CI 30	SC 30.5.1.1.2	P 21	L	# 2	CI 56	SC 56.1.1.1	P 34	L 20	# 4	
BOURGA	RT, Fabrice	Orange			BOURG	ART, Fabrice	Orange			
Comment	Type E C	omment Status D		EZ	Commer	nt Type E	Comment Status D			ΕZ
	planation is given on t the -BR extension.	he change of naming co	onvention moving	g from BX for 1Gb/s			entence "The 1000BASE-X P 00 Mb/s as defined in 66.2"	CS and PMA sub	players are used t	0
Suggestee	dRemedy				Suggest	edRemedy				
	or newcomers to the IE s the line rates in the c	EEE world a note explai locument	ning the reason	since remains stable			Ild be made 1000Mb/s			
'	Response Re POSED ACCEPT IN P	esponse Status W			•	d Response POSED ACCEP	Response Status W			
		to explain BR in Cl 157.			CI 56	SC 56.1.1.2	P34	L28	# 5	
CI 30	SC 30.5.1.1.2	P 21	L15	# 3	BOURG	ART, Fabrice	Orange			
BOURGA	RT, Fabrice	Orange			Commer	nt Type E	Comment Status D			EZ
Comment From	51	comment Status D	of RP40 , vc RI	<i>EZ</i> R40 before table 158-10		ed value of the co work?	opper references is unsure, he	ere unless for a b	oug fixing not relat	ted to
		is given on the pulpose	5 01 D1 140+ VS D1		Suggest	edRemedy				
Suggester	•	e explained sooner tha	n it is now not to	onfuso the reader	Rem	ove from this text	t ?			
-		-		official file feader	Propose	d Response	Response Status W			
'	POSED ACCEPT IN P	esponse Status W				POSED REJECT				
-	se to explain BR40+ in	-				5.1.1.2 gives a co	mplete description of P2P me	dia developed b	y 802.3.	
C/ 30	SC 30.5.1.1.2	P21	L15	# 1	Cl 56	SC Table 56	6-1 P37	L 6	# 6	
	RT, Fabrice	Orange	215	π	BOURG	ART, Fabrice	Orange			
Comment		comment Status D		EZ	Commer	nt Type T	Comment Status D			LB
	J1= -	is "supporting a dsitand	o of at least nn l				been defined to cover distanc			ł0"
				distance are introduced,			It in splitting the market and w link engineering is required.	/iii cause invento	ry problems with	
it wou	ld be safer to refer to a	actual optical budget en	abled by module	e pairings		edRemedy				
Suggestee	dRemedy				00		nce and best practices that op	oto-electronic ma	nufacturers have	
Refer	to optical budget value	es later described in tab	oles 158-16, 159-	-15 and 160-15	deve	eloped for PONs, i	it is believed that thanks to a	15dB dynamic th	e full range of	
-	Response Re POSED REJECT.	esponse Status W					uld be covered with only two n d solve some issues documer			
		pe legacy, it registers .3	cp BiDi PHY into	o CI 30.	Propose	d Response	Response Status W			
	,		•							

PROPOSED ACCEPT IN PRINCIPLE.

Propose to consider 15dB dynamic range in loss budget specifications.

