 1								

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

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C/ 155	SC 155.2.4.3	P <b>38</b>	L <b>28</b>	# 34	C/ 155 SC 155.2.4.4.3	
Huber, To	m	Nokia			Huber, Tom	
blocks bits is the fra	s, which are viewe not clearly stated ame isn't organized occupy.	Comment Status <b>D</b> ame is confusing. The text s ad as an array of 256 by 1020 in the text (it is clear in the fi d into 257B blocks - it just oc	80 bits, but the s igure). Also, the	switch from blocks to overhead portion of	t Comment Type <b>T</b> It would be more clear if th first, and then the note tha filled in for the unused byte is set to zero, so that is su interleaving needs to be ac handled in the later clause	at o es ıgg ddı
Repla The fr transn and 10 <i>Proposed</i>	ce the second ser ame is illustrated nission order of le 0220 257B blocks	ntence of the first paragraph as a structure with 256 rows ft to right, top to bottom. Thi of payload <i>Response Status</i> <b>W</b>	of 10 280 bits w	ith a logical	SuggestedRemedy Replace the text with the for are interleaved in groups of 320 bits is described in ITU first set of 320 bits is used (MFAS) byte, status byte, overhead defined in G.709	of 1 U-T I, a an
C/ 155	SC 155.2.4.3	P <b>39</b>	L <b>4</b>	# 4	Proposed Response	Res
Bruckman		Huawei	24	<i>n</i> -	PROPOSED ACCEPT IN	PF
same <i>Suggestec</i> Repla	napper" is referrre in this sentence fo dRemedy	Comment Status D ed to in the previous sentence or consistency. values" with: "The GMP map Response Status W		<i>bucke</i> napper". Call it the	<ul> <li>Replace the text at 155.2.4</li> <li>"The overhead is organize to form the 1280 bit field. T G.709.1 clauses 8.1 and 9 within those bits, only the justification control bytes J used and is set to 0."</li> </ul>	ed The 9.2. mu
PROF	POSED ACCEPT.				- Remove the editor's note.	
C/ 155	SC 155.2.4.3	P <b>39</b>	L <b>5</b>	# 35	C/ 155 SC 155.2.4.4.3	
Huber, To	m	Nokia				
clause	the details of the here.	Comment Status <b>D</b> overhead are in 155.2.4.4.3,	it would be bett	<i>bucke</i> er to just reference that		
		ad as follows: "The next 1280	) bits carry OH t	oytes, as discussed in	SuggestedRemedy Replace: "The mapper val	ue
D	Response	Response Status W			Proposed Response F	Re

C/ 155 SC	C 155.2.4.4.3	P <b>40</b>	L <b>26</b>	# 36
Huber, Tom		Nokia		
Comment Type	т	Comment Status D		OH description

Comment Status **D** 

specific overhead functions that are supported are mentioned t other OH defined in G.709.1 is not used. Also the value to be es should be clearly specified (G.709.1 says unsourced overhead ggested here as well), and the editor's note concerning dressed. The details of the JC OH being multiframed are better that is specific to that overhead.

llowing: The overhead is organized into 4 sets of 320 bits that f 10 bits to form the 1280 bit field. The contents of each group of J-T G.709.1 clauses 8.1 and 9.2. For 400GBASE-ZR, only the and within those bits, only the multi-frame alignment signal and six justification control bytes JC1 to JC6 are used. Other .1 is not used and is set to 0.

Proposed Response	Response Status	W
PROPOSED ACCEPT	IN PRINCIPLE.	

.4.3 with:

d into 4 sets of 320 bits that are interleaved in groups of 10 bits The contents of each group of 320 bits is described in ITU-T .2. For 400GBASE-ZR, only the first set of 320 bits is used, and nulti-frame alignment signal (MFAS) byte, status byte, and six C1 to JC6 are used. Other overhead defined in G.709.1 is not

C/ 155	SC 155.2.4.4.3	P <b>40</b>	L <b>29</b>	# 5					
Bruckman	, Leon	Huawei							
Comment	Туре Е	Comment Status D		bucket					
	The "mapper" is referrred to in the previous sentence as the "GMP mapper". Call it the same in this sentence for consistency.								
Suggested Replac	,	llues" with: "The GMP map	oper values"						

Proposed Response	Response Status	w
PROPOSED ACCEPT.		

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

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SC 155.2.4.4.3	5/17/2021 5:45:29 PM

C/ 155	SC 155.2.4.4.4	4 P <b>40</b>	L <b>39</b>	# 37	C/ <b>155</b>	SC 155.2.4.4.	5 P41	L <b>5</b>	# 7
uber, Tom	ı	Nokia			Bruckman	, Leon	Huawe	ei	
<i>comment T</i> y There a		Comment Status <b>D</b> instances in the overhe	ad; the MFAS is on	<i>bucl</i> ly in the first one.		<i>Type</i> <b>E</b> dant text	Comment Status	D	buck
the four proposed R	e "The MFAS is ir 320-bit OH insta	n the first four 320-bit Of ances." Response Status W	H instances" to "The	e MFAS is in the first of	to indic 400GE Proposed i	ce "The 3-bit LDI scate the quality" v BASE-ZR PHY the Response	vith "The 3-bit LDI fie	ld is defined to ind	tream 400GBASE-ZR PHY icate to the downstream
/ 155	SC 155.2.4.4.4	4 P <b>40</b>	L <b>40</b>	# 6		OSED ACCEPT.			
ruckman, l	Leon	Huawei			C/ 155	SC 155.2.4.4.	5 P41	L <b>5</b>	# 59
omment Ty	ype E	Comment Status D		buci	ket Maniloff, E	ric	Ciena		
,	AS is a wrapping	g counter			Comment Need o	51	<i>Comment Status</i> gram to indicate LDI a		OH descriptio
oposed Re PROPO	esponse SED ACCEPT.	Response Status W			Proposed		itions/diagram includi Response Status	•	
155	SC 155.2.4.4.	5 P <b>40</b>	L <b>44</b>	# 38					
		5 P <b>40</b> Nokia	L <b>44</b>	# 38	See th	e response to co	mment #36. That res		the OH description in ITU-T tes used in this clause.
uber, Tom Somment Ty	т Туре <b>Т</b>	Nokia Comment Status D		replacement sign	See th G.709	e response to co 1 clauses 8.1 and	mment #36. That res d 9.2, which is a supe	erset of the OH byt	tes used in this clause.
uber, Tom o <i>mment T</i> y LF is a r	n <i>Type</i> <b>T</b> reasonable repla	Nokia		replacement sign	See th G.709. <i>Cl</i> <b>155</b>	e response to con 1 clauses 8.1 and SC <b>155.2.4.4</b> .	mment #36. That res d 9.2, which is a supe 6 P41	erset of the OH byt	
uber, Tom omment Ty LF is a r uggestedR	n Type <b>T</b> reasonable repla Remedy	Nokia <i>Comment Status</i> <b>D</b> acement signal to insert (	(this is what ITU and	<i>replacement sign</i> d OIF both specify)	hal C/ 155 Huber, Tor	e response to con 1 clauses 8.1 and SC <b>155.2.4.4.</b> m	mment #36. That res d 9.2, which is a supe <b>6</b> P <b>41</b> Nokia	erset of the OH byt	tes used in this clause. # <u>39</u>
uber, Tom omment Ty LF is a r uggestedR Replace of a DSF	n Type <b>T</b> reasonable repla Remedy e the first sentend P framing or 400	Nokia Comment Status D acement signal to insert ( ce of the clause and the DGBASE-ZR frame or mu	(this is what ITU an editor's note with th ulti-frame loss, the f	<i>replacement sign</i> d OIF both specify) ne following: In the case	e See th G.709. C/ 155 Huber, Tor Comment It woul	e response to con 1 clauses 8.1 and SC <b>155.2.4.4.</b> m <i>Type</i> <b>T</b> d be helpful to int	mment #36. That res d 9.2, which is a supe <b>6</b> P41 Nokia <i>Comment Status</i>	L14 D ed aspect of this o	tes used in this clause.
luber, Tom comment Ty LF is a r uggestedR Replace of a DSF inserts a	T ype <b>T</b> reasonable repla Remedy e the first sentend P framing or 400 a stream of 257E	Nokia <i>Comment Status</i> <b>D</b> acement signal to insert ( ce of the clause and the	(this is what ITU an editor's note with th ulti-frame loss, the f	<i>replacement sign</i> d OIF both specify) ne following: In the case	e See th G.709. C/ 155 Huber, Tor Comment It woul	e response to col 1 clauses 8.1 and SC <b>155.2.4.4.</b> m <i>Type</i> <b>T</b> d be helpful to int e that the details	mment #36. That res d 9.2, which is a supe <b>6</b> P41 Nokia <i>Comment Status</i> roduce the multifram	L14 D ed aspect of this o	tes used in this clause. # <u>39</u> <i>GMP descriptio</i>
uber, Tom omment Ty LF is a r uggestedR Replace of a DSF inserts a roposed R	T ype <b>T</b> reasonable repla Remedy e the first sentend P framing or 400 a stream of 257E	Nokia Comment Status D acement signal to insert of ce of the clause and the DGBASE-ZR frame or mo B blocks carrying LF orde	(this is what ITU an editor's note with th ulti-frame loss, the f	<i>replacement sign</i> d OIF both specify) ne following: In the case	e C/ 155 Huber, Tor Comment It woul indicat Suggested Insert across	e response to con 1 clauses 8.1 and SC 155.2.4.4. m Type T d be helpful to int e that the details <i>Remedy</i> this text at the stat the second, third	mment #36. That res d 9.2, which is a supe <b>6</b> P41 Nokia <i>Comment Status</i> roduce the multifram are in the OIF 400ZF	Erset of the OH byt L14 D ed aspect of this of R IA. justification contro of a four-frame mul	tes used in this clause. # <u>39</u> <i>GMP descriptio</i> overhead here and also ol information is spread Itiframe (based on the two
uber, Tom omment Ty LF is a r uggestedR Replace of a DSF inserts a roposed R	n Type <b>T</b> reasonable repla Remedy e the first sentend P framing or 400 a stream of 257E Response	Nokia Comment Status D acement signal to insert of ce of the clause and the DGBASE-ZR frame or mo B blocks carrying LF orde	(this is what ITU an editor's note with th ulti-frame loss, the f	<i>replacement sign</i> d OIF both specify) ne following: In the case	e C/ 155 Huber, Tor Comment It woul indicat Suggested Insert across	e response to col 1 clauses 8.1 and SC 155.2.4.4. m Type T d be helpful to int e that the details Remedy this text at the stat the second, third order bits of the l	mment #36. That res d 9.2, which is a supe <b>6</b> P41 Nokia <i>Comment Status</i> roduce the multifram are in the OIF 400ZF art of the clause: The l, and fourth frames of	D ed aspect of this of IA. justification contro of a four-frame mul in OIF 400ZR IA.C	tes used in this clause. # <u>39</u> <i>GMP descriptio</i> overhead here and also ol information is spread Itiframe (based on the two
uber, Tom omment Ty LF is a r uggestedR Replace of a DSF inserts a oposed Re	n Type <b>T</b> reasonable repla Remedy e the first sentend P framing or 400 a stream of 257E Response	Nokia Comment Status D acement signal to insert of ce of the clause and the DGBASE-ZR frame or mo B blocks carrying LF orde	(this is what ITU an editor's note with th ulti-frame loss, the f	<i>replacement sign</i> d OIF both specify) ne following: In the case	e See th G.709. Cl 155 Huber, Tou Comment It woul indicat Suggested Insert across lowest Proposed	e response to col 1 clauses 8.1 and SC 155.2.4.4. m Type T d be helpful to int e that the details Remedy this text at the stat the second, third order bits of the l	mment #36. That res d 9.2, which is a supe <b>6</b> P41 Nokia <i>Comment Status</i> roduce the multifram are in the OIF 400ZF art of the clause: The I, and fourth frames of MFAS) as described <i>Response Status</i>	D ed aspect of this of IA. justification contro of a four-frame mul in OIF 400ZR IA.C	tes used in this clause. # <u>39</u> <i>GMP descriptio</i> overhead here and also ol information is spread Itiframe (based on the two
uber, Tom omment Ty LF is a r uggestedR Replace of a DSF inserts a oposed R	n Type <b>T</b> reasonable repla Remedy e the first sentend P framing or 400 a stream of 257E Response	Nokia Comment Status D acement signal to insert of ce of the clause and the DGBASE-ZR frame or mo B blocks carrying LF orde	(this is what ITU an editor's note with th ulti-frame loss, the f	<i>replacement sign</i> d OIF both specify) ne following: In the case	e See th G.709. Cl 155 Huber, Tor Comment It woul indicat Suggested Insert across lowest Proposed PROP	e response to col 1 clauses 8.1 and SC 155.2.4.4. m Type T d be helpful to int e that the details Remedy this text at the sta the second, third order bits of the I Response OSED ACCEPT I	mment #36. That res d 9.2, which is a supe <b>6</b> P41 Nokia <i>Comment Status</i> roduce the multifram are in the OIF 400ZF art of the clause: The I, and fourth frames of MFAS) as described <i>Response Status</i>	D ed aspect of this of IA. justification contro of a four-frame mul in OIF 400ZR IA.C	tes used in this clause. # <u>39</u> <i>GMP descriptio</i> overhead here and also ol information is spread Itiframe (based on the two
uggestedR Replace of a DSF inserts a troposed Re	n Type <b>T</b> reasonable repla Remedy e the first sentend P framing or 400 a stream of 257E Response	Nokia Comment Status D acement signal to insert of ce of the clause and the DGBASE-ZR frame or mo B blocks carrying LF orde	(this is what ITU an editor's note with th ulti-frame loss, the f	<i>replacement sign</i> d OIF both specify) ne following: In the case	Anal See th G.709. Cl 155 Huber, Tou Comment It woul indicat Suggestea Insert across Iowest Proposed PROP Insert	e response to col 1 clauses 8.1 and SC 155.2.4.4. m Type T d be helpful to int e that the details Remedy this text at the sta the second, third order bits of the Response OSED ACCEPT I the following at the ustification control	mment #36. That res d 9.2, which is a super <b>6</b> P41 Nokia <i>Comment Status</i> roduce the multifram are in the OIF 400ZF art of the clause: The I, and fourth frames of MFAS) as described <i>Response Status</i> IN PRINCIPLE. the beginning of 155.2 I information is sprea ne (based on the two	L 14 L 14 L 14 D ed aspect of this of R IA. justification contro of a four-frame mul in OIF 400ZR IA.C W .4.4.6: d across the secon	tes used in this clause. # <u>39</u> <i>GMP descriptio</i> overhead here and also ol information is spread Itiframe (based on the two

