CI 00	SC	Р	L	# 726	C/ 00	SC 59.4	P 159	L 36	# 1004			
Jin Kim		Samsung			Thatcher,	Jonathan	WWP					
Comment In cas data s	<i>Type</i> TR se one of ONU is stream, all other (Comment Status D not working properly and start DNU will loss the opportunity	to send an ar	n abnormally long output any packet in the	Comment Refere	<i>Type</i> T ence missing in dRemedy	Comment Status D text "media types listed in a	according to"				
	eam direction. In	already considered in 10 base	cness in the p	assive optical network.	Add reference Proposed Response Response Status							
repea outpu jabbe	ter. 10 base 5 us t data stream in F r control.	sed to have a TX jabber contro PMA. Also, the repeater has a	ol function to in a same contro	hibit an abnormally long capability using RX								
Duad	ding aimilar iabh	ar control function like 10 hoor		I naturally can have a calf	C/ 00	SC Introdu	ction P3	L 21	# 843			
interru	upt capability to s	top transmitting an abnormally	/ long output o	lata stream	Daines, K	evin	World Wid	e Packets				
Suggester	dRemedy				Comment	Type E	Comment Status D					
Let's a	add an optional ja	abber control function to EPO	۷.		Any o	bjection with thr	owing my middle name in t	here?				
Proposed	Response	Response Status O			Suggestee Chang	<i>dRemedy</i> ge "Kevin Daine	s" to read "Kevin Q Daines'	1				
C/ 00	SC 0	DO	10	# 404	Pleas	e note, there is	no period. Just "Q"!					
Beck, Mic	hael	Alcatel	LU	# 491	Proposed	Response	Response Status O					
Comment	Type E	Comment Status D										
All ins	tances of "10PAS	SS-TS" have been replaced by	y "10PASS-T"	. This change was	C/ 01	SC 1.3	Р	L	# 788			
proba Claus	bly made to remo e 56 and the nam	ne used in Clause 62. Howeve	r drafts betwee	en the name used in v an inconsistency	Squire, Ma	att	Hatteras N	etworks				
betwe	en "10PASS-T" a	and "2BASE-TL".	,	, , , , , , , , , , , , , , , , , , ,	Comment	Type E	Comment Status D					
Suggester Repla	dRemedy ce "10PASS-T" v	vith "10PASS-TS" throughout	the document		At what point do we start adding to the normative references in 1.3? We have many copper specifications to reference.							
Drement				•	Suggestee	dRemedy						
Proposed	Response	Response Status 0			Add re	eferences for at	least:					
<i>Cl</i> 00 Swanson,	SC 58.1 Steven	P 130 Corning Incorp	L7 porated	# [G991. G993. G994.	2 1 1						
Comment	Type E	Comment Status D			ANSI	11.417						
Incom	plete reference.				And p	ing the copper of	juys for the rest.					
Suggeste	dRemedy				Proposed	Response	Response Status O					
Chang	ge "Clause xx	." to "Clause 36"										
Proposed	Response	Response Status 0										

C/ 04 SC 4.4.2 P13 L1 # 549 CI 22 SC 22.2.4.2.12 P19 L15 # 550 Tom Mathey Independent Tom Mathey Independent Comment Status D Comment Status D Comment Type Е Comment Type Ε No table number or title. Incorrect reference. SuggestedRemedy SuggestedRemedy Add table number and title to both of the tables in 4.4.2 Change subclase reference in lines 15 to 23 from 22.2.4.3.12 to 22.2.4.1.12. Proposed Response Response Status 0 Proposed Response Response Status **O** C/ 04 SC 4.4.2 P13 17 # 548 CI 22 SC 22.7.3.4 P19 / 12 # 844 Daines, Kevin Tom Mathey Independent World Wide Packets Comment Status D Е Comment Status D Comment Type **T** Comment Type Why are the PICS table columns in 802.3u/802.3ab different from When FEC is used, the packet is chopped into groups of 239 bytes and 16 byes are added for each group. When the last group is less than 239 bytes, 16 bytes are still added. As 802.3x/802.3z/802.3ad/802.3ae? Specifically, the Value/Comment column is in a different the math in clause 4 has now become difficult to follow, please verify that the text on page location. 10 of "ifsStretchMultiplier = ... : {In bits, determines the number of bits of interFrameSpacing extention that are required for every ifsStretchRatio bits in a frame" Should EFM do anything about this? If not, which style should EFM follow? Does it matter? includes a calculation for adding 16 parity bytes for this last fraction of the frame. Does anyone care? SugaestedRemedv SugaestedRemedv Discuss Merely pointing it out. Doubt I'd spent the energy harmonizing PICS tables across the standard... Proposed Response Response Status 0 Proposed Response Response Status **O** CI 22 SC 22.2.4.1.12 P17 L 26 # 837 World Wide Packets Daines, Kevin Comment Type Т Comment Status D The corresponding PICS entry is not testable at the PHY. The text in 22.2.4.1.12 should be changed per suggested remedy. Also, Item MF41 should be removed and the editor's note on lines 27-28 on page 19 should be removed. SuggestedRemedy Change "Bit 0.1 shall only be set when an OAM sublayer entity exists and is enabled." to read: "Bit 0.1 should only be set when an OAM sublayer entity exists and is enabled." Remove MF41 on page 19. Delete lines 27-28 on page 19. Proposed Response Response Status 0

P802.3ah Draft 1.3 Comments

TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause Page, ESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

Page 2 of 169 C/ **22** SC **22.7.3.4**

C/ 24 SC 24	P1	L 1	# 1011	C/ 30	SC		Р	L	# 959				
Thatcher, Jonathan	WWP			Simon, S	cott		Cisco Systems,	, Inc.					
Comment Type TR	Comment Status D			Commen	t Type	TR	Comment Status D						
The following comm	ent added against C60 and re	peated here for n	otification.	Management objects need to be added for 10PASS-T and 2BASE-TL									
				SuggestedRemedy									
Optical testing incor	nplete (2 of 2 for C60; also for	C 24)	the logic folk (C24) to	See the spreadsheet simon_copper_objects.xls with a list of suggested objects and initial attempts at descriptions. The editor of Clause 30 should consult with members of the Cu STF to help finalize the objects.									
figure out how to:		get together with		Proposer	d Resnor	190	Response Status O						
1 Ensure that the s	ustem can create the test natt	arns required for a	ach test Even if the	11000300	инсэрог	130							
patterns are called o	but in 60, the logic folk won't ki	now to look there	for logic test			~~	200						
requirements unless	some change in made elsew	here.	ha OAM functions hains	C/ 30	SC	30	P 26	<i>L</i> 1	# 547				
added will not be "o	otional" for this PMDs.	icaled. In short, t	he OAM functions being	I om Mathey Independent									
3. Can operate the I	ink in a mode that supports the	ese tests. The P⊢	IY must be able to send	Commen	t Type	т	Comment Status D						
test frames when th asynchronous. 4. For those that are is desired.	e link is not up (no Rx) for test e synchonous, it must be verifi	s in Part 1 of the e	comment that are not artners are doing what	implementations, then 30.3.1.1.34 aRateControlStatus was added to the management variables. Now that we have more than one ifsStretchMode value along with additional variables, perhaps we need to control the variables.									
SuggestedRemedy				Suggeste	edRemed	dy							
Meet with PMD peo C60.	ole. Discuss and evaluate cap	abilities for C24, a	and requirements for	Discu ifsStr	uss addir retchMult	ng variab tiplier as	les ifsStretchConstant, ifsStretc managed objects.	hCarry, ifsSt	tretchIncludeIFS, and				
Proposed Response	Response Status O			Proposed	d Respor	nse	Response Status O						
C/ 24 SC 24.2.2	1.7 P 22	L 15	# 551	C/ 30	SC	30.11	P 40	L 6	# 891				
Tom Mathey	Independen	t		Gerhardt	, Floyd		Cisco Systems						
Comment Type E Incorrect reference.	Comment Status D			Comment Type E Comment Status D Many of the Cross References within this section are incorrect.									
SuggestedRemedy Change reference fr	ngestedRemedy Change reference from 13.15:0 to that used in Clause 45, mislabeled Table 22-9 on p 57.						SuggestedRemedy 30.11.1.1.7 should reference 57.4.2.1						
Proposed Response	Response Status O			30.1 <i>°</i> 30.1 <i>°</i>	1.1.1.8 s 1.1.1.11	hould ref through (erence 57.4.2.1 30.11.1.1.23 should reference T	able 57-5					
				Proposed	d Respor	nse	Response Status O						

C/ 30 SC 30.11.1	P 40 World Wide F	L 10 Packets	# 848	C/ 30 Tom Math	SC 30.11.1	.1.11	P 43	L 9	# 552
Comment Type E This Editor's note is of accepted rememdy for deleted this.	Comment Status D bld. It should have been remov or one of the loopback comme	red as part of the nts reviewed in	e editing for D1.3. The Vancouver should have	Comment Incori	<i>t Type</i> E rect reference. <i>dRemedy</i>	Comme	ent Status D		
SuggestedRemedy Delete this old editor	s note.			Chan Proposed	ge reference fro Response	Respons	s to 57-5; here and se Status O	d in numerous o	other places.
Proposed Response	Response Status 0								
				C/ 30	SC 30.11.1	.1.15	P 44	L 4	# 840
C/ 30 SC 30.11.1	.1 <i>P</i> 41	L 21	# 786	Daines, K	ievin	0	World Wide F	ackets	
Squire, Matt Comment Type T	Hatteras Netw Comment Status D	works		With attrib	the addition of t ute needed?	he sequence	field within Event	Notifications O	AMPDUs, is a sequence
Need to introduce ad	ditional OAM attributes:			Suggeste	dRemedy				
aOAMRemoteState. recently received Info field, the 2nd and 3rd	This string of 4 octets corresp prmation OAMPDU. The first b bits correspond to the Action phack timer in the State field	onds to the stat oit correponds to bits in the State	e field in the most o Stable bit in the State field, and bits 16-31	Proposed	l Response	Respons	se Status O		
aOAMRemoteVendo	rldEnterpriseNumber. This co	rresponds to the	e Entrprise_Idnetifier in	<i>CI</i> 30 Daines, K	SC 30.11. 1 čevin	.1.22	P 45 World Wide F	L 49 Packets	# 858
aOAMRemoteVendo most recent Informat	rldDeviceNumber. This correstion OAMPDU Vendor Id Red	sponds to the De	evice_Identifier in the	Comment aOAN aOAN	<i>t Type</i> T //VendorSpecifi //VendorSpecifi	<i>Comme</i> cTx needs to cOUITx.	ent Status D be split into two: a	aOAMVendorSp	ecificIANATx and
aOAMRemoteVendo recent Information O	rIdVersion. This corresponds AMPDU Vendor Id Field.	to the Version_I	dentifier in the most	Suggeste See o	dRemedy comment.				
Proposed Response	Response Status O			Proposed	l Response	Respons	se Status O		
C/ 30 SC 30.11.1 Daines, Kevin	.1.11 P 43 World Wide F	L 9 Packets	# 857	<i>CI</i> 30 Daines, K	SC 30.11. 1 čevin	.1.23	P 46 World Wide F	L 7 Packets	# 859
Comment Type E	Comment Status D			Commen	t Type T	Comme	nt Status D		
Wrong cross-ref.				aOAN aOAN	//VendorSpecifi //VendorSpecifi	cRx needs to	be split into two:	aOAMVendorSp	pecificIANARx and
SuggestedRemedy Change "57-3" to "57	-5".			Suggeste	dRemedy				
(14) total occurrences	s in 30.11.1.1.*			Proposed	Response	Respons	se Status O		
Proposed Response	Response Status O			1 1000000	1.0000100	Respons			

 TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause
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 RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 C/ 30
 S

C/ 30 SC 30.11.1.1.23

C/ 30 SC 30.11.1	I.1.25 P 46	L 29	# <mark>787</mark>	C/ 30	SC 30.11.1.	1.4	P 41	L 13	# 851
Squire, Matt	Hatteras Ne	tworks		Daines, K	Cevin		World Wide	Packets	
Comment Type T A general question/c Events, PDUs) with vendor specific Even	Comment Status D comment is how should we have respect to Clause 30? We control Notification TLVs for example	ndle vendor spec uld have an attrik	tific things (TLVs, bute for the most recent	Comment Gram Suggeste	t Type E nmar edRemedy	Comment	Status D		
the PDU types, so h	ow do we handle them?	be. Dut then the		Chan	ge "OAMPDUs"	to "OAMPDU"			
SuggestedRemedy				Proposed	l Response	Response	Status O		
I'm not tied to this, b undefined codepoint the most recent Eve	ut I'd suggest we have an attr , and another attribute for all on nt Notification.	bute for the lates of the vendor spe	st OAMPDU of cific Event TLVs from	C/ 30	SC 30 11 1	14	P 41	/ 20	# 838
Proposed Response	Response Status O			Daines, K	Cevin		World Wide	Packets	" 050
				Comment	t Type T	Comment	Status D		
C/ 30 SC 30.11.1	I.1.3 <i>P</i> 40	L 54	# 850	Per c	comment re: 57.2	2.5.2.2, this edi	tor's note can	be removed.	
Daines, Kevin	World Wide	Packets		Suggeste	edRemedy				
Comment Type E Cross-reference inco	Comment Status D			Remo Proposed	ove Editor's note I Response	found on lines Response	s 20-22. Status 0		
SuggestedRemedy Change "57.2" to "57	7.2.6".			C/ 30	SC 30.11.1.	1.5	P 41	L 31	# 852
Proposed Response	Response Status O			Daines, K	Cevin		World Wide	Packets	
				Comment	t Type E	Comment	Status D		
C/ 30 SC 30.11.1 Daines, Kevin	I.1.3 P 40 World Wide	L 54 Packets	# 849	Wron Suggeste	ng cross-ref. Ind <i>Remedy</i>				
Comment Type E	Comment Status D			Chan -	ige "57.4.3.1" to '	"Table 57-7".			
Grammar				Proposed	l Response	Response	Status O		
SuggestedRemedy Change "OAM entity	sublayer" to "OAM sublayer e	entity".		C/ 30	SC 30.11.1.	1.6	P 41	L 51	# 853
Proposed Response	Response Status O			Daines, K	Cevin		World Wide	Packets	
				Comment Wron	<i>t Type</i> E ng cross-ref.	Comment	Status D		
				Suggeste Chan	edRemedy lige "57.4.3.1" to "	"Table 57-8".			
				Proposed	l Response	Response	Status O		

C/ 30 SC 30.11.1.1 Daines, Kevin	.7 P 42 World Wide Packe	L 14 # 854 ts	C/ 30 SC 30.2.2.1 Daines, Kevin	P 29 World Wide Pac	L1 # 845 kets						
Comment Type E Wrong cross-ref.	Comment Status D		Comment Type E Grammar	Comment Status D							
SuggestedRemedy Change "57.6.2.1" to "7	Table 57-4".		SuggestedRemedy Change "containment tree shown" to "containment trees shown".								
Proposed Response	Response Status O		Proposed Response	Response Status O							
C/ 30 SC 30.11.1.1 Daines, Kevin	.8 P 42 World Wide Packe	L 25 # 855 ts	C/ 30 SC 30.2.2.1 Daines, Kevin	P 29 World Wide Pac	L5 # 846						
Comment Type E Wrong cross-ref.	Comment Status D		Comment Type E Grammar	Comment Status D							
SuggestedRemedy Change "57.6.2.1" to "7	Table 57-4".		SuggestedRemedy Change "containment	tree shown" to "containment tree	es shown".						
Proposed Response	Response Status O		Proposed Response	Response Status O							
C/ 30 SC 30.11.1.1 Daines, Kevin	.9 P 42 World Wide Packe	L 35 # 856 ts	C/ 30 SC 30.2.3 Daines, Kevin	P 29 World Wide Pac	L 32 # 847						
Comment Type E Wrong cross-ref.	Comment Status D		Comment Type E Grammar	Comment Status D							
SuggestedRemedy Change "43B2" to "43B	3.2".		SuggestedRemedy Change "These figure	s shows the names" to "These fig	gures show the names"						
(15) total occurrences v	within 30.11.1.1.*		Proposed Response	Response Status O							
Proposed Response	Response Status O		C/ 30 SC 30.3.2.1.	2 P 33	L 39 # 784						
Cl 30 SC 30.13 Barrass, Hugh Comment Type T Objects need to be add	P 52 Cisco Systems Comment Status D led for copper	L1 # <u>916</u>	Squire, Matt <i>Comment Type</i> T Can eliminate 2PASS <i>SuggestedRemedy</i> Ditto on p34 line 20, p	Hatteras Networn Comment Status D -TL.	KS						
SuggestedRemedy Editor needs to coordin	ate this Clause with the profiles de	escribed in Annex 62A and 63A.	Proposed Response	Response Status O							
Proposed Response	Response Status O										

C/ 30	SC 30.3.3.2	Р	L	# 646	C/ 30	SC :	30.5.1.1.4	P 37	L 18	# 785	
Maislos, A	Ariel	Passave			Squire, M	att		Hatteras Network	5		
Comment Modiy	t <i>Туре</i> Т / 30.3.3.2 аМАСС	Comment Status D ontrolFunctionsSupported to s	support additio	onal opcodes	Comment Need	<i>Type</i> details f	E or new EF	<i>Comment Status</i> D M PHYs adn mediaAvailable.			
Suggeste Add: value Proposed	dRemedy GATE, REPORT, s in the sequence Response	REGISTER_REQ, REGISTE Response Status 0	R, REGISTER	_ACK as possible	Suggeste Sugg For E least the er	dRemea est: FM copp one PMI numerati	y ber PHYs (in its aggr ons match	2BASE-T and 10XXX-TL), this i egation group that is operationa the link integrity state diagrams	s equival al. For EF 3.	ent to the PMD having at ⁻ M optical PHYs (LIST),	
C/ 30 Maislos, A	SC 30.3.5 Ariel	P 40 Passave	L 30	# 649	(at least I think they should). Proposed Response Response Status O						
Comment Add a	t Type T additional attributes	Comment Status D s as required by Clause 64			C/ 30 Thatcher,	SC : Jonatha	30.8.10 n	<i>Р</i> 197 WWP	L 17	# 1022	
Add a use a	attributes as specif ppropriate syntax	fied in maislos_2.pdf empowe	ring editor to r	nodify suggested text to	Comment This i	<i>Type</i> sn't a co	T mponent s	Comment Status D pecification. Is this necessary?			
Proposed	l Response	Response Status O			Suggeste If so,	dRemea commer	y nt withdraw	n. If not, remove.			
C/ 30 Maislos, /	SC 30.3.5 Ariel	P 40 Passave	L 6	# 648	Proposed	Respon	se	Response Status O			
<i>Comment</i> Rena	t <i>Type</i> E me attribute to be	Comment Status D consistant with aPAUSEMAC	CtrlFramesTr	ansmitted	C/ 31A Maislos, A	SC Ariel		P Passave	L	# 647	
Suggeste At Ed Rena Rena	<i>dRemedy</i> litor's discretion: me 30.3.5.1 aMP0 me 30.3.5.2 aMP0	nesTransmitted sReceived	Comment Comr Add a	<i>Type</i> nent act additiona	T ually for 31 l opcodes	Comment Status D A					
Proposed Response Response Status O				Replace text of 31A with supplied text in maislos_1.pdf Proposed Response Response Status O							
								-			

C/ 36 SC 36 P1 L1 # 1010	C/ 45 SC	Р	L # 960					
Thatcher, Jonathan WWP	Simon, Scott	Cisco Systems,	Inc.					
Comment TypeTRComment StatusDThe following comment added against C59 and repeated here for notification.	Comment Type TR Comm VDSL indicator bits are still not m	ent Status D lentioned in the regist	er set					
	SuggestedRemedy							
Optical testing incomplete (2 of 2 for C59; also for C 36)	The editor should work with Cu STF members to write registers that express and control the indicator bits as appropriate.							
After completing part 1 of these 2, it is essential to get together with the logic folk (C36) to figure out how to:	See simon_copper_IB.pdf for a proposal							
1. Ensure that the system can create the test patterns required for each test. Some test patterns are currently in an informative annex (36A). Even if the patterns are called out in 52 the base for the patterns are called out in	Proposed Response Respon	se Status O						
59, the logic folk won't know to look there for logic test requirements unless some change in made elsewhere.	C/ 45 SC	Р	L # 961					
2. Ensure that the system can count the errors indicated. In short, the OAM functions being	Simon, Scott Cisco Systems, Inc.							
added will not be "optional" for this PMDs. 3. Can operate the link in a mode that supports these tests. The PHY must be able to send	Comment Type TR Comm	ent Status D						
test frames when the link is not up (no Rx) for tests in Part 1 of the comment that are not asynchronous. 4. For those that are synchronous, it must be verified that the four partners are doing what	The SCM registers are confusing scheme for controling the NT mo needs to be put together.	and possibly conflicti dem from the LT and	ng with each other. A coherent expressing NT status at the LT					
is desired.	SuggestedRemedy							
SuggestedRemedy	The editor should work with the n	nembers of the Cu ST	F to create an appropriate scheme.					
Meet with PMD people. Discuss and evaluate capabilities for C36, and requirements for C59	See proposal simon_copper_LTN	IT.pdf						
Proposed Response Response Status O	Proposed Response Respon	se Status O						
	C/ 45 SC	P 56	L # <mark>958</mark>					
C/ 36 SC 36.2.5.1.3 P 54 L 33 # 553	Simon, Scott	Cisco Systems,	Inc.					
Comment Type E Comment Status D	Comment Type T Comm A register bit to set the modem to	ent Status D be an NT or LT is ne	eded					
Text got garbeled.	SuggestedRemedy							
SuggestedRemedy	Create such a register bit							
In the definition for xmit, the first sentence seems to have a copy/paste error as the sentence is quite incomplete.	Proposed Response Respon	se Status O						
Proposed Response Response Status O								