Cl 56	SC Table 56-	1 P 37	L 6	# 7	CI 158 SC 158	B.6.1 P5	4 <i>L</i> 21	# 18
BOURGAR	T, Fabrice	Orange			Wey, Jun Shan	ZTE	TX Inc.	-
	listances are ma	Comment Status D de uncertain because of very to refer to optical budgets	diverse passive	<i>EZ</i> e plant engineering		R Comment Status		
SuggestedF	Remedy				SuggestedRemedy Correct the value	es for BR20		
Replace specified		h distances by optical budget	classes enable	d by the modules	Proposed Response	Response Status	W	
) SED REJECT.	Response Status W	eference to each	type of BiDi PHY.	PROPOSED RE This design follo higher than BR1 BR10.	JECT. ws the principle we discuss 0 Tx. BR20 is 6.8 dB highe	ed in last conference ca r than BR10. BR40+ is	all. BR40 Tx is 1.8 dB 6.8 dB higher than
/ 158	SC 158.5.6	P 41	L 53	# 16	C/ 158 SC 158	3.6.1 <i>P</i> 5	5 L12	# 19
Vey, Jun S	Shan	ZTE TX Inc.			Wey, Jun Shan	ZTE	TX Inc.	
	n this sentence: lobal_transmit_c	Comment Status D "PMDs compliant with this cl. disable function which allows			Table 158-7. PM SuggestedRemedy	R Comment Status		
uggestedF	Remedy				Correct the value Proposed Response			
Proposed R	,	Response Status W			PROPOSED RE	JECT.		
	SED ACCEPT. SC 158.6	,	L	# 17	This design follo	ws the principle we discuss 0 Tx. BR20 is 6.8 dB highe		
/ 158	SC 158.6	,	L	# 17	This design follo higher than BR1	ws the principle we discuss 0 Tx. BR20 is 6.8 dB highe	er than BR10. BR40+ is	
7 158 Vey, Jun Sl	SC 158.6 Shan	P53	L	# [<u>17</u>	This design follo higher than BR1 BR10.	ws the principle we discuss 0 Tx. BR20 is 6.8 dB highe 3.10 P6	er than BR10. BR40+ is	6.8 dB higher than
C/ 158 Ney, Jun Si Comment Ty It is uncl and min SuggestedFi	SC 158.6 Shan Sype TR Selear what the lose In loss for each tr	P53 ZTE TX Inc. Comment Status D ss budget for BR40+ is. It wor ansmission class		LB	This design follor higher than BR10 BR10. Cl 158 SC 156 Wey, Jun Shan Comment Type T Table 158-16 To align with ITL budget classes. G.9806 draft spe	ws the principle we discuss 0 Tx. BR20 is 6.8 dB highe 3.10 P6 ZTE R Comment Status J-T G.9806 specifications, c ec: Class S (0-15dB), Class	er than BR10. BR40+ is 5 L1 TX Inc. D consider a 15dB dynami (10-25dB)	6.8 dB higher than # 20
Cl 158 Vey, Jun Si Comment Ty It is unc and min Suggested R Describe Proposed R	SC 158.6 Shan Spe TR Clear what the los In loss for each tr Remedy the loss budge Response	P53 ZTE TX Inc. Comment Status D ss budget for BR40+ is. It wor ansmission class et for BR40+ Response Status W		LB	This design follo higher than BR10 BR10. Cl 158 SC 158 Wey, Jun Shan Comment Type T Table 158-16 To align with ITU budget classes. G.9806 draft spe This comment al	ws the principle we discuss 0 Tx. BR20 is 6.8 dB highe 3.10 P6 ZTE TR Comment Status J-T G.9806 specifications, c	er than BR10. BR40+ is 5 L1 TX Inc. D consider a 15dB dynami (10-25dB)	6.8 dB higher than # 20
Cl 158 Ney, Jun Si Comment Ty It is unc and min SuggestedR Describe Proposed R PROPO	SC 158.6 Shan Type TR clear what the los n loss for each tr Remedy the the loss budge Response DSED ACCEPT I e to clarify this ir	P53 ZTE TX Inc. Comment Status D ss budget for BR40+ is. It wor ansmission class et for BR40+ Response Status W	uld be helpful to	<i>LB</i> show a table of max	This design follor higher than BR10 BR10. Cl 158 SC 156 Wey, Jun Shan Comment Type T Table 158-16 To align with ITL budget classes. G.9806 draft spe	ws the principle we discuss 0 Tx. BR20 is 6.8 dB highe 3.10 P6 ZTE R Comment Status J-T G.9806 specifications, c ec: Class S (0-15dB), Class so applies to Table 159-15	er than BR10. BR40+ is 5 L1 TX Inc. D consider a 15dB dynami (10-25dB)	6.8 dB higher than # 20

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C/ 158	SC 158.11.2.1	Dec	L13	# 14	C/ 158	60	Table 15	9 10	P58	L9	# 05	
	RT, Fabrice	P 66 Orange	L 13	# 14	Rafel, Alt		Table 15	0-10	Р 58 ВТ	L 9	# 25	
Comment	,	Comment Status D		LB	Comment		TR	Comm	ent Status D			LB
A 2 dE short. <i>Suggested</i> Is it sa	B allowance for cor	nectors and splices in such details about enc			Table Chan tempe allows	158-10 nel Inse rature back t links. T) on Page ertion Loss range ass to back tes	s specification for sting and a	voiding the use of	ninimum and ma 0.0 dB value for an optical atten		۱
Proposed	Response	Response Status W	,		Suggeste	dReme	dy					
	OSED ACCEPT II se to discuss this a	N PRINCIPLE. allowance in loss budg	et review.		propo	sed of	0.0 dB. Cł	nange the	ith a minimum Cha value of 6.3 dB in	Draft to a new va	alue of 9.0 dB for	
C/ 158	SC Table 158-	16 P65	L 5	# 12	maximum Channel Insertion Loss. The maximum Channel insertion loss of 9 dB can achieved by narrowing the transmit power range used for 6.3 dB.							
BOURGA	RT, Fabrice	Orange			Chan	ge 13 d	IB into 15	dB for max	channel insertion	loss, its min is () dB.	
Comment	51	Comment Status D	vis at 1270nm	EZ			ax channe dB class.	l insertion	loss, its min value	is 10 dB.		
Suggested	, 0 0	oro, while the white	13 at 127 01111		Proposed	,		'	nse Status W			
00	,	the 1270nm window			Multip	le oper		IN PRINC	CIPLE. Comments on loss b	oudgets. Propose	e to consider this	
Proposed PROP	<i>Response</i> OSED ACCEPT.	Response Status W			propo	sal.						
C/ 158	SC Table 158-	10 <i>P</i> 58	L 9	# 11								
BOURGA	RT, Fabrice	Orange										
Chann	<i>Type</i> T nel insertion loss w relevant waveleng	Comment Status D ith footnote d & e do n ths.	ot match what can be	SV e found in other tables								
	<i>IRemedy</i> dering the table 15 + 2 = 7dB > 6.2 dE											
Proposed PROP	<i>Response</i> OSED ACCEPT II	<i>Response Status</i> W N PRINCIPLE.										