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SORT ORDER: Clause, Subclause, page, line

C/ 155	SC 155.2.4.4.6	P <b>41</b>	L15	# 8	C/ 155	SC 155.2.4.5	P <b>41</b>	L30	# 10
Bruckmar	, Leon	Huawei			Bruckman	, Leon	Huawei		
Comment	Туре Т	Comment Status D		GMP description	Comment	Type E	Comment Status D		bucket
JCn b	ytes are used to rec	cover the data blocks from	the payload.		Wrong	j plural			
Suggeste	Remedy				Suggested	lRemedy			
257B	blocks to the same.	used by the receive path 0 " with "which are then us blocks and re-time them to	ed by the receiv		code i	s calculated"	redundancy codes is ca	lculated" with: "A 32	-bit cyclic redundancy
			o the same		Proposed	Response	Response Status W		
•	Response OSED ACCEPT IN	Response Status W			PROP	OSED ACCEPT.			
FRUF	USED ACCEPT IN				C/ 155	SC 155.2.4.5	P <b>41</b>	L <b>31</b>	# 40
Repla	ce:				Huber, To		Nokia		
"whi	ch are then used by	the receive path GMP de-	mapper to re-tin	ne the received 257B	Comment	Туре Т	Comment Status D		CRC description
	s to the same"	·				enerator polynomi nce is intended.	al is clearly not describe	d in 3.2.9 of 802.3.	
with:					Suggested	Remedy			
	ch are then used by and re-time them t	the receive path GMP de to the same"	mapper to recov	ver the 257B data			s-reference. The genera ended reference?	tor polynomial is di	scussed in 9.2 of OIF
/ 155	SC 155.2.4.5	P <b>41</b>	L27	# 9	Proposed	Response	Response Status W		
Bruckmar		Huawei				OSED ACCEPT	N PRINCIPLE.		
comment	-	Comment Status D		bucket	Chang "A 32-		ncy codes is calculated o	wer 244 664 input k	its using the generator
	cessary new line and						3.2.9 and is appended to		
	Remedy	J.			to				
Make parag	"Each SC-FEC bloc	ck has 119 x 10 280 / 5 24 Ind replace: "119 x 10 280			OIF 40		ncy codes is calculated o 2. The resulting 32-bit c		
Proposed	Response	Response Status W			C/ 155	SC 155.2.4.6	P <b>42</b>	L12	# 11
PROF	OSED ACCEPT.				Bruckman	, Leon	Huawei		
					<i>Comment</i> Unnec	<i>Type</i> <b>E</b> esary word (IMH0	Comment Status D		bucket
					Suggested	lRemedv			
					••	ce "requires an ac	ditional 34 bits of paddir	g" with :"requires a	dditional 34 bits of
					Proposed	Response	Response Status W		
					PROP	OSED ACCEPT.	-		
		ER/editorial required GR/		T/technical E/editorial G/				155	Page 8 of 21

COMMENT STATUS: D/dispatched A/accepted R/rejected	RESPONSE STATUS: O/open W/written C/closed Z/withdrawn	SC 155.2.4.6	5/17/2021 5:45:29 PM
SORT ORDER: Clause, Subclause, page, line			

Bruckman, Leon Huawei	
Comment Type <b>T</b> Comment Status <b>D</b> The MFAS is a wrapping counter	bucke
SuggestedRemedy Replace: "It counts from 0x00 to 0xFF" with "It is a wrapping counter from 00x00 to 0x	)xFF"
Proposed Response Response Status W PROPOSED ACCEPT.	
Cl 155 SC 155.2.5.7.2 P48 L41 # 14	
Bruckman, Leon Huawei	
The sentence defining the RPF bit, although identical to the one in G.709.1, is a little	es <i>criptioi</i> e bit
SuggestedRemedy Replace: "The RPF bit indicates that a signal fail status was detected by the remote 400GBASE-ZR receive function in the upstream direction" with: "The RPF bit indicate the upstream direction, that a signal fail status was detected by the remote 400GBAS receive function"	tes, in
Proposed Response Response Status W	
PROPOSED ACCEPT IN PRINCIPLE. Replace: "The RPF bit indicates that a signal fail status was detected by the remote 400GBAS receive function in the upstream direction" with:	3E-ZR
"The RPF bit indicates, in the upstream direction, that a signal fail status was detecte the remote 400GBASE-ZR receive function"	ed by
C/ 155 SC 155.2.5.7.2 P48 L48 # 15	
Comment Type E Comment Status D Wrong tense	bucke
SuggestedRemedy Replace "define in Clause 118" with "defined in Clause 118"	
Proposed Response Response Status W	
t 1	The MFAS is a wrapping counter SuggestedRemedy Replace: "It counts from 0x00 to 0xFF" with "It is a wrapping counter from 00x00 to 0 Proposed Response Response Status W PROPOSED ACCEPT. CI 155 SC 155.2.5.7.2 P48 L41 # 14 Bruckman, Leon Huawei Comment Type T Comment Status D OH de The sentence defining the RPF bit, although identical to the one in G.709.1, is a little confusing. SuggestedRemedy Replace: "The RPF bit indicates that a signal fail status was detected by the remote 400GBASE-ZR receive function in the upstream direction" with: "The RPF bit indicate the upstream direction, that a signal fail status was detected by the remote 400GBASE-ZR receive function" With: "The RPF bit indicates that a signal fail status was detected by the remote 400GBASE receive function in the upstream direction, that a signal fail status was detected by the remote 400GBASE CI 155 SC 155.2.5.7.2 P48 L48 # 15 Bruckman, Leon Huawei Comment Type E Comment Status D Wrong tense SuggestedRemedy Replace "define in Clause 118" with "defined in Clause 118"