CI 45 SC 2	2.2.4.1.12	P 56	L 41	# 555	C/ 45	SC 45.2.6	.1 P	58	L 12	# 797
Tom Mathey		Independent			Squire, M	att	Hat	eras Networ	ks	
Comment Type	E Comme	nt Status D			Comment	Type T	Comment Statu	s D		
Incorrect sub-	clause numbering.	Clause and table ar	e labeled "22" ii	n a clause 45 area.	Its un	clear which reg	gisters are per-PMI an	d which are	per-PMD.	In Clause 61, it looked like
SuggestedRemedy	/				the ag discov	ggregate/availa very register is	able registers were PM s per-PMI as well?	D. Here, it I	ooks like tl	ney're per-PMI. And the
Change from u Change referen 22. Table should b	ise of clause 22 nur nce to Table 22-9 to	mbering to clause 4 o a clause 45 table, d" indication	5 numbering. also at the table	e itself on page 57 line	Suggester Clarify	<i>dRemedy</i> y the granularit	ty of the registers (per	PMI, per-PN	/ID, etc.).	
					Proposed	Response	Response Statu	6 O		
Proposed Respons	se Respons	se Status O								
					CI 45	SC 45.2.6	.1 P	58	L 12	# 794
C/ 45 SC 4	5	P 211	L 1	# 570	Squire, M	att	Hat	eras Networ	ks	
Tom Mathey		Independent			Comment	Type E	Comment Statu	s D		
Comment Type	T Comme	nt Status D			Is the	PMI available	register in C45 the sa	me as the P	MD availat	ble register in C61?
Barryís presen text to support	tation on sheet #3 h this is not yet in the	had the "preamble re e draft.	econstructed at	receiver". However,	Suggeste	dRemedy				-
SuggestedRemedy	/				Use d	onsistent term	nnology.			
This comment	is to make sure that	t the text is added.			Proposed	Response	Response Statu	6 O		
Proposed Respons	se Respons	se Status O								
					C/ 45	SC 45.2.6	.1 P	58	L14	# 796
C/ 45 SC 4	5	P 56	/ 1	# 554	Squire, M	att	Hat	eras Networ	ks	
Tom Mathev	•	Independent		" 334	Comment	Туре Е	Comment Statu	s D		
Commont Typo	T Commo	int Status D			We sa	ay the NT regis	ster is optionall "writab	le." I think t	hats only "I	remotely" writeable (i.e. it
When clause A		0.22200 register 1	7.15.0 was as	signed for type of	could	be written by r	management locally)?	I have a sin	nilar comm	ent on C61.
physical layer. means of dete	This task force is a rmining their type.	adding a whole bund	ch of new physic	cal layers without any	Suggeste Clarify	<i>dRemedy</i> y meaning of w	vritable.			
SuggestedRemedy	/				Proposed	Response	Response Statu	6 O		
Add bits to 1.7	:15:0 for assignmer	nt of new physical la	yers.		-		-			

Proposed Response Response Status **0**

		" 330							
Squire, Matt Hatteras Networks Tom Mathey Indepe	ndent								
Comment Type T Comment Status D Comment Type T Comment Status	D								
What does it mean for a PMI to not support aggregation? Isn't aggregation a The text "LT system writes remote PMI_Disc requirement? Would we include an EFM fragmentation header if it doesn't support aggregation? The text "LT system writes remote PMI_Disc method for the LT to access the remote partr the text here, and also nowhere else in the du how this is performed	overy_Register" im her prior to link bec raft that is obvious,	plies that there is some coming enabled. However, , provides not a clue as to							
SuggestedRemedy Male a suggestedRemedy									
Make aggregation a required ability. Provide a clue.	Provide a clue.								
Proposed Response Response Status O Provide a clause 45 register to initiate such a that the read is complete. Provide a set of re	Provide a clause 45 register to initiate such a link partner read, along with a bit to indicate that the read is complete. Provide a set of registers, perhaps 32 sets, where the contents of the link partners PML Discourse, Pagister on the started such that the values can be								
C/ 45 SC 45.2.6.1 P 58 L 35 # 557 passed on to STA. Provide a description of h Provide a reference to the defining presentation Tom Mathey Independent Provide a reference to the defining presentation	passed on to STA. Provide a description of how clause 45 registers map to the clue. Provide a reference to the defining presentation which provided the overview and								
Comment Type E Comment Status D Proposed Response Response Status Missing letter Proposed Response Response Status	0								
SuggestedRemedy Cl 45 SC 45.2.6.6 P63	L 23	# 559							
Proposed Response Response Status O Tom Mathey Indepe	ndent								
Comment Type T Comment Status	D								
CI 45 SC 45.2.6.5 P 60 L 40 # 956 The text "The PAF RX error register is a 16 b fragments that have been received across the seems strange as the gamma interface, as s Simon, Scott Cisco Systems, Inc. Simon as the gamma interface, as s	it counter that cont e gamma interface hown in Barryís pre	tains the number of with RxErr asserted." esentation, is above the							
Comment Type T Comment Status D SuggestedRemedy									
The Aggregation Discovery Example really belongs in it's own Annex Perhaps what is meant is fragments which has similar text is present in several other places SuggestedRemedy Similar text is present in several other places	Perhaps what is meant is fragments which have been received from the 64/65 byte PCS Similar text is present in several other places.								
Create Annex 61A and move the text Proposed Response Response Status	0								
Proposed Response Response Status O									
C/ 45 SC 45.2.6.6 P63	L 33	# 560							
Tom Mathey Indepe	ndent								
Comment Type T Comment Status	D								
Since the PAF is optional and sits above the registers 3.x.y, how can the PAF have an add	Since the PAF is optional and sits above the PCS, and the PCS must be accessed via registers 3.x.y, how can the PAF have an address assignment that is 1.x.y?								
SuggestedRemedy									
Perhaps the PAF should be assigned its own higher than the DTE XGXS. Otherwise, the F set 3.x.y. Here and numerous other places.	Pregister set, #6. 1 PAF should be acc	The next abailable number essed by access to register							
Proposed Response Response Status	0								

C/ 45	SC 45.3.1.2	P 65	L 51	# 561	CI 45	SC 45.3.1.4	P 67	L 3	# 345			
Tom Math	hey	Independent			Barnea, Ey	yal	Metalink					
Comment	t Type T	Comment Status D			Comment	Туре Т	Comment Status D					
Subc conte	lause title is "NT". ents are "NT: unde	. Text on line 54 is "only for L efined".	T", Table 45-22.	title is "NT, table	The co (as in	ounter should co with T1.424)	ount uncorrectable FEC bloc	ks and not PMA	frames.			
Suggeste	edRemedy				SuggestedRemedy							
Tar a	ind feather, here a	and numerous other places.			Change the first sentence to:							
Proposed	l Response	Response Status O			blocks	that could not	ble Errors register is a 32 bit be corrected by the FEC me	register tant co chanism"	ntains the number of FEC			
					Proposed	Response	Response Status O					
Cl 45 Barnea, E	SC 45.3.1.3 Eyal	P 66 Metalink	L 35	# 344		00 45 4 4			# 050			
Comment	t Type T	Comment Status D			C/ 45 Barnoa Ev	SC 45.4.1	P Motalink	L	# 356			
The c	counter should cou	unt the number of corrected of	octets and not th	e number of corrected		yai 						
PMA	frames.(As in T1.	424)			Comment	<i>Type</i> I	the droft for electrical length	equator and the	Nt alastriaal langth			
Suggeste	edRemedy				registe	e no register in er		egister and the	IN electrical length			
Chan "The octets	ige the first senter FEC correctable I s that have been o	nce to: Error register is a 32 bit count corrected by the FEC mechar	ter that contains	the number of correted	Suggested See at	<i>Remedy</i> ttached text in b	parnea_cmts_0303.pdf					
Proposed	Proposed Response Response Status O					Response	Response Status O					
CI 45	SC 45.3.1.4	P 67	L 1	# 957	Cl 45	SC 45.4.1	Р	L	# 349			
Simon, S	cott	Cisco System	is, Inc.		Barnea, Ey	yal	Metalink					
Comment The r uncor	<i>t Type</i> T register should rec rrectable errors re	Comment Status D cord RS blocks with uncorrect ceived.	table errors, not	the number of	Comment Add R	<i>Type</i> T X attenuation re	Comment Status D egsiter to the subcluase					
Suggeste	edRemedy				Suggested	Remeay	arnaa amta 0202 ndf					
Chan	ige the register de	finition to match the VDSL M	IB vdslChanUnd	correctBlks object	Drement							
Proposed	l Response	Response Status O			Proposea	Response	Response Status 0					
					CI 45	SC 45.4.1	Р	L	# 353			
					Barnea, Ey	yal	Metalink					
					Comment Interle	<i>Type</i> T aver depth and	Comment Status D block size shuld be added to	the STP regist	ers			
					Suggested See at	<i>Remedy</i> ttached text in b	parnea_cmts_0303.pdf					
					Proposed Response Response Status O							
					P		,					