C/ 158 SC Table 158-10	P 58	L 9	# 27	C/ 158	SC Table 15	58-17	P 65	L 49	# 13	
Khotimsky, Denis	Verizon		-	BOURGA	RT, Fabrice		Orange			
Comment Type TR Comment	Status D		LE	Comment	Туре Т	Comment S	Status D			ΕZ
Presently specified budget classes k assumptions listed in the correspond	ling tables (Tab	158-10, 159-10,	, 160-10). Normally,		not give the atter ad of 0.4 or 0.5 w				avelength windows	s used
fiber distance increase comes at lea contribute to the insertion loss. I wou				Suggested	dRemedy					
contribute to the insertion loss. I wot	nd suggest reder	inning the power	0103363.	figure	s must be made	consistent acro	ss the tables	158-5, 158-10 ar	nd 158-17	
Same comment applies to Tables 15 158/159/160-8, 158/159/160-9, 159		58/159/160-6, 1	158/159/160-7,	•	<i>Response</i> POSED ACCEPT	<i>Response S</i> T IN PRINCIPLE				
SuggestedRemedy				-	se to check othe	-		nt style		
Propose to specify budget loss as th 0(min)-9 dB(max),	e follwing three of	classes:		C/ 158	SC Table 15	58-5	P 53	L 45	# 9	
0(min)-15 dB(max), and 10(min)-23 dB(max).				BOURGA	RT, Fabrice		Orange			
10(mm)-23 dB(max).				Comment	Туре Т	Comment S	Status D			D
Apply the above changes to Tables 158/159/160-8, 158/159/160-9, 159		158/159/160-6,	158/159/160-7,		dering the up an c max with modu				old seems lower t	than
Proposed Response Response	Status W			Suggosto	dRemedy					
noposed nesponse nesponse				Suggester						
PROPOSED ACCEPT IN PRINCIPL Multiple operators send similar comr proposal.	E.	idgets. Propose	to consider this	Back are re	to back testing s				indicate that atten a 2m patchcord (e	
PROPOSED ACCEPT IN PRINCIPL Multiple operators send similar comr proposal.	.E. nents on loss bu			Back are re for BF	to back testing s equired given the		and testing is			
PROPOSED ACCEPT IN PRINCIPL Multiple operators send similar comr proposal.	.E. ments on loss bu P 58	udgets. Propose	to consider this # 29	Back are re for BF <i>Proposed</i> PROF	to back testing s quired given the R40 & 40+) <i>Response</i> POSED ACCEPT	e current figures <i>Response S</i> T IN PRINCIPLE	and testing is Status W	mentioned with a		
PROPOSED ACCEPT IN PRINCIPL Multiple operators send similar comm proposal. Cl 158 SC Table 158-10 Dawes, Peter	E. nents on loss bu P 58 Vodafone		# 29	Back are re for BF <i>Proposed</i> PROF Propo	to back testing s quired given the R40 & 40+) <i>Response</i>	e current figures <i>Response S</i> T IN PRINCIPLE	and testing is Status W	mentioned with a		
PROPOSED ACCEPT IN PRINCIPL Multiple operators send similar comr proposal. Cl 158 SC Table 158-10 Dawes, Peter Comment Type TR Comment	E. nents on loss bu P58 Vodafone Status D	L9	# [<u>29</u> LE	Back are re for BF <i>Proposed</i> PROF Propo	to back testing s quired given the R40 & 40+) <i>Response</i> POSED ACCEPT	e current figures Response S T IN PRINCIPLE support of back	and testing is Status W	mentioned with a		
PROPOSED ACCEPT IN PRINCIPL Multiple operators send similar comr proposal. Cl 158 SC Table 158-10 Dawes, Peter	E. nents on loss bu P58 Vodafone Status D be updated by p	L9	# 29 LE n and max values.	Back are re for BF <i>Proposed</i> PROF Propo <i>Cl</i> 158	to back testing s quired given the R40 & 40+) <i>Response</i> POSED ACCEPT ase to clarify the s	e current figures Response S T IN PRINCIPLE support of back	and testing is Status W E. to back testin	mentioned with a	a 2m patchcord (6	
PROPOSED ACCEPT IN PRINCIPL Multiple operators send similar comm proposal. Cl 158 SC Table 158-10 Dawes, Peter Comment Type TR Comment Channel insertion loss specs should Current values of 6.3 dB, 13 dB, 18 d	E. nents on loss bu P58 Vodafone Status D be updated by p dB, and 23 dB st	L9 providing the min hould be update	# 29 LE n and max values. ed.	Back are re for BF Proposed PROF Propo Cl 158 BOURGA	to back testing s quired given the A40 & 40+) Response POSED ACCEPT se to clarify the SC Table 15	e current figures Response S T IN PRINCIPLE support of back	and testing is Status W E. to back testin P53 Orange	mentioned with a	a 2m patchcord (6	e.g.
PROPOSED ACCEPT IN PRINCIPL Multiple operators send similar comm proposal. Cl 158 SC Table 158-10 Dawes, Peter Comment Type TR Comment Channel insertion loss specs should Current values of 6.3 dB, 13 dB, 18 d Same comment applies to 25G loss 160 (Table 160-10)	E. nents on loss bu P58 Vodafone Status D be updated by p dB, and 23 dB st	L9 providing the min hould be update	# 29 LE n and max values. ed.	Back are re for BF Proposed PROF Propo Cl 158 BOURGA Comment "Minin	to back testing s equired given the R40 & 40+) Response POSED ACCEPT set to clarify the SC Table 15 RT, Fabrice Type T	e current figures Response S T IN PRINCIPLE support of back 58-5 Comment S	and testing is Status W E. to back testin P53 Orange Status D	mentioned with a ng. L 45	a 2m patchcord (6	e.g. D