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SC 155.2.5.7.2 5/17/2021 5:45:29 PM SORT ORDER: Clause, Subclause, page, line

C/ 155 SC 155.2.	.5.8	P <b>49</b>	L <b>1</b>	# 16		C/ 155	SC 155.3.2		P <b>50</b>	L <b>32</b>	# 17	
Bruckman, Leon		Huawei				Bruckman	Leon	ŀ	Iuawei			
Comment Type <b>T</b> Missing clause	Commer	nt Status D			GMP	Comment Missin	• •	Comment St	atus <b>D</b>			bucket
<i>uggestedRemedy</i> There is no clause t mapper uses the JC					е-		ot after "400GBA					
roposed Response PROPOSED ACCE	Response	e Status W				Proposed PROP	Response OSED ACCEPT	Response Sta	atus <b>W</b>			
Add the following at						C/ 155	SC 155.3.2		P <b>51</b>	L <b>49</b>	# 18	
-						Bruckman		-	Huawei			
"The GMP de-mapper decodes the JC bytes and interprets them according to ITU-T G.709 Annex D. The values from the JC bytes are used to recover the 257B data blocks and to re- time them. The CRC8 value in JC1-3 and the CRC4 value in JC4-6 protect against errors						Comment Senter	51	Comment St and also the "SIL		hall be called ou	it here.	PMA
in the JC bytes."			4 value ili JC4-0	protect against	enois	Suggested	Remedy					
2/ <b>155</b> SC <b>155.3.</b> Dawe. Piers	.1.3	P <b>49</b> Nvidia	L <b>44</b>	# 97		indicat	ion logic that rep		PMA:IS SIG	is generated thro NAL.indication p		
,					D144	-	Response	Response Sta	•			
		nt Status <b>D</b> Frame alignmen	t word (FAW), tra	ainina sequence	PMA (TS).			,				
This isn't your grand reserved symbols a enough that definitio uggestedRemedy As for a PCS: add a	dfather's PMA. Ind pilot sequen on by directive r an annex with su	Frame alignmen ces (PS) are mo isks ambiguity. uitable examples	re like PCS funct	tions, and compl	(TS), licated	PROP Replac "The P logic th	OSED ACCEPT	IN PRINCIPLE.		ited through a se	et of signal indica	ation
This isn't your grand reserved symbols a enough that definitio <i>tuggestedRemedy</i> As for a PCS: add a examples should ca	dfather's PMA. Ind pilot sequen on by directive r an annex with su an be made ava <i>Response</i>	Frame alignmen ces (PS) are mo isks ambiguity. uitable examples ilable separately e Status W	re like PCS funct	tions, and compl	(TS), licated	PROP Replac "The P logic th with: "The P	OSED ACCEPT me: MA:IS_SIGNAL nat reports" MA:IS_SIGNAL	IN PRINCIPLE.	ive is genera	ited through a se ited through a sig		
This isn't your grand reserved symbols a enough that definitio uggestedRemedy As for a PCS: add a examples should ca proposed Response	dfather's PMA. Ind pilot sequen on by directive r an annex with su an be made ava <i>Response</i> PT IN PRINCIF	Frame alignmen ces (PS) are mo isks ambiguity. uitable examples ilable separately e Status W	re like PCS funct	tions, and compl	(TS), licated	PROP Replac "The P logic th with: "The P	OSED ACCEPT ee: MA:IS_SIGNAL nat reports"	IN PRINCIPLE.	ive is genera	Ū		
This isn't your grand reserved symbols a enough that definitio uggestedRemedy As for a PCS: add a examples should ca roposed Response PROPOSED ACCE	dfather's PMA. Ind pilot sequen on by directive r an annex with su an be made ava <i>Response</i> PT IN PRINCIF Ission.	Frame alignmen ces (PS) are mo isks ambiguity. uitable examples ilable separately e Status W PLE. her an informativ	re like PCS funct (see Annex 119 on the web. e annex with PM	tions, and compl	(TS), licated Large	PROP Replac "The P logic th with: "The P (SIL) th C/ 155 Dawe, Piel Comment	OSED ACCEPT we: MA:IS_SIGNAL hat reports" MA:IS_SIGNAL mat reports" SC 155.3.3.8 rs Type T	IN PRINCIPLE. .indication primit .indication primit	ive is genera ive is genera <b>P58</b> Vvidia atus <b>D</b>	uted through a sig	gnal indication lo # <u>96</u>	
This isn't your grand reserved symbols a enough that definition SuggestedRemedy As for a PCS: add a examples should ca Proposed Response PROPOSED ACCE For task force discu The task force shou	dfather's PMA. Ind pilot sequen on by directive r an annex with su an be made ava <i>Response</i> PT IN PRINCIF Ission.	Frame alignmen ces (PS) are mo isks ambiguity. uitable examples ilable separately e Status W PLE. her an informativ	re like PCS funct (see Annex 119 on the web. e annex with PM	tions, and compl	(TS), licated Large	PROP Replac "The P logic th with: "The P (SIL) th C/ 155 Dawe, Pier Comment PMA:13 Suggested	OSED ACCEPT we: MA:IS_SIGNAL hat reports" MA:IS_SIGNAL hat reports" SC 155.3.3.6 rs Type T S_UNITDATA_C Remedy	IN PRINCIPLE. indication primit indication primit <i>Comment St</i> indication to PM	ive is genera ive is genera <i>P</i> <b>58</b> Nvidia <i>atus</i> <b>D</b> IA:IS_UNITD	ted through a sig	gnal indication lo # <u>96</u> on	ogic
This isn't your grand reserved symbols a enough that definitio <i>fuggestedRemedy</i> As for a PCS: add a examples should ca proposed Response PROPOSED ACCE For task force discu The task force shou	dfather's PMA. Ind pilot sequen on by directive r an annex with su an be made ava <i>Response</i> PT IN PRINCIF Ission.	Frame alignmen ces (PS) are mo isks ambiguity. uitable examples ilable separately e Status W PLE. her an informativ	re like PCS funct (see Annex 119 on the web. e annex with PM	tions, and compl	(TS), licated Large	PROP Replac "The P logic th with: "The P (SIL) th CI 155 Dawe, Pier Comment PMA:IS Suggested PMD:IS	OSED ACCEPT at reports" MA:IS_SIGNAL hat reports" SC 155.3.3.8 Type T S_UNITDATA_C Remedy S_UNITDATA_C	IN PRINCIPLE. indication primit indication primit Comment St indication to PM kindication to PM Response Sta	ive is genera ive is genera <b>P58</b> Vvidia atus <b>D</b> IA:IS_UNITD	uted through a sig L48 DATA_3.indicatio	gnal indication lo # <u>96</u> on	ogic

Missing plural uggestedRemedy Replace "into two stream" w proposed Response Re PROPOSED ACCEPT. 155 SC 155.3.3.6 Bruckman, Leon	Huawei Comment Status D with: "into two streams" esponse Status W P59 Huawei	L 41	bucket	SuggestedReme Update dela Proposed Respo	e <i>dy</i> y with actual		s ~4.5 us.	Delay constraints
Missing plural uggestedRemedy Replace "into two stream" w roposed Response PROPOSED ACCEPT. 1 155 SC 155.3.3.6 ruckman, Leon comment Type T C	vith: "into two streams" esponse Status W P <b>59</b>	L 41	bucket	Delay listed SuggestedReme Update dela Proposed Respo	as 892.16 n edy y with actual	s is incorrect, actual delay is value.	s ~4.5 us.	Delay constraint
Replace "into two stream" w Proposed Response Re PROPOSED ACCEPT. 155 SC 155.3.3.6 Bruckman, Leon Comment Type T C	esponse Status W	L 41		Update dela Proposed Respo	y with actual			
PROPOSED ACCEPT. 7 155 SC 155.3.3.6 Bruckman, Leon Comment Type T C	P <b>59</b>	L41			onse			
Bruckman, Leon Comment Type <b>T</b> C		L <b>4</b> 1		PROPOSEL		Response Status W N PRINCIPLE.		
comment Type <b>T</b> C	Huawei		# 20	For task for	ce discussion	۱.		
	Comment Status D		cross reference	The value in and the 400		incorrectly based on the su MA,	m of the 400GBA	ASE-R PCS or 400GXS
uggestedRemedy "according to Clause 155", I clause" or write the right cla	but this is clause 155, so	either repalce w	vith "according to this	maximum (u	is) for the 40	nmended maximum (bit time 0GBASE-ZR PCS and PM/ w entry to Table 116-6 with	A is needed.	,
roposed Response Re PROPOSED ACCEPT IN P Change:	esponse Status W RINCIPLE.			times at 400 (TBD) will re	Gb/s. This quire calcula	s out, the CFEC delay is of would correspond to 3515.6 ation of all other delays betw BASE-ZR PMD service inte	625 pause_quant veen the PCS se	ta. The actual value
"Implementations are requir	ed to have a frame loss i	atio (see 1.4.27	5) of less than 1.7	C/ 156 SC	3156.1	P <b>64</b>	L <b>25</b>	# 61
??10-12 for 64-octet frames Clause 155."				Maniloff, Eric		Ciena		
to:				<i>Comment Type</i> ZR is incom	<b>E</b> plete name	Comment Status D		bucke
"Implentations are required 12 for 64-octet frames with				SuggestedReme Replace ZR	-	ASE-ZR		
according to this clause."				Proposed Respo PROPOSEI		Response Status W		