C/ 45 SC 45.4.1	P	L	# 354	C/ 45	SC 45.4.1.11	P 77 Motolink	L 16	# 351	
				Dalliea, Ey	- -				
Comment Type T	Comment Status D			Comment	<i>l ype</i> T	Comment Status D			
Add NT Interleaver r	register			The re The bit	definition should	be extended to 16 bits			
SuggestedRemedy	harrian anta 0202 adf			Sugaested	Remedv				
See attached text in	barnea_cmts_0303.pdf			See at	tached text in ba	rnea_cmts_0303.pdf			
Proposed Response	Response Status O			Proposed	Response	Response Status O			
C/ 45 SC 45.4.1	Р	L	# 355		00 45 4 4 40	077	1 40	# 050	
Barnea, Eyal	Metalink			C/ 45 Barnoa Ev	SC 45.4.1.12	P11 Motolink	L 40	# 352	
Comment Type T	Comment Status D								
The are no register of	defined for the SCM IB.			Comment	<i>l ype</i> T gister desen't ref	Comment Status D			
SuggestedRemedy				The bi	definition should	be extended to 16 bits			
See attached text in	barnea_cmts_0303.pdf			Suggested	Remedy				
Proposed Response	Response Status O			See at	tached text in ba	rnea_cmts_0303.pdf			
				Proposed I	Response	Response Status O			
C/ 45 SC 45.4.1	P 68	L	# 350						
Barnea, Eyal	Metalink			CL 45	SC 45 4 1 10	D 91	/ 25	# 240	
Comment Type T	Comment Status D			Barnea. Ev	ral	Metalink	233	# 340	
There are several se Those are: I_STP (la current register defir	ets of STP for a SCM. Three of del STP), CR_STP (Current ST ntion does not reflect this.	them can be c P) and WS_S	hanged during operation: IP(Warm-Start STP). The	Comment There	<i>Type</i> T is no RX power le	Comment Status D evel register in T1.424			
SuggestedRemedy				Suggested	Remedy				
1. Add the following	text before 45.4.1.2			Delete	the subcluase				
Subclauses 45.4.1.2 Different addresses	2 to 45.4.1.12 describe register are used for the different sets	s for different s	ets of STP.	Proposed I	Response	Response Status O			
FOI THE 1_51P, K=0.	. FOI CR_31P , K=1. FOI VV3_3	51P, K=2.		CI 45	SC 45.5	P 82	L 22	# 917	
2. Change the resist	ter bits in 45.4.1.2 to 45.4.1.12	such that for 1	6 bit register the register	Barrass, H	ugh	Cisco Systems			
Dits are 1.x+k.15:0,1	for 32 bits register the register	DIts are 1.X+2K	.15:0 and 1.x+1+2K.15:0	Comment	Type E	Comment Status D			
Proposed Response	Response Status O			Subclause title should refer to Clause 62 not Clause 61					
				Suggested Chang	<i>Remedy</i> e 61 to 62				
				Proposed I	Response	Response Status O			
					•				

Cl 45 Simon, Sc	SC 45.5.1	P 82 Cisco System	L s, Inc.	# 962	C/ 45 Barrass, H	SC 45.6 Hugh		P 86 Cisco System	L 1 Is	# 918		
Comment MCM	<i>Type</i> T modems do not ope	Comment Status D erate by setting the SNR m	argin on a tone	e-by-tone basis.	Comment Sectio	<i>Type</i> T on needs to be	Comm added for C	nent Status D lause 63 (SHDSL)	registers			
Suggested Remo	dRemedy ve the register bits	that set and activate the S	NR margin on a	a tone-by-tone basis.	SuggestedRemedy Editor should collect all of the control functions in Clause 63 and turn them into register definitions.							
Create maxSI	e registers that corr NRmargin	espond to the VDSL MIB o	bjects that con	trol minSNRmargin and	Proposed	Response	Respor	nse Status O				
Proposed	Response	Response Status 0										
C/ 45	SC 45.6	P 85	L 54	# 798	C/ 45 Tom Math	SC Table	45-10	P 57 Independent	L 29	# 556		
Squire, Ma	att	Hatteras Netw	vorks		Comment Type T Comment Status D							
<i>Comment</i> We ne	<i>Type</i> T eed to start a sectio	Comment Status D n for 2BASE-TL.			The clause 22 register 1.7 is adding a bit for OAM unidirectional. Clause 45 should do the same such that phylis which could be clause 45 only capable do not need to add clause 22 capability just to access register 1.7							
Suggested Sugge	dRemedy ested registers inclu	ide (definitions in G991.2, s	section referen	ced):	SuggestedRemedy Replicate or reference text from clause 22 register 1.7 in a 3.44.x register bit.							
PHY c 1) CR	counters: C Anomaly register	(See G991.2 Section 9.2.7	1)		Proposed	Response	Respor	nse Status O				
2) Seg 3) Los 4) Los	s of Sync Defect re s of segment defect	egister (See G991.2 Section egister (See G991.2 Section tregister (See G991.2 Sec	9.2.2) n 9.2.3) ction 9.2.4)		C/ 45 Barnea, E	SC Table yal	45-21	<i>P</i> Metalink	L	# 346		
6) Los 7) Coo 8) Erro	s of sync word defe be Violation register ord seconds register	2.3) ect (9.2.6) r (9.3.1) er (9.3.2)			Comment Type T Comment Status D Interleaver depth and Interleaver block size are part of the STP (for SCM modems). Therefore the setting of those should be part of the STp setting in subclause 45.4							
9) sev 10) LC 11) UA	erely errored secor DSW seconds regis A seconds (9.3.5)	nds register (9.3.3) ter (9.3.4)			Suggester Delete	dRemedy e the Interleav	er depth and	Interleaver block s	ize from the tab	le		
					Proposed	Response	Respor	nse Status O				
Other 1) SHI 2) Loo 3) SNI 4) Pov	DSL version numbe p attenuation thres R margin threshold ver backoff status	er hold (9.5.5.7.5) (9.5.5.7.5)			<i>Cl</i> 45 Barnea, E	SC Table yal	45-43	P 82 Metalink	L 5	# 347		
Proposed Response Response Status O					Comment The S	<i>Type</i> E SNR value sho	Comm uld be S/4	nent Status D				
					Suggester Chang	<i>dRemedy</i> ge S/2 to S/4 i	n the descrip	otion				
					Proposed	Response	Respor	nse Status O				

C/ 45 SC Table 45	-45 P 82		# 963	Cl 56 Beck Mich	SC 56.4		P 92 Alcatel	L 5	# 488
Comment Type E The TX PSD level bits	Comment Status D do not have units in their desc	cription.		Comment 7 Empty	<i>ype</i> E subsection.	Comment	Status D		
SuggestedRemedy Add the appropriate un	its.			Suggestedl Add tex	Re <i>medy</i> .t: The relatio	n of 2BASE-TL a	and 10PASS-T	to other standa	ards can be found in
Proposed Response	Response Status O			Proposed F	Response	Response	Status O		
C/ 56 SC 56.1 Beck, Michael	P 90 Alcatel	L 49	# 487	C/ 56 Daines, Kev	SC Figure	56-2	P 89 World Wide F	L 9 Packets	# 860
Comment Type E SHDSL doesn't mean '	Comment Status D "Symmetric High speed Digita	I Subscriber Lo	op".	Comment 7 Figure	<i>ype</i> E s not self-cor	Comment	Status D sublayer label s	should be fixed	
Replace "Symmetric H Digital Subscriber Line	igh speed Digital Subscriber I "	.oop" with "Sing	gle-Pair High-Speed	Suggestedl Change	Remedy e "MULTI-PO	INT MAC CONT	ROL (MPCP)"	to read: "MPCF	P-MULTI-POINT MAC
Proposed Response	Response Status O			Note: T	ROL" he dash betw	veen MPCP and	MULTI should	be Big dash (E	m dash) while the dash
C/ 56 SC 56.1.2 Yoshimura, Minoru	<i>P</i> 89 NEC	L 42	# 452	Proposed F	Response	Response	Status O	En dasn).	
Comment Type E "Point to Point Emulation removed. This sublayer does not	Comment Status D on Sublayer" described in 56. exist in figure 64-2 and figure	1.2 and figure 5 65-1.	6-2 should be	C/ 56 Tom Mathe Comment 1	SC Table	56-1 Comment	P 91 Independent Status D	L 6	# <mark>563</mark>
SuggestedRemedy Remove the term "Emu	ulation Sublayer".from clause	56.		My imp fact car	ression of 10 not be used	0BASE-LX10 is I since ONU/OLT	that it is not sp	ecific to ONU/0 o 1000BASE ap	DLT applications, and in pplications, ie. 1 Gig.
Proposed Response	Response Status O			Suggestedl Remov	Remedy e text "ONU/0	OLT" in column t	itled "location"	for first 4 phvís	S.
C/ 56 SC 56.1.4 Tom Mathey	P 90 Independent	L 20	# 562	Proposed F	Response	Response	Status O		
Comment Type E Copy/Paste.	Comment Status D								
SuggestedRemedy The text "plus the 1000 PX10-U to reflect upstr)BASE-PX10-D (PON Upstrea ream behavior.	m laser 10 km)	" should be 1000BASE-						
Proposed Response	Response Status O								

CI 57	SC		Р	L	# 541	CI 57	SC	3.2.1	P 109	L 19	# 431	
Braga, Ald	obino		IOL			Hirai, Hid	eyuki		Sumitomo Ele	ectric		
Comment Should , claus , claus , claus Suggested If minF	E erences of 3.1 page 2 page 11 3 page 11 y ze makes	Comment Status C 64 byte frames be rej 115 line 12 & 14 2 line 14 7 line 49, 51, 53) placed with minFram stead of 64 bytes.	eSize?	Comment Type T Comment Status D Figure 57-4: Conditions for the transition from SEND_LOCAL_REMOTE_2 state to SEND_ANY state are insufficient. According to Fig57-4, when a LOCAL device is in SEND_LOCAL_REMOTE_2 state and is notified of STABLE state from the REMOTE device which is in SEND_LOCAL_REMOTE_2 state, the LOCAL device enters SEND_ANY state immediately. At this time, the Remote device may be still in SEND_LOCAL_REMOTE_2 state, but the							
Proposed	Respon	se	Response Status)	# 200 h	At th LOC For e Infor	AL device, 1 AL device example, mationO	the Remo ce is able , the LOC AMPDUs	the device may be still in SEN to send OAMPDUs which are CAL may go on sending Variat s, so the REMOTE is not able	D_LOCAL_REN e not Information bleRequestOAM to enter SEND	MOTE_2 state, but the nOAMPDUs. /PDU without sending _ANY state.	
Kawaquchi	i Kazuh	0	7 90 Oki Ele	L 30 ctric Industry c	# 360	Suggeste	dReme	dy				
Comment It looks constri Which If the C descrip On the OAMP of OAN OAMP	Type s that be uct and layer co DAM clie ption of o other h PDUs, so M_CTRL PDU TLV	T oth the OA transmit I constructs ent layer of 57.3.2.2 . and , if the ome varial request / ,for exar	Comment Status I AM client layer and the information OAMPDUs and transmits Informa construct and transmit e Control block in OAM bles of OAM_CTRL.re are necessary in orde nple Maximum_PDU_	Control block in OA control block in OA tion OAMPDUS ? Information OAMPD construct and trans quest should be add r to indicate some co Size .	M sub-layer can PUs, it is inconsistent with smit Information led .I think the variables ontents of Information	trans The ren Prop (re <i>Proposed</i>	ition from condition note_sta osed ne mote_st d Respon	m SEND able = ST w conditi able = ST nse	LOCAL_REMOTE_2 state to I in the current draft: ABLE ion: TABLE) + (receive OAMPDUs <i>Response Status</i> O	SEND_ANY st	tate. rmationOAMPDU)	
Suggested I suppo Theref	Remed ose that fore, sor	y the Cont ne variabl tifier.Devi	rol block in OAM cons es of OAM_CTRL.req ce_Identifier. Enterpris	truct and transmit In uest need to be add se Identifier.	formation OAMPDUs. ed , Maximum_PDU_Size	C/ 57 Hirai, Hid Commen	SC eyuki <i>t Type</i>	4.3.1 T	P 113 Sumitomo Ele Comment Status D	L 49 ectric	# 432	
Proposed	Respon	se	Response Status)		In Dr infori But i	aft1.2, the nation with the cur	he definit vas provio rrent draf	tion of InformationOAMPDU fo ded. ft, the order of Local TLV and	ormat with Loca Remote TLV fie	I TLV and Remote TLV eld is not defined.	
						Suggeste	dReme	dy				
						Defir	e the or I TLV ar	der of Lo	te TLV and Remote TLV in It	ntormationOAM arately.	IPDU, or the type of	