PROPOSED ACCEPT IN PRINCIPL Multiple operators send similar comm proposal. Cl 158 SC Table 158-10 Dawes, Peter Comment Type TR Comment Channel insertion loss specs should Current values of 6.3 dB, 13 dB, 18 d Same comment applies to 25G loss 160 (Table 160-10) SuggestedRemedy	E. nents on loss bu P58 Vodafone Status D be updated by p dB, and 23 dB st in Clause 159 (T	L9 providing the min hould be update Fable 159-10) ar	# 29 LE n and max values. ed. nd 50G loss in Clause	Back are re for BF Proposed PROF Propo Cl 158 BOURGA Comment "Minin in the	to back testing s equired given the Response POSED ACCEPT se to clarify the SC Table 15 RT, Fabrice Type T num range" value section.	e current figures Response S T IN PRINCIPLE support of back 58-5 Comment S	and testing is Status W E. to back testin P53 Orange Status D	mentioned with a ng. L 45	a 2m patchcord (6	e.g. D
PROPOSED ACCEPT IN PRINCIPL Multiple operators send similar comm proposal. Cl 158 SC Table 158-10 Dawes, Peter Comment Type TR Comment Channel insertion loss specs should Current values of 6.3 dB, 13 dB, 18 d Same comment applies to 25G loss 160 (Table 160-10) SuggestedRemedy Propose to specify channel insertion	E. nents on loss bu P58 Vodafone Status D be updated by p dB, and 23 dB st in Clause 159 (T	L9 providing the min hould be update Fable 159-10) ar	# 29 LE n and max values. ed. nd 50G loss in Clause	Back are re for BF Proposed PROF Propo Cl 158 BOURGA Comment "Minin in the Suggested	to back testing s equired given the A40 & 40+) Response POSED ACCEPT se to clarify the SC Table 15 RT, Fabrice Type T num range" value section. dRemedy	e current figures Response S T IN PRINCIPLE support of back 58-5 Comment S les don't seem p	and testing is Status W to back testin P53 Orange Status D practical given	mentioned with a ng. <i>L</i> 45 the figures and a	# 8	e.g. D n later
PROPOSED ACCEPT IN PRINCIPL Multiple operators send similar comm proposal. Cl 158 SC Table 158-10 Dawes, Peter Comment Type TR Comment Channel insertion loss specs should Current values of 6.3 dB, 13 dB, 18 d Same comment applies to 25G loss 160 (Table 160-10) SuggestedRemedy	E. ments on loss bu P58 Vodafone Status D be updated by p dB, and 23 dB sł in Clause 159 (T loss as two rows lue.	L9 providing the min hould be update Fable 159-10) ar s in the table: of	# 29 LE n and max values. ed. nd 50G loss in Clause ne row for minimum	Back are re for BF Proposed PROF Propo Cl 158 BOURGA Comment "Minin in the Suggested Either lineic dynan	to back testing s equired given the R40 & 40+) Response POSED ACCEPT set to clarify the s SC Table 15 RT, Fabrice Type T num range" value section. dRemedy assuptions need loss of fibre (0.4	e current figures Response S T IN PRINCIPLE support of back 58-5 Comment S les don't seem p d to be changed or 0.5 accordin between 0m and	And testing is Status W to back testin P53 Orange Status D practical given d or minimum g to table 158 d 40km exceed	the figures and a range values. Fo	a 2m patchcord (6	e.g. D n later the ns, the
PROPOSED ACCEPT IN PRINCIPL Multiple operators send similar comm proposal. Cl 158 SC Table 158-10 Dawes, Peter Comment Type TR Comment Channel insertion loss specs should Current values of 6.3 dB, 13 dB, 18 d Same comment applies to 25G loss 160 (Table 160-10) SuggestedRemedy Propose to specify channel insertion value and the other for maximum va Propose to specify 3 classes as cha	E. ments on loss bu P58 Vodafone Status D be updated by p dB, and 23 dB sH in Clause 159 (T loss as two rows lue. nnel insertion los	L9 providing the min hould be update Fable 159-10) ar s in the table: of	# 29 LE n and max values. ed. nd 50G loss in Clause ne row for minimum	Back are re for BF Proposed PROF Propo Cl 158 BOURGA Comment "Minin in the Suggested Either lineic dynan specif	to back testing s equired given the Response POSED ACCEPT set to clarify the SC Table 15 RT, Fabrice Type T num range" value section. dRemedy assuptions need loss of fibre (0.4 nic of fibre loss b	e current figures Response S T IN PRINCIPLE support of back 58-5 Comment S les don't seem p d to be changed or 0.5 accordin between 0m and	And testing is Status W to back testin P53 Orange Status D practical given d or minimum g to table 158 d 40km exceed nuators?).	the figures and a range values. Fo	# 8 # 8 assumptions given or instance given t dered wavelength	e.g. D n later the ns, the
PROPOSED ACCEPT IN PRINCIPL Multiple operators send similar comm proposal.	E. ments on loss bu P58 Vodafone Status D be updated by p dB, and 23 dB st in Clause 159 (T loss as two rows lue. nnel insertion los a 159 and 160.	L9 providing the min hould be update Fable 159-10) ar s in the table: of	# 29 LE n and max values. ed. nd 50G loss in Clause ne row for minimum	Back are re for BF Proposed PROF Propo Cl 158 BOURGA Comment "Minin in the Suggested Either lineic dynan specif Proposed	to back testing s quired given the A40 & 40+) Response POSED ACCEPT se to clarify the SC Table 15 RT, Fabrice Type T num range" value section. dRemedy assuptions need loss of fibre (0.4 nic of fibre loss b fic external conditional conditional conditional conditional conditional conditional conditional conditional con	e current figures Response S T IN PRINCIPLE support of back 58-5 Comment S les don't seem p d to be changed or 0.5 accordin between 0m and itions (e.g. atten Response S	And testing is Status W to back testin P53 Orange Status D bractical given d or minimum g to table 158 d 40km exceed huators?). Status W	the figures and a range values. Fo	# 8 # 8 assumptions given or instance given t dered wavelength	e.g. D n later the ns, the