C/ <b>156</b> S	C 156.1.1	P <b>64</b>	L <b>37</b>	# 62	C/ 156	SC	156.2	P <b>65</b>	L <b>19</b>	# 21	
Maniloff, Eric		Ciena			Bruckman	, Leon		Huawei			
Comment Type	ə T	Comment Status A			Comment	Туре	т	Comment Status A			
BER of 2.4	E-4 is incorre	ect				0	clause 15	6.5.4 SIGNAL_DETECT is fix	ked to OK. This	ahhl be reflected in	
SuggestedRem	nedy				thetex						
Replace 2.	4E-4 with cor	rect value of ~1.26e-2			Suggested		ly				
Response Response Status C ACCEPT IN PRINCIPLE.						Tow options: 1 - Replace "The SIGNAL_DETECT parameter can take on one of two values: OK or FAIL." with "The SIGNAL_DETECT parameter value is fixed to OK." and remove the sentence: "When SIGNAL_DETECT = FAIL, the rx_symbol parameters are undefined."					
Replace 2.	4E-4 with cor	rect value of 1.25e-2.					ve these	two last sentences.			
C/ <b>156</b> S	C 156.2	P <b>65</b>	L19	# 83	Response			Response Status C			
Dawe, Piers		Nvidia			ACCE	PT IN F	PRINCIPL	.E.			
Comment Type	e T	Comment Status A			Change "The SIGNAL_DETECT parameter can take on one of two values: OK or FAIL.						
		AL_DETECT parameter car				SIGNA	L_DETE	CT = FAIL, the rx_symbol par	ameters are une	defined."	
two values:	: OK or FAIL,	while 156.5.4 says that SIG	NAL_DETECT is	s fixed to OK.	to "The SIGNAL_DETECT parameter takes a fixed value of OK."						
SuggestedRem					C/ 156		 156.2	P65	L <b>23</b>	# 00	
		d with non-amplified channe signal detect function with tw					150.2		L <b>23</b>	# 22	
channels.				ised with non-amplified	Bruckman	,	-	Huawei			
Response		Response Status C			Comment	,,		Comment Status R	is fixed to OK		
ACCEPT II	N PRINCIPLE					_		ot based on light received, it			
			4		Suggested						
See respor		ent 21. No change to 156.5.	4.			ent light		the sentence: "It is possible f GNAL_DETECT = OK indicati			
					Response			Response Status C			
					REJE	CT.					

			"					"
C/ 156 SC 156.5.1	P <b>67</b>	L <b>7</b>	# 103	C/ 156	SC 156.6	P <b>68</b>	L <b>37</b>	# 98
Dawe, Piers	Nvidia			Dawe, Pie		Nvidia		
Comment Type TR	Comment Status R			Comment		Comment Status R		
point for the DWDM bl	points for the PMD. The way ack link is causing problems,	because the PM	D and TP2 are		els aren't transp itted over or on	ported, they are transmission p channels	oaths. Signals m	nay be transported or
	cord between 2 m and 5 m in			Suggestea	Remedy			
to be at the same poin	e test point for the transmitter it. • optic cabling (channel)" (see			multipl		ansport of multiple DWDM cha nels over a single fiber" or "ena iber".		
	mes for the output of the PME	) (such as "MDI",	"PMD" or	Response		Response Status C		
,,	v one could be invented.			REJEC	CT.			
SuggestedRemedy								
in so many clauses, ar appropriate.	annel" as from MDI to MDI, sa nd or "link segment" (see 1.4.	309). Use a figur	e like Figure 151-7 if	project	to define Ether	hes the corresponding text in 8 rent operation over DWDM sys s aligned with 802.3ct.		
	hin the "DWDM channel", or t DWDM channel" for use, whic			C/ <b>156</b>	SC 156.6	P <b>69</b>	L <b>32</b>	# 63
esponse	Response Status C			Maniloff, E	ric	Ciena		
REJECT.				Comment	Туре Т	Comment Status A		
	P3 in clause 156 is the same				nd TP3 need to is of the black li	be indexed to in figure 156-3 t nk	o define intra an	d inter-channel
	therent operation over DWDN v is aligned with 802.3ct.	A systems, and 1	the stated intention is	Suggestea	-			
7 156 SC 156.5.1	P <b>67</b>	L16	# 77	•	e IP2 with IP2	2_i and TP3 with TP3_i		
ark, Charles	Juniper Netwo		"	Response		Response Status C		
,	1	UIKS	h t t	ACCE	PT IN PRINCIP	LE.		
Comment Type E	Comment Status D		bucket	Chang	e to TP2 i and	TP3 i as suggested. The use	of the ilabels	is required to define
Figure 156-2, PMD service interface	s in Fig. 156-2 need to be cor	rected.				channel spectral attenuation as		
uggestedRemedy								
"PMD:IS_UNITDATA_	0.request to PMD:IS_UNITDA	ATA_3.request"						
"PMD:IS_UNITDATA_	0.indication to PMD:IS_UNIT	DATA_3.indicatio	on"					
Proposed Response	Response Status W							
PROPOSED ACCEPT	-							

C/ 156 SC '	156.6	P <b>69</b>	L <b>47</b>	# 78		\$ 156.7.1	P <b>72</b>	L17	# 64
Park, Charles		Juniper Netwo	rks		Maniloff, Eric		Ciena		
Comment Type	т (	Comment Status R			Comment Type	т	Comment Status A		Interchannel cross ta
		orresponding optical frequ enting the channel center					ines a single point on the tran channel crosstalk penalties th		
SuggestedRemed	<i>y</i>				SuggestedReme	edy			
Add new table grid including	g the channel index numbe the text.	er and center fro	equency for 100GHz			rsion with a Maximum and m ailable to define this.	nimum spect	ral mask. A supporting	
Alternatively, i with descriptic grid.	refer the table on of channel	a 154-6 in IEEE802.3ct for index assignment for two	100GHz grid o different cases,	r refer ITU-T G.697.1 100G- and 75GHz	Response ACCEPT IN				
Response	R	esponse Status <b>C</b>					Ad Hoc was formed to discus )Gb compared to 100 GHz sp		
, REJECT.					was capture	d in manilo	off_3cw_01a_210429 and pre- nich showed clear consensus	sented on 4/2	9. During the meeting a
teleconference	was then reat	firmed by the IEEE P802.3	Bcw task force o	on April 2nd interim	maniloff_3cv • Yes – 28 • No – 2 • Abstain - 6		1429		
Park. Charles	156.7.1	Juniper Netwo		# 79	Implement t	he recomn	nendations stated in maniloff_	3cw 01a 210	0429 with editorial license
Comment Type	т	Comment Status R	K5		. <u></u>	3156.7.1	 P <b>72</b>	 	# 42
In Table 156-6 center frequer	nter frequency is referring grid spacing.	-	Zhang, Bo Comment Type	TR	Marvell / Inph Comment Status A	i			
Center freque	ncy for 100GI	Hz grid is different from the	at of 75GHz gri	d.			n ratio (SMSR) is not a releva	nt Tx spec to	r 400GBASE-ZR
Better to provi	de the chann	el index and correspondin	g optical freque	ency for 100GHz grid.	SuggestedReme				
SuggestedRemed					Replace SM OpenROAD		ith out-of-band OSNR (min) د ب	so that it's alig	ined with OIF 4002R and
change contex	xt correspond	lingly			Response		Response Status C		
Response REJECT.	R	esponse Status C			ACCEPT IN	PRINCIPL	.E.		
NEGLOT.							vith out-of-band OSNR (min),		