Proposed Response Response Status **0**

C/ 57	SC 4.3.4	P 116	L 7	# 433	C/ 57	SC 57.2	4	P 97	L 36	# 457
Hirai, Hide	yuki	Sumitomo Electri	с		Ho, Julian			Vitesse Semic	onducto	
Comment In the Packa field is	Type T case of Variablel ge or Object, how unclear.	Comment Status D Response with Variable Erorr(0x w to allocate Variable Error Cont	04) of which ainer to Vari	variable type is ableResponse Data	Comment Insert Suggested "Simil	Type E the word 'su IRemedy arty, the OA	C blayer' V sublaye	comment Status D		
Suggested There (1) Stu pos	<i>Remedy</i> are two methods Iff Data field with sible,then stuff re	: variable containers (width+value emaining data field with variable	e) as much a error(0x04)	as	Proposed	Response	Re	esponse Status O		
con (2) Stu	tainer. iff data field with	a variable error(0x04) container	only.		<i>CI</i> 57 Ho, Julian	SC 57.2	4	P 97 Vitesse Semic	L 37 onducto	# 458
Metho Proposed	d (2) should be c Response	lefined, because (2) is simple. Response Status 0	ony.		Comment Remo either	<i>Type</i> E ve comma a uses 'the' sa	C fter 'same ime interr	<i>comment Status</i> D e'. Also, remove ambiguit nally and with the subordi	y using 'this' in nate, or 'this' s	stead of 'the', i.e. it ame interface as the
Cl 57 Squire, Ma Comment	SC 57.1.2 tt Type E	P 94 Hatteras Network Comment Status D	L 25 s	# 767	MAC (Suggested "subor servic Proposed	Client. <i>IRemedy</i> dinate subla interfaces. <i>Response</i>	yer, such " <i>R</i> e	as the MAC Control or Nesponse Status O	/IAC , using this	s same standard
The re	ferences to othe	r clauses are wrong after renuml	pering them	last meeting.						
Suggested Match	Remedy to correct clause	e numbers.			Cl 57 Thatcher,	SC 57.2 Jonathan	4	Р 97 WWP	L 41	# 983
Proposed	Response	Response Status O			<i>Comment</i> "do no	<i>Type</i> E t comunicat	C e through	comment Status D the OAM sublayer" is so	mewhat confus	sing.
CI 57 Daines, Ke Comment	SC 57.2.1 evin <i>Type</i> E	P 96 World Wide Pack Comment Status D	L 31 tets	# 861	Suggestee Recor MA_C OAM	<i>IRemedy</i> nmend char ONTROL.re sublayer exis	ging to "a quest prir sts."	re not acted upon by the natives communicate wit	OAM sublayer h the MAC Cor	htrol entity as though no
Gramr Suggested Chang	nar (mostly) <i>IRemedy</i> e "OAMPDU. Th	is" to "OAMPDUs and vendor sp	ecific event	s. These"	Proposed	Response	Re	esponse Status O		
Proposed	Response	Response Status O								

CI 57 SC 57.2.4	P 97	L 46	# 459	CI 57	SC 57.2.5.1	P 98	L 12	# 889
Ho, Julian	Vitesse Semi	conducto		Gerhardt, F	Floyd	Cisco System	S	
Comment Type E	Comment Status D			Comment	Туре т	Comment Status D		
The sentence can be s	implified.			When	the local_oam_e	enable is disabled the interfac	e will act as if it	had no OAM sublayer.
SuggestedRemedy				So, if the sever b	here is a low com be activated doe	st, limited functionality implem	entation of 802	
"so it is clear as to whic	ch interface is being referred	to."		Suggested	Remedy			
Proposed Response	Response Status O			Allow f	or the optional in nentation of the	mplementation of OAM sublay MAC Control sublayer	er, similar to th	e optional
C/ 57 SC 57.2.4 Daines, Kevin	P 97 World Wide F	L 47 Packets	# 862	Proposed I	Response	Response Status 0		
Comment Type E Grammar	Comment Status D			<i>Cl</i> 57 Thatcher, J	SC 57.2.5.2. Ionathan	2 <i>P</i> 98 WWP	L 33	# 985
SuggestedRemedy Change "five" to "four".				Comment T Remov	<i>Type</i> T ve "if present"	Comment Status D		
Proposed Response	Response Status O			Suggested Per co	<i>Remedy</i> mment			
C/ 57 SC 57.2.4 Thatcher, Jonathan	Р 97 WWP	L 50	# 984	Proposed I	Response	Response Status O		
Comment Type T	Comment Status D			C/ 57	SC 57.2.5.2.	2 P 98	L 33	# 839
The Parser does not ha	ave "internal clients."			Daines, Ke	vin	World Wide P	ackets	
The Mux does not have	e "internal clients."			Comment	Туре Т	Comment Status D		
It is confusing to use th	e word client to represent the	ese sublayer fur	nctions.	To alig	n OAMPDUs wi	th the other two Slow Protoco	ls (Clause 43's	LACP and Marker), the
SuggestedRemedy				SOUICE	address param	eter should be changed from	optional to requ	ired. As such, the text
Use some other word.	Perhaps "other OAM sublaye	er functions"		aOAM	_astMACAddres	SS.	in or fixing the t	
Proposed Response	Response Status O			Suggested	Remedy			
. ,				Remov	e ", if present,"	from line 33.		
				Proposed I	Response	Response Status 0		

CI 57	SC 57.2.5.3.2	P 99	L 5	# 768	C/ 57	SC 57.2.5.	4.2	P 99	L 35	# 987		
Squire, N	latt	Hatteras Netw	orks		Thatcher,	Jonathan		WWP				
Comment I wou source	<i>t Type</i> E Ild think the indicati ce MAC.	Comment Status D on should match the reques	t parameters, a	nd should pass up the	Comment The pa OAM_ unnce	<i>Type</i> T arser control ar CTL.request p cesarily confus	Comment s nd the mux contr rimatives that ma ing.	Status D ol are not symi ay be unneces	metric. There a sary. At very le	re a number of ast, these are		
Suggeste	arreneay do sourco, addross	in the data indication primiti	NO.		Suaaestea	Remedv	-					
Proposed	l Response	Response Status O	ve.		There "local_	are two metho action" primat	ds possible for h ive.	nelping this. The	e first, recomm	ended, uses only one		
Cl 57 Thatcher, Commen It is r Suggeste Discu Proposed	SC 57.2.5.3.3 Jonathan <i>t Type</i> T not clear if matching edRemedy uss. Resolve as con t Response	P 99 WWP Comment Status D g the DA is part of being "val mmitte desires. If rejected, th Response Status O	L 19 idly formed."	# 986	# 986 In the second (being described first), uses a local_tx_action and a local_rx_action replacing the existing local_action). In this case, the values for the primatives for local_tx_action (for the MUX) are identical to local_rx_action (for the parser) and LB, Forward, and Discard. There are a number of places where local_tx_action inserted, including figure 57-5 to replace "local_unidirectional and local_ink_state can be eliminated along with local_ok_to_tx, etc. It is also added to the Informate pdu state field (Fig 57-6) where action is replace with something descriptive ("loc becomes "remote"?) such as rx_action. The preferred method is to have one local_action for both the MUX and the PAI would have the values: LB, FORWARD, DISCARD. But, it may also need value Tx_Forward (Rx_Discard implied) and Rx_Forward (Tx_Discard implied). I can't place where these are required. But, I can't prove that they are not.							
C/ 57 Ho, Juliar	SC 57.2.5.3.4	P 99 Vitesse Semio	L 17 conducto	# 460	place v Proposed	where these ar Response	e required. But, <i>Response</i> S	I can't prove th Status O	at they are not			
<i>Commen</i> Chan	<i>t Type</i> E nge 'to' to 'at'	Comment Status D			CI 57	SC 57.2.5.	5.3	P100	L 49	# 769		
Suggeste "OAN	edRemedy /IPDU at the local"				Squire, Ma	itt Type E	Comment	Hatteras Netw Status D	vorks			
Proposed	l Response	Response Status O			think) t don't n	to convey the f leed to pass th	lags field. But the subsection is used with the section of the sec	nenever we rec he flags field is DAMPDU.	also in the OA	MPDU. This is really (I MPDU.indication. So we		
C/ 57 Thatcher,	SC 57.2.5.4.2 Jonathan	<i>Р</i> 100 WWP	L 9	# 988	Suggested Chang	<i>Remedy</i> e 2nd sentenc	e of paragraph t	0:				
<i>Commen</i> Whin	<i>t Type</i> E le on: I don't like the	Comment Status D e term "OAM link." Whine of	Ŧ		The O a valid loopba	AM_CTL.indica ly formed error ick control OA	ation is used to i r-free OAMPDU MPDU).	ndicate the value that does not read	ue of the Flags esult in a OAM	field upon the arrival of PDU.indication (e.g. a		
Suggeste Almo	edRemedy st anything else. O	AM channel?			" Proposed	Response	, Response S	Status O				
Proposed	l Response	Response Status 0										