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/ 158 SC Table 158-5

C/ 158 SC Table 158-6	P 54	L 20	# 37		C/ 159	SC 6.1	P 78	L 8	# 34	
₋uo, Yuanqiu	Futurewei				Frank, Effer	nberger	Futurewe	ei Technologies		
Comment Type TR C	Comment Status D			SV	Comment T	, i	Comment Status D			WL
In Table 158-6, row "Side M 10GBASEBR40+-D values		(min)", both 10GI	BASEBR20-D and				engths for BR20 and high ersion impacts can be fou			
SuggestedRemedy					SuggestedF	Remedy				
Propose to set these two va	alues as 30 dB.						ngth should be 1260 to 12			nitter,
Proposed Response Re PROPOSED ACCEPT IN P	Pesponse Status W PRINCIPLE.				EMLs, s	so this seems	for free from DMLs. DML to be a no brainer. And, b up and down becomes 20	by shifting to a short	er wavelength, the	
C/ 158 SC Table 158-8	P 56	L17	# 10		If accep	ted, this would	l affect tables 159-6, 7, 8,	and 9; and tables	160-6, 7, 8, and 9.	
BOURGART, Fabrice	Orange				Proposed R	esponse	Response Status W			
Comment Type E C No unit is given for the "Max	Comment Status D	r damage)"		SV			IN PRINCIPLE.			
SuggestedRemedy					C/ 159	SC 6.1	P113	L 8	# 30	
Should it be "dBm" ?					Frank, Effer	nberger	Futurewe	ei Technologies		
Proposed Response Re	esponse Status W				Comment T	ype T	Comment Status D			WL
PROPOSED ACCEPT IN P	'RINCIPLE.						engths for BR20 and high is can be found in Liu_3cp		standard wavelength	ıs.
C/ 159 SC 6.1	P 78	L 8	# 31		SuggestedF					
	P 78 Futurewei Teo	-	# 31		SuggestedF THe do	Remedy wnstream wav	elength should be specifie	ed 1300-1320 nm.		
rank, Effenberger		-	# 31	WL	SuggestedF THe dov dispersi	Remedy wnstream wav on, this band v	would require a chirp-free	ed 1300-1320 nm.		
Frank, Effenberger Comment Type T C To optimize the wavelength	Futurewei Teo Comment Status D ns for BR20 and higher, w	chnologies we should use a r	more standard	WL	SuggestedF THe dov dispersi enables	Remedy wnstream wav on, this band w uncooled ope	would require a chirp-free ration (potentially).	ed 1300-1320 nm.		
Frank, Effenberger Comment Type T C To optimize the wavelength wavelength. The dispersion	Futurewei Teo Comment Status D ns for BR20 and higher, w	chnologies we should use a r	more standard	WL	SuggestedF THe do dispersi enables Proposed R	Remedy wnstream wav on, this band v uncooled ope esponse	would require a chirp-free ration (potentially). Response Status W	ed 1300-1320 nm.		
Frank, Effenberger Comment Type T C To optimize the wavelength wavelength. The dispersion SuggestedRemedy	Futurewei Teo Comment Status D ns for BR20 and higher, w n impacts can be found ir	chnologies we should use a r n Liu_3cp_1_190	more standard 09.		SuggestedF THe do dispersi enables Proposed R PROPC	Remedy wnstream wav on, this band v uncooled ope esponse DSED ACCEP	would require a chirp-free ration (potentially).	ed 1300-1320 nm.		
Frank, Effenberger Comment Type T C To optimize the wavelength wavelength. The dispersion SuggestedRemedy THe upstream wavelength s but such chirp comes for free	Futurewei Teo Comment Status D ns for BR20 and higher, w n impacts can be found ir should be 1260 to 1280 r ee from DMLs. DML's an	chnologies we should use a r n Liu_3cp_1_190 nm. This require re cheaper and h	more standard 09. Is a chirped transm igher power than		SuggestedF THe do dispersi enables Proposed R PROPC	Remedy wnstream wav on, this band v uncooled ope esponse DSED ACCEP	would require a chirp-free ration (potentially). <i>Response Status</i> W I IN PRINCIPLE.	ed 1300-1320 nm.		
 Frank, Effenberger Formment Type T C To optimize the wavelength wavelength. The dispersion FuggestedRemedy THe upstream wavelength so but such chirp comes for free EMLs, so this seems to be 	Futurewei Tec Comment Status D ns for BR20 and higher, w n impacts can be found ir should be 1260 to 1280 r ee from DMLs. DML's ar a no brainer. And, by sh	chnologies we should use a r n Liu_3cp_1_190 nm. This require re cheaper and h nifting to a shorter	more standard 09. s a chirped transm igher power than r wavelength, the		SuggestedF THe do dispersi enables Proposed R PROPC Propose	Remedy wnstream wav on this band uncooled ope esponse DSED ACCEP to discuss th SC 6.1	would require a chirp-free ration (potentially). <i>Response Status</i> W I IN PRINCIPLE. is and make a decision. P113	ed 1300-1320 nm. Tx, which is not too	bad. The width als	
Frank, Effenberger Comment Type T C To optimize the wavelength wavelength. The dispersion SuggestedRemedy THe upstream wavelength s but such chirp comes for fre EMLs, so this seems to be guard band between up and	Futurewei Tec Comment Status D his for BR20 and higher, w n impacts can be found in should be 1260 to 1280 r ee from DMLs. DML's ar a no brainer. And, by sh d down becomes 20nm, w	chnologies we should use a r n Liu_3cp_1_190 nm. This require re cheaper and h ifting to a shorter which is much m	more standard 09. s a chirped transm igher power than r wavelength, the ore forgiving.		SuggestedF THe dor dispersi enables Proposed R PROPC Propose Cl 159	Remedy wnstream wav on, this band w uncooled ope esponse OSED ACCEP e to discuss th SC 6.1 nberger	would require a chirp-free ration (potentially). <i>Response Status</i> W I IN PRINCIPLE. is and make a decision. P113	ed 1300-1320 nm. Tx, which is not too	bad. The width als	
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Frank, Effenberger Comment Type T C To optimize the wavelength wavelength. The dispersion SuggestedRemedy THe upstream wavelength s but such chirp comes for fre EMLs, so this seems to be guard band between up and If accepted, this would affect Proposed Response Reference	Futurewei Tec Comment Status D hs for BR20 and higher, w n impacts can be found in should be 1260 to 1280 r ee from DMLs. DML's ar a no brainer. And, by sh d down becomes 20nm, w ct tables 159-6, 7, 8, and <i>Response Status</i> W PRINCIPLE.	chnologies we should use a r n Liu_3cp_1_190 nm. This require re cheaper and h ifting to a shorter which is much m	more standard 09. s a chirped transm igher power than r wavelength, the ore forgiving.		SuggestedF THe do dispersi enables Proposed R PROPC Propose Cl 159 Frank, Effer Comment T To optir The disp SuggestedF THe do dispersi	Remedy wnstream wav on, this band wav on uncooled ope esponse DSED ACCEP to discuss th SC 6.1 nberger ype T nize the wavel persion impact Remedy wnstream wav on, this band wave	would require a chirp-free ration (potentially). <i>Response Status</i> W I IN PRINCIPLE. is and make a decision. <i>P</i> 113 Futurewe <i>Comment Status</i> D engths for BR20 and high	<i>L</i> 8 <i>L</i> 8 ET Technologies ET, we should use so 0_1_1909.	# 33 standard wavelength	o WL ns.