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

Cl	156
SC	156.7.1

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C/ 156 SC 156.7.1	P <b>72</b>	L <b>20</b>	# 44	Cl 156 SC 156.7.1 P72 L26 # 45
Zhang, Bo	Marvell / Inphi			Zhang, Bo Marvell / Inphi
Comment Type <b>TR</b> laser linewidth spec nee	Comment Status <b>A</b> eds to be companioned with la	aser phase nois	e spec	Comment Type TR Comment Status D address TBD for EVM (max)
SuggestedRemedy Add laser phase noise s (13.1.210)	spec from OIF published 4002	ZR IA - laser fre	quency noise mask	SuggestedRemedy Replace TBD with 14.8% from way_3ct_01b_1119.pdf to stimulate some task force progress. Note that test methodology detailed in way_3ct_01b_1119.pdf might be different than that from pittala_3ct_01a_191205
Response ACCEPT IN PRINCIPLI	Response Status <b>C</b> E.			Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.
See response to comm	ent 65.			See response to comment 24.
C/ <b>156</b> SC <b>156.7.1</b> Maniloff, Eric	P <b>72</b> Ciena	L <b>20</b>	# 65	C/ 156         SC 156.7.1         P72         L28         # 43
Comment Type T	Comment Status A			Zhang, Bo Marvell / Inphi
	newidth is insufficient for a col	herent receiver.		Comment Type TR Comment Status A address TBD for I-Q offset (max)
SuggestedRemedy Replace linewidth with a	a Laser Frequency Noise mas	sk.		SuggestedRemedy
Response ACCEPT IN PRINCIPLI	Response Status C			Adopt DC I-Q offset of -26dB and instantaneous I-Q offset of -20dB from OIF 400ZR spec to ensure interoperability between 400ZR and 400GBASE-ZR
In Table 156-8 replace TBD. Update paramete	"Laser linewidth (max)" with "l r definitions 156.9 with editori	ial license.		Response     Response Status     C       s     ACCEPT IN PRINCIPLE.       See response to comment 67.
	noise spec consistent with O 13.1.210) with editorial licens		)ZR IA - laser	C/ 156 SC 156.7.1 P72 L28 # 67
OIF IA available at http: 01.0_reduced2.pdf.	s://www.oiforum.com/wp-cont	ent/uploads/OIF	-400ZR-	Maniloff, Eric     Ciena       Comment Type     T     Comment Status       I-Q Offset should include both a max instantaneous and mean value
				SuggestedRemedy Split I/Q offset into maximum instantaneous and mean values
				Response Response Status C ACCEPT IN PRINCIPLE.
				In Table 156-6 replace "I-Q offset (max)" with "I-Q (max instantaneous)" and "I-Q (mean)". Use values consistent with the published OIF 400ZR IA "13.1.270a and 13.1.270b". Update parameter definitions 156.9, with editorial license.
				OIF IA available at https://www.oiforum.com/wp-content/uploads/OIF-400ZR- 01.0_reduced2.pdf.
				al G/general C/ 156 Page 15 of 21 W/written C/closed Z/withdrawn SC 156.7.1 5/17/2021 5:45:29

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SORT ORDER: Clause, Subclause, page, line

Maniloff, Eric       Clena       Zhang, Bo       Marvell / Inphi         Comment Type       T       Comment Type       TR       Comment Status A       Receiver OSIN spee	C/ 156 SC 156.7.1 P72 L33 # 66	C/ 156 SC 156.7.2	P <b>73</b>	L17	# 49
Laser RIN is missing from table       Value in damage threshold is empty         Uggested/Remedy       Add an entry for RIN Average and an entry for RIN peak       Value in damage threshold is empty         ACCEPT IN PRINCIPLE.       In Table 156-6 add entries for "RIN Average" and "RIN peak". Use values consistent with the published OIF 400ZR IA "13.1.212". Update parameter definitions 156.9 with editorial license.       Maniloff. Eric       Clena         OIF IA available at https://www.oiforum.com/wp-content/uploads/OIF-400ZR-011.0 reduced2.pdf.       Juniper Networks       Add TBD as value         V156       SC 156.7.2       P73       L14       #80         Value in frequency for 100GHz grid is different from that of 75GHz grid.       Juniper Networks       Response       Response Status C         Center frequency for 100GHz grid is different from that of 75GHz grid.       L24       #46         Desponse       Response Status S       C         Cl 156       SC 156.7.2       P73       L24       #46         Comment Type       T       Comment Status A       Response Status C         Carlster frequency for 100GHz grid is different from that of 75GHz grid.       Cl 156       SC 156.7.2       P73       L24       #46         Zhang, Bo       Marvell / Inphi       Comment Status A       Average receive power values called out in Receiver OSNR' are not aligned with the min Average receive power value in line 2	Aaniloff, Eric Ciena	Zhang, Bo	Marvell / Inph	i	
Add an entry for RIN Average and an entry for RIN peak       Either remove this damage threshold spec or add a TBD in the value cell         Response       Response Status C         ACCEPT IN PRINCIPLE.       In Table 156-6 add entries for "RIN Average" and "RIN peak". Use values consistent with the published OIF 400ZR IA "13.1.212". Update parameter definitions 156.9 with editorial license.       Add TBD as value         OIF IA available at https://www.oiforum.com/wp-content/uploads/OIF-400ZR.01.0-reduced2.pdf.       PT3       L14       # 80         C/1 156       SC 156.7.2       PT3       L14       # 80         Dark, Charles       Juniper Networks       Comment Type       Comment Type       Comment Status R         In Table 156-7, nominal center frequency for 100GHz grid.       Response       Response Status C         ACCEPT.       Center frequency for 100GHz grid is different from that of 75GHz grid.       Ether remove this damage threshold out in "Receiver OSNR" are not aligned with the min Average receive power values called out in "Receiver OSNR" are not aligned with the min Average receive power value in line 20         Suggested/Remedy       Replace -16dBm with -12dBm         Replace -16dBm with -12dBm       Suggested/Remedy         REJECT.       Response Status C         See response to comment 78.       Response Response Status C					bucke
Response       Response Status       C         ACCEPT IN PRINCIPLE.       In Table 156-6 add entries for "RIN Average" and "RIN peak". Use values consistent with the published OIF 400ZR IA "13.1.212". Update parameter definitions 156.9 with editorial license.       Proposed Response Status       W         OIF IA available at https://www.oiforum.com/wp-content/uploads/OIF-400ZR-01.0_reduced2.pdf.       OIF IA available at https://www.oiforum.com/wp-content/uploads/OIF-400ZR-01.0_reduced2.pdf.       Add TBD as value       Add TBD as value         20 156       S C 156.7.2       P73       L14       Image: To comment Status A       Receiver OSNR specs should be defined relative to -12dBm         20 rate frequency of To Comment Status R       In Table 156-7, nominal center frequency is referring Table 156-4, which indicating the center frequency of 75GHz grid spacing.       Response Status C       AcCEPT.         Center frequency for 100GHz grid is different from that of 75GHz grid.       Better to provide the channel index and corresponding optical frequency for 100GHz grid.       Ci 156       S C 156.7.2       P73       L24       # 46         SuggestedRemedy change context correspondingly       Response Status C       Marrell / Inphi       Comment Type       T Comment Status A         Response       Response Status C       SuggestedRemedy       Average receive power values called out in Receiver OSNR* are not aligned with the min Average receive power values called out in Receiver OSNR* are not aligned with the min Average receive power values called	SuggestedRemedy	SuggestedRemedy			
ACCEPT IN PRINCIPLE. In Table 156-6 add entries for "RIN Average" and "RIN peak". Use values consistent with the published OIF 400ZR IA "13.1.2.12". Update parameter definitions 156.9 with editorial license. OIF IA available at https://www.oiforum.com/wp-content/uploads/OIF-400ZR- 01.0_retuced2.pdf. 20 156 SC 156.7.2 P73 L14 # 100 Park, Charles Juniper Networks comment Type T Comment Status R In Table 156-7, nominal center frequency is referring Table 156-4, which indicating the center frequency of 75GHz grid spacing. Center frequency for 100GHz grid is different from that of 75GHz grid. Better to provide the channel index and corresponding optical frequency for 100GHz grid. Response Response Status C REJECT. See response to comment 78. Comment 78.	Add an entry for RIN Average and an entry for RIN peak	Either remove this damage thresho	ld spec or add a	TBD in the value	cell
the published OIF 400ZR IA "13.1.212". Üpdate parameter definitions 156.9 with editorial license. OIF IA available at https://www.oiforum.com/wp-content/uploads/OIF-400ZR- 01.0_reduced2.pdf. Z/ 156 SC 156.7.2 P73 L14 # 80 Park, Charles Juniper Networks Zomment Type T Comment Status R In Table 156-7, nominal center frequency is referring Table 156-4, which indicating the center frequency of 75GHz grid spacing. Center frequency for 100GHz grid is different from that of 75GHz grid. Better to provide the channel index and corresponding optical frequency for 100GHz grid. SuggestedRemedy change context correspondingly Response Response Status C REJECT. See response to comment 78. Comment 78. Comment 78. Comment 78. C/ 156 SC 156.7.2 P73 L24 # 68 Comment 79pe T Comment Status A Receiver OSNR specs should be defined relative to -12dBm SuggestedRemedy Replace -16dBm with -12dBm AccEPT. C/ 156 SC 156.7.2 P73 L24 # 46 Zhang, Bo Marvell / Inphi Comment Type TR Comment Status A Average receive power values called out in 'Receiver OSNR' are not aligned with the min Average receive power values called out in 'Receiver OSNR' are not aligned with the min Average receive power values in line 20 SuggestedRemedy Replace -16dBm with -12dBm Response Response Status C		, ,			
license.       OIF IA available at https://www.oiforum.com/wp-content/uploads/OIF-400ZR- 01.0_reduced2.pdf.       CI 156 SC 156.7.2       P73 L24 # [68         V1 156 SC 156.7.2       P73 L14 # [80       Ci noment Type T Comment Status R         In Table 156-7, nominal center frequency is referring Table 156-4, which indicating the center frequency of 75GHz grid spacing.       SuggestedRemedy         Center frequency for 100GHz grid is different from that of 75GHz grid.       Response Status C         Better to provide the channel index and corresponding optical frequency for 100GHz grid.       CI 156 SC 156.7.2       P73 L24 # [46         Zhang, Bo       Marveil / Inphi         Comment Type T       Comment Status A         Better to provide the channel index and corresponding optical frequency for 100GHz grid.       CI 156 SC 156.7.2       P73 L24 # [46         Zhang, Bo       Marveil / Inphi       Comment Type TR       Comment Status A         Average receive power values called out in 'Receiver OSNR' are not aligned with the min Average receive power value in line 20       SuggestedRemedy         REJECT.       See response to comment 78.       Response Response Status C       SuggestedRemedy         Response       Response Status C       SuggestedRemedy       SuggestedRemedy         Replace -16dBm with -12dBm       Response Status C       SuggestedRemedy         Replace -16dBm with -12dBm       Response Status C		Add TBD as value			
OI: IA available at https://www.oitorum.com/wp-content/uploads/OIF-4002R-01.0_reduced2.pdf.         01: 0_reduced2.pdf.         0: 0_reduced2.pdf.<		C/ 156 SC 156.7.2	P <b>73</b>	L <b>24</b>	# 68
01.0_reduced2.pdf.       P73       L14       # 80         1/ 156       SC 156.7.2       P73       L14       # 80         rark, Charles       Juniper Networks       Gomment Type       T       Comment Status       R         In Table 156-7, nominal center frequency is referring Table 156-4, which indicating the center frequency of 75GHz grid spacing.       Center frequency for 100GHz grid is different from that of 75GHz grid.       Response       Response Status       C         Better to provide the channel index and corresponding optical frequency for 100GHz grid.       Comment Type       T       Comment Status       A         uggestedRemedy change context correspondingly       Response Status       C       C       ACCEPT.         Verage receive power values called out in 'Receiver OSNR' are not aligned with the min Average receive power values called out in 'Receiver OSNR' are not aligned with the min Average receive power value in line 20       SuggestedRemedy         REJECT.       See response to comment 78.       Response       Response Status       C	QIE IA available at https://www.oiforum.com/wp.content/uploads/QIE_40078_	Maniloff, Eric	Ciena		
1156       SC 156.7.2       P73       L14		Comment Type T Commen	t Status A		
ark, Charles       Juniper Networks         omment Type       T       Comment Status       R         In Table 156-7, nominal center frequency of 75GHz grid spacing.       Response       Response Status       C         Center frequency of 75GHz grid spacing.       C/       156       SC 156.7.2       P73       L24       # 46         Better to provide the channel index and corresponding optical frequency for 100GHz grid.       C/       156       SC 156.7.2       P73       L24       # 46         Zhang, Bo       Marvell / Inphi       Comment Status       A       Average receive power values called out in 'Receiver OSNR' are not aligned with the min Average receive power value in line 20       SuggestedRemedy         REJECT.       See response to comment 78.       Response       Response Status       C	156 SC 156 7 2 P73 / 14 # 80	Receiver OSNR specs should be de	efined relative to	-12dBm	
In Table 156-7, nominal center frequency is referring Table 156-4, which indicating the center frequency of 75GHz grid spacing.       Response       Response Status       C         Center frequency for 100GHz grid is different from that of 75GHz grid.       C/ 156       SC 156.7.2       P73       L24       # 46         Better to provide the channel index and corresponding optical frequency for 100GHz grid.       C/ 156       SC 156.7.2       P73       L24       # 46         SuggestedRemedy change context correspondingly       Comment Status       A         Response       Response Status       C         REJECT.       See response to comment 78.       Response       Response Status       C	Park, Charles Juniper Networks	00 ,			
Better to provide the channel index and corresponding optical frequency for 100GHz grid. SuggestedRemedy change context correspondingly Response Response Status C REJECT. See response to comment 78. Context and corresponding optical frequency for 100GHz grid. SuggestedRemedy Response Status C Response to comment 78. Comment Status A Average receive power values called out in 'Receiver OSNR' are not aligned with the min Average receive power value in line 20 SuggestedRemedy Response Response Status C Response Response Status C Response Response Status C	In Table 156-7, nominal center frequency is referring Table 156-4, which indicating the	,	Status C		
Better to provide the channel index and corresponding optical frequency for 100GHz grid.         SuggestedRemedy change context correspondingly       Comment Type       TR       Comment Status       A         Average receive power values called out in 'Receiver OSNR' are not aligned with the min Average receive power value in line 20       A         Response       Response Status       C       SuggestedRemedy Replace -16dBm with -12dBm         See response to comment 78.       Response       Response Status       C	Center frequency for 100GHz grid is different from that of 75GHz grid.	C/ 156 SC 156.7.2	P <b>73</b>	L <b>24</b>	# 46
uggestedRemedy       Comment Type       TR       Comment Status       A         change context correspondingly       Average receive power values called out in 'Receiver OSNR' are not aligned with the min Average receive power value in line 20         besponse       Response Status       C         REJECT.       SuggestedRemedy         See response to comment 78.       Response       Response Status	Better to provide the channel index and corresponding optical frequency for 100GHz grid	Zhang, Bo	Marvell / Inph	i	
Average receive power values called out in 'Receiver OSNR' are not aligned with the min Average receive power value in line 20       Average receive power values called out in 'Receiver OSNR' are not aligned with the min Average receive power value in line 20       Pesponse     Response Status       REJECT.     SuggestedRemedy Replace -16dBm with -12dBm       See response to comment 78.     Response     Response Status		···· //··			
REJECT.     Replace -16dBm with -12dBm       See response to comment 78.     Response     Response Status				r OSNR' are not a	aligned with the min
	See response to comment 78.		Status C		
See response to comment 68.		See response to comment 68.			