CI 57	SC 57.2.6	P 101	L 10	# 770	C/ 57	SC 57.2.7.	2	P 101	L 49	# 865
Squire, Ma	att	Hatteras Netw	orks		Daines, K	evin		World Wide I	Packets	
Comment	<i>Type</i> T	Comment Status D		r the true intent of the	Comment	Type E	Comment	Status D		
active we do an exa	/passive was to s n't say that a dev ample.	stop an NT from controlling an vice with a passive peer should	LT. This table d ignore/discar	d variable request, as	Suggeste Chan	dRemedy ge "OAMPDU F	Flag field" to rea	d "Flag field".		
Suggestee Add a	dRemedy n asterisk Yes ar	nswer under active for the follo	owing rows		Also,	on page 102, li	ne 37, remove "	'OAM".		
- Read - Send - Read And d (i.e. a	cts to OAM disco d variable respon cts to loopback c lefine the asterish ctive devices dor	wery init ise ommands (new row needed) < to mean that the Yes is cond n't do the above for a passive j	itional on the p beer).	peer device being Active	Also, Proposea	on page 102, li Response	ne 48, remote " Response	OAM". Status O		
Proposed	Response	Response Status O	,		<i>CI</i> 57 Squire, M	SC 57.2.7.3 att	2	P 101 Hatteras Net	L 53 works	# 771
					Comment	tType E	Comment	Status D		
CI 57 Daines, Ke	SC 57.2.6.2 evin	P 101 World Wide Pa	L 34 ackets	# 863	Remo sectio	ove the non-critions, and there's	ical events table s no reason to ha	e as this duplica ave both.	ates the event de	efinitions in later
<i>Comment</i> Gram	<i>Type</i> E mar	Comment Status D			Suggeste Remo	dRemedy ove table 57-3.	Replace text in	57.2.7.2 with		
Suggestee	dRemedy				"Non-	critical events a	are defined by e	vent TLVs in S	ection <refer< td=""><td>ENCE>. Examples of</td></refer<>	ENCE>. Examples of
Remo	ove the word "only	y".			Proposed	Response	Response	Status O		500103, 616.
Also, Loopb	on line 36, re-ord back Control OAM	ler the two OAMPDUs, "shall r MPDUs".	not send Varial	ble Request or						
Proposed	Response	Response Status O			CI 57 Thatcher,	SC 57.2.7.	2	P 102 WWP	L 8	# 989
CI 57	SC 57.2.7	P 101	L 43	# 864	Comment Need	t <i>Type</i> TR a flag to identif	<i>Comment</i> fy a critical even	Status D t that is other t	han Link_Fault a	and Dying_Gasp
Daines, K	evin	World Wide Pa	ackets		Suggeste	dRemedy				
Comment Gram	<i>Type</i> E mar	Comment Status D			Add a occur	a "Critical Event red. Add also to	t" flag. This flag Table 57-4.	indicates that a	a vendor specific	critical event has
Suggestee Chang	<i>dRemedy</i> ge "A" to "The".				Note: thresl	it may be the c hold setting). Cl	case that "non-c hange "non-criti	ritical events" a cal" to simply "	re in fact critical events?"	(depending on the
Proposed	Response	Response Status O			It wou to cre	uld be ideal to h ate the "Critical	ave a mask tha I Even" or not. C	t controls whet Other option, lea	her these other ' ave unspecified.	'events" LOGICAL OR
					Proposed	Response	Response	Status O		

C/57 SC 57.2.7.3 P 102 L 41 # 866 Daines, Kevin World Wide Packets Volume Volume	CI 57 SC 57.2.8 P 103 L 1 # [209 Finn, Norman Cisco Systems
Comment Type E Comment Status D	Comment Type TR Comment Status D
Local OAM event procedure should mention option of sending duplicate Event Notifica OAMPDUs	ion Mention is made of several things that can go wrong with loopback mode. One serious condition is not mentioned. What happens if two active stations simultaneously try to put
SuggestedRemedy At the end of bullet b), add the following text "Optionally, the OAM client may send	the other station into loopback mode? Aside from the obvious potential for a storm, how do the two stations back off gracefully without playing Tweedle-Dee and Tweedle-Dum forever?
duplicate Event Notification OAMPDUs to increase the likelihood of reception at the re	note SuggestedRemedy
Proposed Response Response Status O	Suggest you mention this possibility, and state that the request of the lower-numbered MAC address wins.
	Proposed Response Response Status O
CI 57 SC 57.2.7.4 P 102 L 48 # 772	
Squire, Matt Hatteras Networks	CI 57 SC 57.2.8 P103 L2 # 462
Comment Type T Comment Status D	Ho, Julian Vitesse Semiconducto
57.2.5.5.3, we say we always call the CTL indication for valid OAMPDUs. I though we just do it for valid PDUs not otherwise indicated with the OAMPDU.indication. Here, w saying that we do it for critical events, which I take to mean whenever the flags field from peer changes. Which is the right way? SuggestedRemedy	Change the purpose of loopback from testing link performance to fault localisation. Fault is a change the purpose of loopback from testing link performance to fault localisation. Fault localisation was the initial objective of OAM remote loopback, as part of the maintenance objective, see daines_1_0702.pdf . Instead, for link monitoring, i.e. monitoring "the performance of a link," access to remote statistics is used, which is part of the
Suggest we use the CTL.indication whenever	administration objective.
a) we're not otherwise indicating the flags field to the OAM client in the OAMPDU.indication, and	SuggestedRemedy "Loopback is used for fault localisation."
 b) the flags field has changed since the last valid OAMPDU. And make this consistent in this section and 57.2.5.5.3. 	Proposed Response Response Status O
Proposed Response Response Status O	
	C/ 57 SC 57.2.8 P103 L4 # 456
CI 57 SC 57.2.7.4 P102 L 54 # 867	Ho, Julian Vitesse Semiconducto
Daines, Kevin World Wide Packets	Comment Type E Comment Status D
Comment Type E Comment Status D	Include definitions of local and remote devices and their relationship. This will help to resolve some confusion in regards to Ethernet over other transport networks.
Remote OAM event procedure should mention option of receiving duplicate Event Notification OAMPDUs.	SuggestedRemedy
SuggestedRemedy	"The remote and local devices are link partners." "Local device- this subclause is taken from the perspective of this device. Remote device, the link partner to the local device."
At the end of bullet b), add the following text "The OAM client discards any duplicate received Event Notification OAMPDUs."	Proposed Response Response Status O
Proposed Response Response Status O	

C/ 57 Ho, Julian	SC 57.2.8	P Vite	2 103 esse Semicono	L 4 ducto	# 463	<i>CI</i> 57 Daines, Ke	SC 5 evin	57.2.8.1		P 103 World Wide P	L 37 Packets	# 868
Comment Ty If loopba explicitly impleme accurate SuggestedRe	vpe E ack is to be user or characterised, entations of loop ely measured. bemedy	Comment Statu d to test "the perfo e.g. loss, latency, back may only all	us D prmance of a li , bandwidth, e. low a subset o	nk", link performa t.c. With the curre f these characteria	nce should be ent draft, some stics to be	Comment Passir mecha Suggestec Page/	<i>Type</i> ng the lo anism. d <i>Remed</i> y Line: Ch	T opback tir // ange 	Comment me has little	<i>Status</i> D value. Let's rem	iove it from the C	JAM Loopback
Specify p	performance ch	aracteristics requi	ired to be mea	sured in loopback	κ.	1) 103	3/37: Cha	ange "non	-zero loopba	ck time" to "sta	rt loopback code	€".
Proposed Re	esponse	Response Statu	is O			2) 103 3) 104 4) 104 5) 104	8/39: Del 1/1 : Dele 1/12: Cha 1/12: Cha	ete "the n ete sub-cla ange "zero	ion-zero loop ause 57.2.8.3 o loopback tii	back timer valu 3 me" to "end loop	e and". pback code".	
<i>Cl</i> 57 Braga, Aldob	SC 57.2.8.1 Dino	P UNI	2 1.3 H-IOL	L 35	# 96	5) 104 6) 104 7) 104 8) 104	/13: Cha //14: Del //16: Del	ete "the zero ete "zero	ero loopback tin loopback tim	timer value and er value and"	d"	
<i>Comment Ty</i> Should s primitive	pe T specify that the	Comment Statu	us D ld be set to DIS	SCARD via OAM_	_CTL.request	9) 104 9) 105 10)10(11)10(5/6 : Cha 5/9 : Del 5/14: De	nge "non- ete "the n lete "the l	-zero loopbac on-zero loop oopback time	ck time" to "star back timer valu er equal to zero	t loopback code' e and" and"	"
SuggestedRe To initiat device a OAM_CT Proposed Re	emedy te remote loopb Ind the local OA TL.request prim esponse	ack, the local MAG M Client sets its lo itive. Response Statu	C Client stops ocal_action pa	sending data fran rameter to DISCA	nes to the remote ARD via the	12)10 13)11 14)11 Bit(s)= Name Descri	5/20: De 4/5 : Del 4/9 : Inse =3 =In Rem iption="1	ete "the z ete row 3' ert row for note Looph	zero loopbach 1:16 r bit 3 back is currently ir	< timer value ar	id" ack. 0=Device is	not in remote loopback
						Proposed	Respon	se	Response	Status O		

C/ 57	SC 57.2.8.2	P 103	L 46	# 192
Martin, David	ł	Nortel Networks		

Comment Type E Comment Status D

Bullet (a) states that while in loopback mode "The local device transmits frames from the MAC Client...". At first this sounds contradictory to line 34 on page 103 above which states that "To initiate remote loopback, the local MAC Client stops sending data frames...".

SuggestedRemedy

Perhaps inserting the word "test" would clarify the intent that test frames rather than user data frames are sent by the MAC Client while the remote device is in loopback. So line 46 would read "The local device transmits test frames from the MAC Client...".

Proposed Response Response Status **O**

CL 57 SC 57 2 8 2	P 103	/ 49	# 218	CI 57	SC 57 2 8 4	P104	/ 10	# 103		
Finn, Norman	Cisco Systems	L 40	# 210	Martin, D	avid	Nortel Netwo	orks	" [195		
Comment Type T	Comment Status D			Commen	t Type E	Comment Status D				
Are LACP packets refl reflected, because the only in the sub-type fie here.	ected or eaten in loopback mo y are not OAM packets. Practi ld. It may be very difficult for e	de? Technical cally speaking existing hardwa	ly, they should be , LACP and OAM differ are to do the right thing,	States that to exit loopback mode "the local MAC client stops sending frames". A this sounds contradictory to line 34 on page 103 which states that "To initiate remote loopback, the local MAC Client stops sending data frames".						
SuggestedRemedy				Suggeste Perh	ans inserting the v	vord "test" would clarify the	intent that test fra	ames rather than user		
I'd say that non-OAM S that a device which con MAX not be reflected	Slow Protocol packets SHOUL mmands another to enter loop	D be reflected back mode mu	in loopback mode, and st recognize that they	data would	frames are sent b d read "the loca	y the MAC Client while the I MAC client stops sending	remote device is test frames".	in loopback. So line 104		
Proposed Response	Response Status 0			Proposed	l Response	Response Status O				
C/ 57 SC 57.2.8.2	P 104	/ 51	# 97	C/ 57	SC 57.2.8.4	P104	L 16	# 194		
Braga, Aldobino	UNH-IOL			Martin, D			UIKS			
Comment Type E Says to keep Discover	Comment Status D y Process alive			State	s that "the OAM ing MAC Client fra	A client sets its local_action mes." It isn't the OAM clier	parameter to FW	/D and resumes ending MAC Client		
SuggestedRemedy Suggest changing it to	keep Discovery Process from	restarting.		frame	es, rather it's the research to the OAM subsection of the MAC	blayer and it's the Parser the Client (rather than discardir	naing user data in hat resumes pass ng them).	ing received MAC		
Proposed Response	Response Status O			Suggeste	dRemedy					
C/ 57 SC 57.2.8.3	P 104	L 5	# 98	Sugg FWD MAC subla	est rewording line . The Parser resu client resumes so yer."	16 to say "the OAM clier mes passing received non- ending user data frames (ra	nt sets its local_a OAMPDUs up to ther than test frar	ction parameter to the MAC Client and the mes) to the OAM		
Commont Tuno T	Commont Status D			Proposed	l Response	Response Status O				
Need to add OAM clier	nt sets local action parameter	to LB via OAN	1 CTL.request primitive.							
This is necessary for the parameter will be set to	he timer expiration case, becau o DISCARD.	use coming into	o this the local_action	<i>CI</i> 57 Braga, Al	SC 57.2.8.4 dobino	P 104 UNH-IOL	L 17	# 99		
SuggestedRemedy				Commen	t Type T	Comment Status D				
After receiving the Loo	pback Control OAMPDU, the r	emote OAM cl	ient sets the	Loca	_action paramete	r should be set to FWD via	the OAM_CTL.re	equest primitive		
local_action parameter then sends an Informa	r to LB via the OAM_CTL.reque tion OAMPDU with updated sta	ests primitive.	The remote OAM clent	Suggeste	dRemedy					
zero loopback timer va	alue and its local_action set to	_B.	i teneening me nem nem	After	receiving an Infor	mation OAMPDU with a zer	ro loopback time	value and local_action		
Proposed Response	Response Status O			Set to OAM	_CTL.request prir	nitive and resumes sending	MAC Client fram	HAND VIA THE Nes.		
				Proposed	l Response	Response Status 0				