Frank, Effenberger Comment Type T C To optimize the wavelength wavelength. The dispersion CuggestedRemedy THe upstream wavelength s but such chirp comes for fre EMLs, so this seems to be guard band between up and If accepted, this would affect Proposed Response Re PROPOSED ACCEPT IN P	Futurewei Tec Comment Status D hs for BR20 and higher, w n impacts can be found in should be 1260 to 1280 r ee from DMLs. DML's ar a no brainer. And, by sh d down becomes 20nm, w ct tables 159-6, 7, 8, and <i>Response Status</i> W PRINCIPLE.	chnologies we should use a r n Liu_3cp_1_190 nm. This require re cheaper and h ifting to a shorter which is much m	more standard 09. s a chirped transm igher power than r wavelength, the ore forgiving.		SuggestedF THe do dispersi enables Proposed R PROPC Propose Cl 159 Frank, Effer Comment T To optir The disp SuggestedF THe do dispersi	Remedy wnstream wav on this band wav uncooled ope esponse DSED ACCEP to discuss th SC 6.1 nberger ype T nize the wavel persion impact Remedy wnstream wav on, this band wavel uncooled ope	would require a chirp-free ration (potentially). Response Status W T IN PRINCIPLE. is and make a decision. P113 Futurewe Comment Status D engths for BR20 and high is can be found in Liu_3cp elength should be specifie would require a chirp-free	<i>L</i> 8 <i>L</i> 8 ET Technologies ET, we should use so 0_1_1909.	# 33 standard wavelength	o WL ns.
Frank, Effenberger Comment Type T C To optimize the wavelength wavelength. The dispersion SuggestedRemedy THe upstream wavelength s but such chirp comes for fre EMLs, so this seems to be guard band between up and If accepted, this would affect Proposed Response Re PROPOSED ACCEPT IN P	Futurewei Tec Comment Status D hs for BR20 and higher, w n impacts can be found in should be 1260 to 1280 r ee from DMLs. DML's ar a no brainer. And, by sh d down becomes 20nm, w ct tables 159-6, 7, 8, and <i>Response Status</i> W PRINCIPLE.	chnologies we should use a r n Liu_3cp_1_190 nm. This require re cheaper and h ifting to a shorter which is much m	more standard 09. s a chirped transm igher power than r wavelength, the ore forgiving.		SuggestedF THe dor dispersi enables Proposed R PROPC Propose Cl 159 Frank, Effer Comment T To optir The disp SuggestedF THe dor dispersi enables Proposed R PROPC	Remedy wnstream wav on this band of esponse DSED ACCEP to discuss th SC 6.1 nberger ype T nize the wavel persion impact Remedy wnstream wav on this band of uncooled ope esponse DSED ACCEP	would require a chirp-free ration (potentially). <i>Response Status</i> W F IN PRINCIPLE. is and make a decision. P113 Futurewe <i>Comment Status</i> D engths for BR20 and high is can be found in Liu_3cp elength should be specifie would require a chirp-free ration (potentially).	<i>L</i> 8 <i>L</i> 8 ET Technologies ET, we should use so 0_1_1909.	# 33 standard wavelength	o WL ns.
Frank, Effenberger Comment Type T C To optimize the wavelength wavelength. The dispersion SuggestedRemedy THe upstream wavelength s but such chirp comes for fre EMLs, so this seems to be guard band between up and If accepted, this would affect Proposed Response Re PROPOSED ACCEPT IN P	Futurewei Tec Comment Status D his for BR20 and higher, win impacts can be found in should be 1260 to 1280 r ee from DMLs. DML's ar a no brainer. And, by sh d down becomes 20nm, with ct tables 159-6, 7, 8, and PRINCIPLE. d make a decision.	chnologies we should use a r in Liu_3cp_1_190 nm. This require re cheaper and h nifting to a shorter which is much m d 9; and tables 16	more standard 09. Is a chirped transmigher power than r wavelength, the ore forgiving. 60-6, 7, 8, and 9.	nitter,	SuggestedF THe do dispersi enables Proposed R PROPC Propose Cl 159 Frank, Effer Comment T To optir The disp SuggestedF THe do dispersi enables Proposed R PROPC Propose	Remedy wnstream wav on this band of esponse DSED ACCEP to discuss th SC 6.1 nberger ype T nize the wavel persion impact Remedy wnstream wav on this band of uncooled ope esponse DSED ACCEP	would require a chirp-free ration (potentially). Response Status W F IN PRINCIPLE. is and make a decision. P113 Futurewe Comment Status D engths for BR20 and high is can be found in Liu_3cp elength should be specifie would require a chirp-free ration (potentially). Response Status W F IN PRINCIPLE. is and make a decision.	<i>L</i> 8 <i>L</i> 8 ET Technologies ET, we should use so 0_1_1909.	# 33 standard wavelength	WL ns. and o
Frank, Effenberger Comment Type T C To optimize the wavelength wavelength. The dispersion SuggestedRemedy THe upstream wavelength so but such chirp comes for fre EMLs, so this seems to be guard band between up and If accepted, this would affed PROPOSED ACCEPT IN P Propose to discuss this and	Futurewei Teo Comment Status D his for BR20 and higher, wind impacts can be found in should be 1260 to 1280 right ee from DMLs. DML's arright a no brainer. And, by shid down becomes 20nm, with ct tables 159-6, 7, 8, and <i>Desponse Status</i> W PRINCIPLE. d make a decision.	chnologies we should use a r in Liu_3cp_1_190 nm. This require re cheaper and h nifting to a shorter which is much m d 9; and tables 16	more standard)9. s a chirped transmigher power than r wavelength, the ore forgiving. 60-6, 7, 8, and 9.	itorial G/g	SuggestedF THe do dispersi enables Proposed R PROPC Propose Cl 159 Frank, Effer Comment T To optir The disp SuggestedF THe do dispersi enables Proposed R PROPC Propose	Remedy winstream wav on, this band w uncooled oper esponse DSED ACCEP to discuss th SC 6.1 nberger ype T nize the wavel persion impact Remedy winstream wav on, this band w uncooled oper esponse DSED ACCEP to discuss th	would require a chirp-free ration (potentially). Response Status W F IN PRINCIPLE. is and make a decision. P113 Futurewe Comment Status D engths for BR20 and high is can be found in Liu_3cp elength should be specifie would require a chirp-free ration (potentially). Response Status W F IN PRINCIPLE. is and make a decision. Chi	<i>L</i> 8 <i>L</i> 8 Tx, which is not too <i>L</i> 8 Technologies ber, we should use s b_1_1909. d 1300-1320 nm. Tx, which is not too	# 33 standard wavelength Given the distance a bad. The width als	o WL ns. and o