CI 156 SC 156.7.2 P73	L <b>27</b>	# 69	C/ 156	SC 156.7.2	P <b>73</b>	L <b>33</b>	# 48
Maniloff, Eric Ciena			Zhang, Bo		Marvell / Inpl	ni	
Comment Type <b>T</b> Comment Status <b>A</b> Receiver OSNR tolerance should be defined for	Average Power (mi	n)	Comment T footnote		Comment Status <b>A</b> atory receiver OSNR toleranc	e spec is inform	native
SuggestedRemedy			Suggested	Remedy			
Replace -16dBm with -12dBm					b: Receiver sensitivity (max),	for OSNR >=34	dB (12.5GHz) is
Response Response Status C			informa Responses	itive			
ACCEPT.			Response ACCEE	T IN PRINCIP	Response Status C		
C/ 156 SC 156.7.2 P73	L <b>28</b>	# 47					
Zhang, Bo Marvell / I	nphi		See res	sponse to comr	nent 70.		
Comment Type TR Comment Status A			C/ 156	SC 156.8	P <b>74</b>	L <b>7</b>	# 71
Average receive power value called out in 'Rece min Average receive power value in line 20	iver OSNR tolerance	e' is not aligned with the	Maniloff, Er	ric	Ciena		
<b>3</b>			Comment T		Comment Status A		
SuggestedRemedy Replace -16dBm with -12dBm			passba	nd and the pas	T G698.2 to define both the a sband. Ripple as used here s thin the passband.		
Response Response Status C							
			Suggested	Remedy			
ACCEPT IN PRINCIPLE. See response to comment 69.			Add a f		fy that ripple is only defining t and.	he loss/gain va	riations withing th
ACCEPT IN PRINCIPLE.	L <b>33</b>	# 70	Add a f DWDM <i>Response</i>	ootnote to clari	Response Status C	the loss/gain va	riations withing th
ACCEPT IN PRINCIPLE. See response to comment 69.		# 70	Add a fo DWDM <i>Response</i> ACCEF In Table	ootnote to clari channel passt PT IN PRINCIP e 156-8 add foo	Response Status C	ng "Only used to	define the loss or gain
ACCEPT IN PRINCIPLE. See response to comment 69. Cl 156 SC 156.7.2 P73 Maniloff, Eric Ciena Comment Type T Comment Status A Tx OSNR min is 34dB, this should be used in no		# [ <u>70</u>	Add a fo DWDM <i>Response</i> ACCEF In Table	ootnote to clari channel passt PT IN PRINCIP e 156-8 add foo	and. <i>Response Status</i> <b>C</b> LE. otnote to "Ripple (max)" statin	ng "Only used to	define the loss or gain
ACCEPT IN PRINCIPLE. See response to comment 69. C/ 156 SC 156.7.2 P73 Maniloff, Eric Ciena Comment Type T Comment Status A Tx OSNR min is 34dB, this should be used in no		# 70	Add a fo DWDM <i>Response</i> ACCEF In Table variatio	ootnote to clari channel passe PT IN PRINCIP e 156-8 add foo ns within the D SC <b>156.8</b>	and. <i>Response Status</i> <b>C</b> LE. btnote to "Ripple (max)" statin WDM channel passband" wit	ng "Only used to h editorial licens	o define the loss or gain se.
ACCEPT IN PRINCIPLE. See response to comment 69. Cl 156 SC 156.7.2 P73 Maniloff, Eric Ciena Comment Type T Comment Status A Tx OSNR min is 34dB, this should be used in no SuggestedRemedy Replace 35 dB with 34 dB		# [ <u>70</u>	Add a fi DWDM Response ACCEF In Table variatio C/ <b>156</b> Maniloff, Er Comment T	ootnote to clari channel passi PT IN PRINCIP e 156-8 add foo ns within the D SC <b>156.8</b> ric <i>Type</i> <b>T</b>	And. <i>Response Status</i> <b>C</b> LE. Detnote to "Ripple (max)" statin WDM channel passband" wit <i>P</i> 74	ng "Only used to h editorial licens L7	define the loss or gain se. # <u>72</u> Interchannel cross talk
ACCEPT IN PRINCIPLE. See response to comment 69. Cl <b>156</b> SC <b>156.7.2</b> P <b>73</b> Maniloff, Eric Ciena Comment Type <b>T</b> Comment Status <b>A</b> Tx OSNR min is 34dB, this should be used in no SuggestedRemedy Replace 35 dB with 34 dB Response Status <b>C</b>		# <u>70</u>	Add a fr DWDM Response ACCEF In Table variatio C/ 156 Maniloff, Er Comment T The spe Suggestedf	ootnote to clari channel passi PT IN PRINCIP e 156-8 add foo ns within the D SC 156.8 ric SC 156.8 ric ype T ecification need Remedy bassband defin	aand. <i>Response Status</i> <b>C</b> LE. ptnote to "Ripple (max)" statin WDM channel passband" wit <i>P</i> 74 Ciena <i>Comment Status</i> <b>A</b>	ng "Only used to h editorial licens L <b>7</b> DWDM channe	define the loss or gain se. # 72 Interchannel cross talk
ACCEPT IN PRINCIPLE. See response to comment 69. C/ 156 SC 156.7.2 P73 Maniloff, Eric Ciena Comment Type T Comment Status A Tx OSNR min is 34dB, this should be used in no SuggestedRemedy Replace 35 dB with 34 dB Response Status C		# <u>70</u>	Add a f DWDM Response ACCEF In Table variatio C/ 156 Maniloff, Er Comment 7 The spe Suggestedf Add a p present	ootnote to clari channel passi PT IN PRINCIP e 156-8 add foo ns within the D SC 156.8 ric SC 156.8 ric ype T ecification need Remedy bassband defin	and. <i>Response Status</i> <b>C</b> LE. btnote to "Ripple (max)" statin WDM channel passband" wit <i>P</i> 74 Ciena <i>Comment Status</i> <b>A</b> ds to include a more detailed ition for the DWDM channel.	ng "Only used to h editorial licens L <b>7</b> DWDM channe	define the loss or gain se. # 72 Interchannel cross talk
ACCEPT IN PRINCIPLE. See response to comment 69. Cl <b>156</b> SC <b>156.7.2</b> P <b>73</b> Maniloff, Eric Ciena Comment Type <b>T</b> Comment Status <b>A</b> Tx OSNR min is 34dB, this should be used in no SuggestedRemedy Replace 35 dB with 34 dB Response Status <b>C</b>		# <u>70</u>	Add a f DWDM Response ACCEF In Table variatio C/ 156 Maniloff, Er Comment T The spe SuggestedF Add a p present Response	ootnote to clari channel passi PT IN PRINCIP e 156-8 add foo ns within the D SC 156.8 ric SC 156.8 ric ype T ecification need Remedy bassband defin	aand. <i>Response Status</i> <b>C</b> LE. bothote to "Ripple (max)" statin WDM channel passband" wit <i>P</i> 74 Ciena <i>Comment Status</i> <b>A</b> ds to include a more detailed ition for the DWDM channel. <i>Response Status</i> <b>C</b>	ng "Only used to h editorial licens L <b>7</b> DWDM channe	define the loss or gain se. # 72 Interchannel cross talk