	Ditte	1.10	" 22		01.450			201		"	
Cl 159 SC 159.6	P113	L 12	# 22		C/ 159		ble 159-10	<i>P</i> 81	L 4	# 24	
Wey, Jun Shan	ZTE TX Inc.				Rafel, Albe			BT			
Comment Type TR Table 159-6	Comment Status D			LB	Comment			comment Status D		Channel Insertion	LB
	a dynamic range of 14dB, while	e the other clas	ses are at 9dB, 4dB.					lean version, row 4. Prop OTH minimum and maxin			
Why such a high dyna	mic range for this class?							A 0.0 dB value for min			
SuggestedRemedy								e use of an optical atten nannel Insertion Loss add			
Discussion needed					Suggested	lRemedv					
Proposed Response	Response Status W						a row in Ta	ble with a minimum Char	nel Insertion L	oss with a value	
PROPOSED ACCEPT	IN PRINCIPLE.				propos	sed of 0.0	dB. Change	e the value of 6.3 dB in D	raft to a new va	alue of 9.0 dB for	
CI 159 SC 159.6	P114	L12	# 23		achiev	ed by nari	rowing the t	n Loss. The maximum Ch ransmit power range use	d for 6.3 dB.		
Wey, Jun Shan	ZTE TX Inc.							r max channel insertion I ertion loss, its min value i) dB.	
Comment Type TR	Comment Status D			LB		ve 18 dB c			5 TU UD.		
Table 159-7					Proposed	Response	e Re	esponse Status W			
	a dynamic range of 14dB, while mic range for this class?	e the other clas	ses are at 9dB, 4dB.				CEPT IN P				
SuggestedRemedy					Multipl propos		rs send sim	ilar comments on loss bu	dgets. Propos	e to consider this	
Discussion needed											
Proposed Response	Response Status W				C/ 159	00.14	ble 159-10	<i>P</i> 81	L 4	# 28	
PROPOSED ACCEPT	1				McCammo	. ,		AT&T			
	P113	L1	# 21		Comment Table		-	<i>comment Status</i> D lean version, row 4. Prop	oose values for	Channel Insertion	LB
Wey, Jun Shan	ZTE TX Inc.	-1	<i>"</i> 21		Loss :	specification	on using BC	OTH minimum and maxim	um. Industrial	temperature range	
Comment Type TR	Comment Status D			WL				 A 0.0 dB value for mining the use of an optical attention 			
Table 159-6					specifi	cation of r	minimum Cl	nannel Insertion Loss add	ls a test case f	or compliance.	
Wavelength plan for B	R20/40/40+ only allows a 4nm	guard band be	tween upstream and	k	Suggested	Remedy					
	be challenging to meet with low	cost optics						ble with a minimum Char			
SuggestedRemedy								e the value of 6.3 dB in D n Loss. The maximum Ch			۵
Discussion needed								ransmit power range use			2
Proposed Response	Response Status W				Proposed	Response	e Re	esponse Status W			
PROPOSED ACCEPT	IN PRINCIPLE.					e operato	CEPT IN P rs send sim	RINCIPLE. ilar comments on loss bu	dgets. Propos	e to consider this	