C/ 156 SC 156.8 P74	L <b>9</b>	# 53	C/ 156 SC 156.8 P74 L12 # 54
Zhang, Bo Marvell / Inph	ni		Zhang, Bo Marvell / Inphi
Comment Type TR Comment Status A Address TBD for Average output power at TP3			Comment Type TR Comment Status A Address TBD for OSNR at TP3<35dB
SuggestedRemedy Replace TBD with 0dBm per Receiver spec			SuggestedRemedy Replace TBD with -12dBm per Receiver spec
Response Response Status C ACCEPT.			Response Response Status C ACCEPT.
C/ 156 SC 156.8 P74	L11	# 73	C/ 156 SC 156.8 P74 L17 # 51
Maniloff, Eric Ciena			Zhang, Bo Marvell / Inphi
Comment Type <b>T</b> Comment Status <b>A</b> References to 35 dB should all be to 34dB, since th	is is the minimur	n Tx OSNR	Comment Type TR Comment Status A OSNR at TP3 value is not aligned with Transmitter in-band OSNR value
<i>tuggestedRemedy</i> Replace all references (lines 11, 12, 16, 19) to 35dE	3 (12.5GHz) with	34 dB (12.5GHz)	SuggestedRemedy Replace 35dB with 34dB
Response Response Status C ACCEPT.			Response Response Status C ACCEPT IN PRINCIPLE.
C/ 156 SC 156.8 P74	L <b>12</b>	# 50	See response to comment 73.
Zhang, Bo Marvell / Inph	ni		C/ 156 SC 156.8 P74 L19 # 52
Comment Type TR Comment Status A			Zhang, Bo Marvell / Inphi
OSNR at TP3 value is not aligned with Transmitter i	in-band OSNR va	alue	Comment Type TR Comment Status A
SuggestedRemedy			OSNR at TP3 value is not aligned with Transmitter in-band OSNR value
Replace 35dB with 34dB			SuggestedRemedy
Pesponse Response Status C			Replace 35dB with 34dB
,			Response Response Status C
ACCEPT IN PRINCIPLE.			
•			ACCEPT IN PRINCIPLE.

C/ 156	SC 156.8	P <b>74</b>	L <b>25</b>	# 55	C/ <b>156</b>	SC 156.9.9		P <b>76</b>	L <b>31</b>	# 24
Zhang, Bo		Marvell / Inphi			Le Chemin	ant, Greg		Keysight Tecl	hnologies	
Comment Typ	pe TR	Comment Status A			Comment 7	Гуре Т	Comment S	Status D		
Address -	TBD for fiber of	chromatic dispersion slope								status. EVM requires a
SuggestedRe	•	ps/km/nm/nm per P802.3ct sp			change	s in OSNR (see	e		0	n be seen as large
•					A spe	cification limit re	equires a know	n method of m	easurement. Th	ow_3cn_01_181025.pd ne complexity of the
Response ACCEPT		Response Status C			EVM m This pr	easurement rec ocess should be	quires a specifi e explcitly defin	c analysis proc ed. See	cess to achieve	consistent results.
	SC 156.8	P <b>74</b>	L <b>34</b>	# 74	7.pdf a	nd			_	neminant_3cn_01_1902
Maniloff, Eric		Ciena			9.pdf	grouper.ieee.org	g/groups/602/3/	/cn/public/adric	DC/19_0509/lect	neminant_3ct_01_1905
Comment Typ		Comment Status A		Interchannel cross talk	Suggestedl	Remedv				
		k is not a meaningful specifica the crosstalk needs to be defir		rent receiver. The	••	•	ng EVM has be	en developed k	by Keysight Tec	hnologies and used in
SuggestedRe			icu.		ITU and	d OIF standards	s. This is conta	ained within a la	arge Matlab scri	ipt. The computation his script is available fo
		should be replaced with a spo								tly written into the ted on the details for
presented		s on the DWDM Black Link. A	supporting con	Indution will be	script n		d inclusiion witl	hin the 802.3cv	v clauses. A p	resentation on the
presented Response	d.	Response Status <b>C</b>	supporting con	Indution will be	script n	nanagement an ht EVM script is	id inclusiion with s planned to sup	hin the 802.3cv oport this comr	v clauses. A p	
presented Res <i>ponse</i>		Response Status <b>C</b>	supporting con	Indution will be	script n Keysigl <i>Proposed F</i>	nanagement an ht EVM script is	d inclusiion with planned to sup <i>Response</i> S	hin the 802.3cv oport this comr Status <b>W</b>	v clauses. A p	
presented Response ACCEPT	d.	Response Status <b>C</b> E.	supporting con	Indution will be	script n Keysigl Proposed F PROPC	nanagement an ht EVM script is Response DSED ACCEPT	ad inclusiion with planned to sup <i>Response S</i> IN PRINCIPLE	hin the 802.3cv oport this comr Status <b>W</b>	v clauses. A p	
presented Response ACCEPT See respo	IN PRINCIPL	Response Status <b>C</b> E.		# 75	script n Keysigl <i>Proposed F</i> PROPC For tas	nanagement an ht EVM script is Response DSED ACCEPT k force discussi	id inclusiion with planned to sup <i>Response S</i> N PRINCIPLE ion.	hin the 802.3cd oport this comm Status W E.	w clauses. A p nent	resentation on the
presented Response ACCEPT See response	IN PRINCIPL onse to comm SC <b>156.9.5</b>	Response Status <b>C</b> E. nent 64.			script n Keysigl Proposed F PROPC	nanagement an ht EVM script is Response DSED ACCEPT	id inclusiion with planned to sup <i>Response S</i> N PRINCIPLE ion.	hin the 802.3cv oport this comr Status <b>W</b>	v clauses. A p	
presented Response ACCEPT See response C/ <b>156</b> Maniloff, Eric	d. IN PRINCIPL onse to comm SC <b>156.9.5</b>	Response Status C E. nent 64. P <b>76</b>			script n Keysigl Proposed F PROPO For tas C/ <b>156</b> Dawe, Pier	nanagement an ht EVM script is Response DSED ACCEPT k force discussi SC <b>156.9.12</b> s	id inclusiion with planned to sup <i>Response</i> S IN PRINCIPLE ion.	hin the 802.3cc oport this comr Status W E. P <b>77</b> Nvidia	w clauses. A p nent	resentation on the
presented Response ACCEPT See respo 2/ <b>156</b> Maniloff, Eric Comment Typ	d. IN PRINCIPL onse to comm SC <b>156.9.5</b> pe <b>T</b>	Response Status C E. nent 64. P <b>76</b> Ciena	L13	# [75	script n Keysigl Proposed F PROPO For tas C/ <b>156</b> Dawe, Pier Comment 7	nanagement an ht EVM script is Response DSED ACCEPT k force discussi SC <b>156.9.12</b> s Fype <b>TR</b>	d inclusiion with planned to sup <i>Response S</i> IN PRINCIPLE ion. <i>Comment S</i>	hin the 802.3cc oport this comr Status W E. P77 Nvidia Status R	v clauses. A p nent	resentation on the
presented Response ACCEPT See response C/ 156 Maniloff, Eric Comment Typ Laser Lin SuggestedRe	IN PRINCIPL onse to comm SC <b>156.9.5</b> De <b>T</b> ewidth defined emedy	Response Status C E. nent 64. <b>P76</b> Ciena Comment Status A d as a single parameter is insu	L13	# [75	script n Keysigl Proposed F PROPO For tas C/ <b>156</b> Dawe, Pier Comment 7 This su	nanagement an ht EVM script is Response DSED ACCEPT k force discussi SC <b>156.9.12</b> s Fype <b>TR</b>	ad inclusiion with planned to sup <i>Response</i> S IN PRINCIPLE ion. <i>Comment</i> S posed to define	hin the 802.3cc oport this comr Status W E. P77 Nvidia Status R transmitter in-	k clauses. A p nent <i>L</i> 3 band OSNR. It	resentation on the
presented Response ACCEPT See response C/ 156 Maniloff, Eric Comment Typ Laser Lin SuggestedRe	IN PRINCIPL onse to comm SC <b>156.9.5</b> De <b>T</b> ewidth defined emedy	Response Status C E. nent 64. P <b>76</b> Ciena Comment Status A	L13	# [75	script n Keysigl Proposed F PROPO For tas C/ <b>156</b> Dawe, Pier Comment 7 This su	nanagement an ht EVM script is Response DSED ACCEPT k force discussi SC <b>156.9.12</b> s Type <b>TR</b> lbclause is supp 9.11." but does	ad inclusiion with planned to sup <i>Response</i> S IN PRINCIPLE ion. <i>Comment</i> S posed to define	hin the 802.3cc oport this comr Status W E. P77 Nvidia Status R transmitter in-	k clauses. A p nent <i>L</i> 3 band OSNR. It	resentation on the
presented Response ACCEPT See respo Cl 156 Maniloff, Eric Comment Typ Laser Lin Suggested Re A laser fro	IN PRINCIPL onse to comm SC <b>156.9.5</b> De <b>T</b> ewidth defined emedy	Response Status C E. nent 64. <b>P76</b> Ciena Comment Status A d as a single parameter is insu	L13	# [75	script n Keysigl Proposed F PROPO For tas Cl 156 Dawe, Pier Comment 7 This su in 156.9 Suggested	nanagement an ht EVM script is Response DSED ACCEPT k force discussi SC <b>156.9.12</b> s Type <b>TR</b> lbclause is supp 9.11." but does	d inclusiion with planned to sup <i>Response</i> S IN PRINCIPLE ion. <i>Comment</i> S posed to define not say what "t	hin the 802.3cc oport this comr Status W E. P77 Nvidia Status R transmitter in-	k clauses. A p nent <i>L</i> 3 band OSNR. It	resentation on the
presented Response ACCEPT See respo C/ 156 Maniloff, Eric Comment Typ Laser Lin Suggested Re A laser fro Response	IN PRINCIPL onse to comm SC <b>156.9.5</b> De <b>T</b> ewidth defined emedy	Response Status C E. nent 64. <b>P76</b> Ciena Comment Status A d as a single parameter is insu	L13	# [75	script n Keysigl Proposed F PROPO For tas Cl 156 Dawe, Pier Comment 7 This su in 156.9 Suggested	nanagement an ht EVM script is Response DSED ACCEPT k force discussi SC 156.9.12 s Fype TR hbclause is supp 9.11." but does Remedy	d inclusiion with planned to sup <i>Response</i> S IN PRINCIPLE ion. <i>Comment</i> S posed to define not say what "t	hin the 802.3cc oport this comr Status W E. P77 Nvidia Status R transmitter in-b	k clauses. A p nent <i>L</i> 3 band OSNR. It	resentation on the
presented Response ACCEPT See respo Cl 156 Maniloff, Eric Comment Typ Laser Lin SuggestedRe A laser fro Response ACCEPT	d. IN PRINCIPL onse to comm SC <b>156.9.5</b> De <b>T</b> ewidth defined emedy equency noise	Response Status C E. nent 64. <b>P76</b> Ciena <i>Comment Status</i> A d as a single parameter is insu e mask should be included <i>Response Status</i> C E.	L13	# [75	script n Keysigl Proposed F PROPO For tas C/ <b>156</b> Dawe, Pier Comment 7 This su in 156.9 Suggested/ Comple	nanagement an ht EVM script is Response DSED ACCEPT k force discussi SC 156.9.12 s Type TR bclause is supp 9.11." but does Remedy ete the definition	ad inclusiion with s planned to sup <i>Response</i> S IN PRINCIPLE ion. <i>Comment</i> S posed to define not say what "t	hin the 802.3cc oport this comr Status W E. P77 Nvidia Status R transmitter in-b	k clauses. A p nent <i>L</i> 3 band OSNR. It	# <u>95</u>