Cl 159	SC Table 159-5	P 76	L 27	# 15	
BOURGAR	RT, Fabrice	Orange		-	
	71	<i>comment Status</i> D -5 about the dynamic "	2m - max length"	are also valid for	LB
Suggestedl	Remedy				
Realisti	ic values based on p	ossible damage and ac	tual dynamic shou	uld be given.	
Proposed F PROPC	Response Re DSED ACCEPT IN P	esponse Status W RINCIPLE.			
C/ 160	SC 9	P111	L 1	# 32	
Frank, Effe	nberger	Futurewei Te	echnologies		
Table 1 wavele Suggestedl	ngths.	de to follow the format	of table 159-14, es	specially the	
Simple	st thing is to just cop	y the 159 table to here.	Or just do it by re	eference.	
	Response Re DSED ACCEPT IN P e to refer to Table 15				
C/ 160	SC 9	P111	L1	# 35	
Frank, Effe	nberger	Futurewei Te	echnologies		
<i>Comment 1</i> Table 1		<i>comment Status</i> D de to follow the format	of table 159-14, es	specially the	ΕZ
wavele			2		
<i>Suggestedl</i> Simple		y the 159 table to here.	Or just do it by re	eference.	
Proposed F PROPC	Response Re DSED ACCEPT IN P	esponse Status W RINCIPLE.			

Cl 160	SC 16	0.6.3	P101	L 35	# 38
Lewis, Da	vid		Lumentum		
Comment	Туре Т	Com	ment Status D		SV
			(for maximum TDEC r penalties (for maxir		d add up to Channel
Suggested	Remedy				
			t (for maximum TDE and -BR40+ respec		8, 21.8, and 26.8 for
Proposed	Response	Respo	onse Status W		
		CEPT IN PRIN			
C/ 160	SC Ta	ble 160-10	P101	L 42	# 26
Rafel, Alb	ert		BT		
Comment	Туре Т	R Com	ment Status D		LB
Chanr tempe allows	nel Insertio rature rang back to ba inks. The s	n Loss specific ge assumption ack testing and	an version, channel i ation using BOTH m for specification. A 0 avoiding the use of minimum Channel II	inimum and max 0.0 dB value for r an optical attenua	inum. Industrial ninimum insertion loss ator in practice on
Suggested	Remedy				
propos maxim achiev Chang For 23	sed of 0.0 num Chanr ved by narr je 13 dB ir	dB. Change the nel Insertion Lo rowing the trans nto 15 dB for ma channel insertio	with a minimum Cha e value of 6.3 dB in I ss. The maximum C smit power range use ax channel insertion n loss, its min value	Draft to a new val hannel insertion I ed for 6.3 dB. loss, its min is 0	ue of 9.0 dB for oss of 9 dB can
Proposed	Response	Respo	onse Status W		

PROPOSED ACCEPT IN PRINCIPLE.

Multiple operators send similar comments on loss budgets. Propose to consider this proposal.

C/ 160 SC Table 160-10

C/ 160	SC -	Table 160-7	P 98	L 53	# 36
Luo, Yuan	iqiu		Futurewei		
Comment	Туре	TR	Comment Status D		SV
			r Optical Modulation Amp about 5dB lower than that		
Suggested	Remed	ly			
Propo	se to ch	ange the Ol	MAouter(min) value of 500	GBASE-BR20-U	from "3.4" into "-1.5".

Proposed Response Response Status W PROPOSED ACCEPT IN PRINCIPLE.

C/ 160 SC Table 160-7 Page 8 of 8 11/7/2019 8:02:43 PM