Cl	156
SC	156.9.12

C/ 156 SC 156.9.22 P78 L17 # 76
Maniloff, Eric Ciena
Comment Type <b>T</b> Comment Status <b>A</b> Interchannel cross tal Inter-Channel Crosstalk is not a meaningful specification for a coherent receiver. The spectral distribution of the crosstalk needs to be defined. SuggestedRemedy
156.9.22 should be modified to include an adjacent channel spectral attenuation for the DWDM black link, and describe how this is used along with Tx spectrum to calculate the worst-case inter-channel crosstalk.
Response Response Status C ACCEPT IN PRINCIPLE.
See response to comment 64.
C/ 156 SC 156.10.2 P78 L38 # 101
Dawe, Piers Nvidia
Comment Type TR Comment Status R As the sentence above says, laser safety should apply at the Tx MDI also. As we know, TP2 is not at the MDI.
SuggestedRemedy
Change "to the single channel points at TP2 and TP3, as shown in Figure 156-3," to "where the signals are in separate fibers, such as TP2 and TP3 in Figure 156-3".
Response Response Status C REJECT.
This text exactly matches the corresponding text in 802.3ct 154.10.2, which was the first project to define Etherent operation over DWDM systems, and the stated intention is to ensure that 802.3cw is aligned with 802.3ct.

Comment Type E Verb fix

SuggestedRemedy

REJECT.

Replace: "that the manufacturer of a laser product provide information" with: "that the manufacturer of a laser product provides information"

Comment Status R

Response Response Status C

The existing text is consistent with multiple enforce clauses.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general	C/ 156	Page 20 of 21
COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn	SC 156.10.2	5/17/2021 5:45:29 PM

SORT ORDER: Clause, Subclause, page, line

C/ 156 SC 156.	11 P <b>79</b>	L <b>41</b>	# 92	C/ <b>156A</b>	SC 156A.4	P <b>88</b>	L <b>34</b>	# 56
Dawe, Piers	Nvidia			Zhang, Bo		Marvell / Inph	i	
Comment Type <b>TF</b>	Comment Status A			Comment	Type <b>TR</b>	Comment Status R		
which reminds us	d Figure 156-2 shows, TP2 is not that "The optical transmit signal is cord (TP2), between 2 m and 5 m	s defined at the c	utput end of a single-	unamp	lified scenarios	tween TP2 to TP3 is less than with Mux/dmux included	10dB, there is p	practically no usage for
	has been deleted from 154.11.	inteligitt. And	quivalent sentence to	Suggested				
SuggestedRemedy				Sugge	st remove this v	whole 156A.4 section		
	ce "At the transmitter output the N n TP3, as shown in Figure 156–2.'		h TP2 and at the	Response REJEC	CT.	Response Status C		
Response ACCEPT.	Response Status C			placeh	olders from 802	e beginning annex 156A states 2.3ct and are subject to change ecessary and is pending furthe	e". Analysis def	ining which scenarios
CI 156A SC 156A	<b>A.3</b> <i>P</i> 87	L <b>47</b>	# 93			, , ,		
Dawe, Piers	Nvidia			Contrib	outions are well	come to address which scenari	os can be supp	orted.
Comment Type <b>TR</b>	Comment Status R			C/ 156A	SC 156A.4	P <b>88</b>	L <b>54</b>	# <u>1</u> 02
	t if anything "application" means h	ere. Sometimes	it's the wrong word	Dawe, Pier	s	Nvidia		
-	4.309 link segment.			Comment	Type <b>TR</b>	Comment Status R		
	'Examples of DWDM black link ap		SNR" to "DWDM			at TP2 and TP3" yet we know een 2 m and 5 m in length (see		nd TP2 are separated
	e with OSNR" (there is only one ny application over any DWDM bl		and any number of	Suggested	Remedy			
	a particular DWDM black link dist			Delete	"at TP2 and TF	P3".		
<b>U</b> 1	ifically in an example application of	of 40 channels" to	o "Specifically in an	Response		Response Status C		
example with"; In 156A.4:				REJEC	T.			
<ol> <li>In 156A.4, cha black link example</li> <li>Change "four e</li> <li>Change "conve</li> <li>Conventional poir</li> <li>Change Table</li> <li>Table 156A-2</li> </ol>	nge "Example of DWDM black lin es with OSNR" (there are four exa examples of DWDM black link app entional point-to-point Ethernet ap nt-to-point Ethernet link segment v 156A-240 channel example DW 40-channel example with ne next three tables.	mples here); lications" to "fou plication where tl vhere the PMDs"	r examples"; ne PMDs" to ;	first pro	oject to define B	P3 in annex 156A is the same Etherent operation over DWDN w is aligned with 802.3ct.		
Response	Response Status C							
REJECT.								
project to define E	natches the corresponding text in therent operation over DWDM sy							

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

ensure that 802.3cw is aligned with 802.3ct.