Cl 57 Gerbardt El	SC 57.2.8.5	P 104 Cisco Systems	L 21	# 890	Cl 57 Daines K	SC 57.2.8.8	P 105 World Wide Pac	L 19	# 871			
Comment Ty When th its local the OAM SuggestedR Change	/pe T ne loopback_tim _action set to D / loopback test. <i>Remedy</i> the text on pag	Comment Status D her expires it appears that the re ISCARD, if the local OAM does e 104 line 26 from 'the local OA	emote OAM c not elect to e M client may	ient can get stuck with ither resume or end elect to either' to 'the	Comment TypeEComment StatusDDuplicate bullets a & b breaks style guide.Duplicate bullets a & b breaks style guide.DSuggestedRemedy Change 2nd a & b to c & dCProposed ResponseResponse StatusO							
local OA Proposed Re	M client shall e esponse	ither' Response Status O			<i>Cl</i> 57 Squire, M	SC 57.3.1.1	P 105 Hatteras Networ	L 41 ks	# 773			
Cl 57 Ho, Julian Comment Ty If loopback seamles stated. C measure SuggestedR "In loopt replicate frame lo the caus e.t.c. Proposed Re Cl 57	SC 57.2.8.7 ype E ack is to be used k should replication is loopback med Dtherwise, with ement of link per- temedy back mode, the as near as pos- ss due to unave ses of frame los esponse SC 57.2.8.8	P104 Vitesse Semicor Comment Status D d to test "the performance of a the as near as possible to that tr chanism is only implied in this s the current draft, in some imple offormance may not be represent non-OAMPDU traffic looped bas solute that transmitted by the loop oidable causes or the insertion/ is already in this subclause, i.e. Response Status O P105	L ducto ink", traffic or ansmitted by ubclause and mentations o ntitive of the li ck to the loca cal device, wi extraction of C clock differer	 # 464 a the return-leg of the the local device. This should be explicitly f loopback the nk. al device should the exception of DAMPDUs." Then state acces, asymmetric links # 870 	Comment The C Suggeste Remo Proposed CI 57 Braga, Ala Comment DISC. Suggeste DISC. Proposed	Type E DAm type is alread dRemedy ove the "Value: Int Response SC 57.3.1.2 dobino Type E ARD; parser disca dRemedy ARD; parser disca Response	Comment Status D dy defined in 43B, no need to de teger 3" from the OAM_subtype Response Status O P106 UNH-IOL Comment Status D ards non-OAMPDUs ards received non-OAMPDUs Response Status O	o it here. constant a	and reference Annex 43B. # [<u>100</u>			
Daines, Kevi Comment Ty With loo SuggestedR Remove Proposed Re	in ype T pback timer bei gemedy ad middle timing esponse	World Wide Pac Comment Status D ing removed, this timing conside consideration. Response Status O	kets eration can al	so be removed.	Cl 57 Daines, K Comment local_ Suggester Add to Value Proposed	SC 57.3.1.2 evin Type E lost_link_timer ha dRemedy ext: s: TRUE; timer ha Response	P106 World Wide Pac <i>Comment Status</i> D as no values section. as expired. FALSE; timer has no <i>Response Status</i> O	L 42 kets ot expired.	# <mark>872</mark>			

CI 57	SC 57.3.1.2	P 106	L 42	# 536	CI 57	SC 5	57.3.1.2	P 107	L 15	# 534
Braga, Aldobi	ino	IOL			Braga, Al	dobino		IOL		
Comment Ty	pe E	Comment Status D			Commen	t Type	E	Comment Status D		
local_lost	t_link_timer_d	one variable			local	_stable va	ariable			
Does not Does not	t have a definit t have defined	tion indicating why it is used. values			Defin	ition is va	ague: "A v	ariable set by the Discovery P	rocess"	
SuggestedRe	emedv				Suggeste	dRemedy	y indiaata l	local OAM aliant asknowladge	ant of and	actic faction with remate
This is us	sed to indicate	that the local_lost_link_time	r has expired.		OAM	state info	ormation.	IOCAI OAINI CIIEITI ACKITOWIEUGIT		
Values: T ¸ False; I	TRUE; local_lo local_lost_link	st_link_timer has expired _timer has not expired	·		Proposed	l Respon	se	Response Status O		
Proposed Re	esponse	Response Status 0								
					<i>CI</i> 57 Martin, Da	SC 5 avid	57.3.1.2	P 107 Nortel Networks	L 23	# 196
Cl 57 Daines, Kevir	SC 57.3.1.2 n	P 106 World Wide F	L 8 Packets	# 841	<i>Commen</i> Typo	t Type	E	Comment Status D		
Comment Ty	pe T	Comment Status D			Suggeste	dRemed	V			
P802.3ae discrepar specificat	e changed the ncies with the tions.	MAC service specifications i relevant 802.1 standards. EF	n Clause 2 to re M should be us	concile long-standing ing these new service	Chan recei	ige "wh ve direction	, ien the linl on is not c	k in the receive direction is not operational."	operation."	to "when the link in the
Specific t "m_sdu"	to OAM, one p should read "r	parameter of the MA_DATA.ir mac_service_data_unit".	ndication primiti	ve needs to change.	Proposed	l Respon	se	Response Status O		
SuggestedRe	emedy				CI 57	SC F	57312	P107	/ 27	# 535
Change "	"ind_m_sdu" to	o "ind_mac_service_data_un	it".		Braga, Al	dobino	7.5.1.2	IOL	- 21	# [333
Also, on	page 108, line	1, change "m_sdu" to "mac_	_service_data_u	nit"	Commen remo	<i>t Type</i> te_stable	E variable	Comment Status D		
Note: The	e "ind_" prefix	, meaning "indication", is to d	ifferentiate from	the companion	Defin	ition state	es what ha	appens not what it is used for.		
Proposed Re	esponse	Response Status O			Suggeste This OAM	edRemedy is used to state info	y o indicate ormation.	remote OAM client acknowled	gment of an	d satisfaction with local
C/ 57	SC 57.3.1.2	P 107	L 12	# 874	Proposed	l Respon	se	Response Status O		
Daines, Kevir	n	World Wide P	ackets							
Comment Typ Missing t	rpe E text	Comment Status D								
SuggestedRe	emedy									
Add "has	s seen and " af	ter "OAM Client".								
Proposed Re	esponse	Response Status 0								

C/ 57 SC 57.3.1.2	P 107	L 3	# 873	C/ 57	SC 57.3.1.2	P107	L 36	# 461
Daines, Kevin	world wide Pac	Kets		Ho, Julian		vitesse Semico	nducto	
Comment Type E	Comment Status D			Comment	Type E	Comment Status D		
Grammar, additional e	explanatory text needed			Gram	nar problem, "to	indicated OAM".		
SuggestedRemedy				Suggested	lRemedy			
Change "allows" to "al	low".			"to ind	icate the OAM"			
After "TRUE" descripti devices set parameter	on, add "Active devices always s to TRUE during the Discovery p	set paramete process."	er to TRUE. Passive	Proposed	Response	Response Status O		
or words to this effect.								
Proposed Response	Response Status 0			CI 57	SC 57.3.1.2	P107	L 36	# 875
				Daines, Ke			Kels	
C/ 57 SC 57.3.1.2	P 107	L 3	# 195	Comment Gramr	<i>Type</i> E nar	Comment Status D		
Martin, David	Nortel Networks			Suggested	Remedy			
Comment Type E Typo.	Comment Status D			Chang	e "indicated" to	"indicate".		
SuggestedRemedy				Proposea	Response	Response Status U		
Change "This is used	to allows…" to "This is used to a	llow"						
Proposed Response	Response Status 0			CI 57	SC 57.3.1.2	P 107	L 36	# 197
				Martin, Da	vid	Nortel Networks	j	
				Comment	Туре Е	Comment Status D		
C/ 57 SC 57.3.1.2	P 107	L 3	# 979	Туро.				
Arnold, Brian	Cisco Systems			Suggested	Remedy			
Comment Type E	Comment Status D			Chang	e "This is used t	o indicated" to "This is used	to indicate th	e"
Typo "allows" -> "allow	V"			Proposed	Response	Response Status O		
SuggestedRemedy Typo "allows" -> "allow	v"				,	,		
Proposed Pespense	Posponso Status			CI 57	SC 57.3.1.2	P107	L 4	# 537
r roposed Nesponse				Braga, Ald	obino	IOL		
				Comment	Туре Е	Comment Status D		
Cl 57 SC 57.3.1.2 Arnold, Brian	P 107 Cisco Systems	L 36	# 980	local_o	ok_to_tx variable			
Comment Type E	Comment Status D			saying Discov	it allows the ser very process, is r	nding of Information OAMPDUs not really accurate.	during the b	eginning of the
				Suggested	lRemedy			
Typo: "indicated OA	M" -> "indicate the OAM"			It shou Discov	uld say, "This is u very process."	used to allow the sending of all	OAMPDUs tl	hroughout the OAM
Proposed Response	Response Status O			Proposed	Response	Response Status O		

 TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause
 Page 25 of 169

 RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 C/ 57
 SC 57.3.1.2

C/ 57	SC 57.3.1.2	P 107	L 43	# 842	C/ 57	SC 57.3.1.4	P 108	L 29	# 538
Daines, Ke	evin	World Wide P	ackets		Braga, Al	dobino	IOL		
Comment	Type T	Comment Status D			Commen	t Type E	Comment Status D		
P802.3	3ae changed the	MAC service specifications i	n Clause 2 to r	econcile long-standing	max_	rate_timer			
specifi	ications.	elevant 602.1 standards. EF	IN Should be u	sing these new service	"not g	greater than"			
Specif "m_sd	fic to OAM, two pa lu" should read "n	arameters of the MA_DATA. nac_service_data_unit". Sec	request primitiv ond, "service_c	re need to change. First, class" has been removed	Suggeste "no g	dRemedy reater than"			
and re	eplaced with the o	ptional "frame_check_seque	nce".		Proposed	l Response	Response Status 0		
Suggested	dRemedy								
1) Cha 2) Cha 3) On	ange "req_m_sdu ange "req_service page 108, line 10	" to "req_mac_service_data_ e_class" to "req_frame_check :: fix alias.	_unit". <_sequence".		<i>CI</i> 57 Takashi,	SC 57.3.1.4 Ezawa	P 108 Oki Electric I	L 30 Industry C	# 300
Note: param	The "req_" prefix, neter ind_*, meani	meaning "request", is to diff ng "indication".	erentiate from	the companion	<i>Commen</i> We p	t <i>Type</i> E ropose that the to	Comment Status D	shall be deleted	regarding
Proposed	Response	Response Status O			max_ of tim min_i detail	rate_timer, min_i lers are necessar rate_timer and los	ate_timer and local_lost_link y for detection of link fault. B st_link_timer. We think that t is necessary to define we th	k_timer. We sup But there is enoughere is no proble bink that the tole	pose that the definition gh margin between em without definition of grance value should be
Cl 57	SC 57.3.1.3	P 108	L 10	# 564	ease	d more.	is necessary to define, we th		
Common t	ey Tumo F				Suggeste	dRemedy			
P802.3	<i>Type</i> E 3ae deleted "serv	ice_class" from MA_DATA.r	equest.		Droposo	Boononoo	Paapapa Statua		
Suggested Check	dRemedy c.				Fioposec	Response	Response Status		
Proposed	Response	Response Status O			<i>CI</i> 57 Braga, Al	SC 57.3.2.1 dobino	P 109 IOL	<i>L</i> 1	# 539
01 53	00 57 0 4 4	D 400	1.00	# 1000	Commen	t Type E	Comment Status D		
Jonathan	SC 57.3.1.4 Thatcher	P 108 WWP	L 23	# 1026	Disco no lo:	overy Process Dia st_link_timer varia	igram able		
Comment	Туре Т	Comment Status D			Suggeste	dRemedy			
Recon mecha	nmend that we re anism for controlli	place the current max_rate_ ng the number of PDUs to b	timer and min_ e sent out in a	rate_timer with a new second.	chang local_	ge to: _lost_link_timer			
Suggested	dRemedy				Proposed	l Response	Response Status O		
Per file	e thatcher_cmts_	1_0303.pdf.							
Proposed	Response	Response Status 0							

C/ 57 SC 57.3.2.	.1 <i>P</i> 109	L 35	# 101	C/ 57	SC 57.3.	2.1	P 109	L 9	# 540
Braga, Aldobino	UNH-IUL			Braga, Al	dobino		IOL		
Comment Type T	Comment Status D			Commen	t Type T	0	Comment Status D		
Once in SEND_LOC OAMPDU with local	AL_REMOTE_2 state local OA and remote state information rid	M client should tht away	send Information	Disco	overy Process	s State M	achine		
SuggestedRemedy		, ,		lt's no	ot a good idea	a to have	empty states.		
Once in the SEND_L OAMPDU with local	LOCAL_REMOTE_2 state the lo and remote state information.	ocal OAM clien	t sends an Information	ACTI	VE_SEND_L	OCAL: s	hould contain local_ol	k_to_tx <= TRUE.	=
Proposed Response	Response Status 0			SEN	D_ANY: shou	ld contai	n something?		
				BUT	what if we ch	ange the	def of local_ok_to_tx.		
CI 57 SC 57.3.2.	.1 P 109	/ 39	# 876	so tha	at it reads:	-			M D'
Daines, Kevin	World Wide P	ackets		valu	is used to all les: NONE; S	ow the se Sending c	f all OAMPDUs the figure of the second se	nrougnout the OA be prohibited.	IN DISCOVERY process."
Comment Type E Wrong text.	Comment Status D			, AI	NY; Sending TL; Sending	of all OA of non-In	MPDU shall not be proformation OAMPDUs	ohibited. shall be prohibited	i.
SuggestedRemedv				Now	we could hav	e the follo	owing states:		
Remove "there is a l	link fault condition" from this ser	ntence.		PASS	VE_SEND_L SIVE SEND	UCAL: s LOCAL:	hould contain local_of should contain local_c	<_to_tx <= CTL. ok to tx <= NONE	
Proposed Response	Response Status O			SEN	D_ANY: shou	ld contai	n local_ok_to_tx <= AN	NY.	
				Suggeste	dRemedy				
<i>Cl</i> 57 <i>SC</i> 57.3.2. Braga, Aldobino	.1 P 109 UNH-IOL	L 42	# [<u>102</u>	Chan Furth ACTI PASS	ge definition er add the se VE_SEND_L SIVE_SEND_	of local_c tting of lo OCAL: LOCAL:	ok_to_tx such that it co cal_ok_to_tx to the fo	ontains one of thre llowing discovery	ee values. process states:
Comment Type T	Comment Status D			SEN	D_ANY:				
There isn't a blurb ex SEND_LOCAL_REN	xplaining the transition from the MOTE_2 state	SEND_ANY to		Proposed	l Response	R	esponse Status O		
SuggestedRemedy							D 4 00	1.50	
If at any time the set remote OAM client b SEND LOCAL REN	ttings on the local OAM client ch becoming unsatisfied with the se MOTE_2 state.	ange resulting ttings, the stat	in management of the emachine returns to the	C/ 57 Yokomoto	SC 57.3 . o, Tetsuya	2.2	P 109 Japan	L 52	# 966
Proposed Response	Response Status 0			Comment	t Type E	C	Comment Status D		
				It has	s written (the	MAC's Tr	ansmitFrame function	is simultaneous a	and is never interrupted).
				Suggeste	dRemedy				
				l thinl (wher	k that the IFG n should OAN	time afte	er finishing transmission transmitted?).	on of MAC FRAM	E needs to be specified
				Proposed	l Response	R	esponse Status O		

P802.3ah D	raft 1.3	Comments
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C/ 57 SC 57.3.2.2	P 109	L 54	# 888	CI 57	SC 5	7.3.3	P110	L	# 545
Gerhardt, Floyd	isco Systems			Braga, Ald	obino		IOL		
Comment Type T Comment Sta	atus D			Comment	Туре	т	Comment Status D		
While in the Discovery process but not	yet in the SEND_A	ANY state the loc	al_dying_gasp	The st	ate mach	nine cou	d be trimmed and changed to	reflect my earli	er comments.
this information is only transmitted after	the min_rate_time	er or max_rate_t	imer expires.	Suggested	lRemedy	,			
SuggestedRemedy				chang	e the cur	rent stat	e machine to the state machir	ne reflected in b	raga_oam_2_0303.pdf
Add the following text to c): OAM_CTL. parameter set enables the immediate to Gasp bit set in the Flags field.	equest primitive w ansmission of Info	vith the local_dyin prmation OAMPD	ng_gasp 0U with the Dying	Proposed	Respons	e	Response Status O		
Proposed Response Response Sta	tus O			<i>CI</i> 57 Braga, Ald	SC 5 obino	7.3.3	P 110 IOL	L	# 542
C/ 57 SC 57.3.2.2 Thatcher. Jonathan V	P 110	L 7	# 991	Comment Line 42	<i>Туре</i> 2	т	Comment Status D		
Comment Type TR Comment St	atus D			Parser	r:MADI s	hould be	Parser:MADR		
Immediate transmission of queued OAI link_fault.	/IPDU should be se	ent with either D	ying Gasp or	Suggested chang	<i>lRemedy</i> e Parser	, :MADI to	Parser:MADR		
SuggestedRemedy Add "or link_fault"				Proposed	Respons	e	Response Status O		
Proposed Response Response Sta	tus O			CI 57	SC 5	7.3.3	P110	L 40-42	# 800
				Seyoun LI	М		SAMSUNG EL	ECTRO	
C/ 57 SC 57.3.2.3	P110 I	L 19	# 992	Comment	Туре	Т	Comment Status D		
Thatcher, Jonathan v	/VVP			In Figu WAIT	Ire 57-5 FOR T	which is X and Cl	the Multiplexer state diagram, IECK_LINK_STATUS are onl	the conditions v two case:	between
Comment Type I Comment Sta	ITUS D	forwarded						,	
Suggested Pomody		lorwarded.		1. Data 2. Data	a Frame a Frame	looped b	ack from Parser block when i	k mode t's loopback mo	ode
Change the wording to "the first validly	ormed instance of	f an OAMPDU'		there i MAC o	s anothe	r conditio	on to be added. send some test frames in the	loopback mode	e to Multiplexer block.
Optionally add: "Note: the implementer	may choose to for	ward all validly for	ormed	Suggested	Remedv	,			
Pronosed Response Response Sta	utus O			My rer	nedy is t	hat "OAI	M:MADR*local_action=LB" she	ould be added.	
				Proposed	Respons	e	Response Status 0		

CI 57	SC 57.3.3	P 110	L 41	# 453	C/ 57	SC 57	7.3.3	P110	L 46	# 543
Yoshimura,	Minoru	NEC			Braga, Alo	dobino		IOL		
Comment 7	Type E	Comment Status D			Comment	Туре	т	Comment Status D		
"Parser "Parser	r:MADI*local_ac r:MADR*local_a	tion=LB" used in figure 57-5 sl ction=LB"	nould be		PARS Unidir	SER and Nectional o	AC clie	ent aata - should be switched or n is strictly for the use of OAM t	nly on loca raffic.	_link_status value only.
Suggested	Remedy				Suggeste	dRemedy				
Correct	according to co	omment.			local_	unidirectio	onal = F	ALSE + local_link_status = OK		
Proposed F	Response	Response Status O			should local_	d be chan link_statu	ged to is = OK			
C/ 57	SC 57.3.3	P 110	L 42	# 801	, and					
Seyoun LIN	1	SAMSUNG EL	ECTRO		local_ ,sho	unidirectio	onal = T anged to	RUE * local_link_status = FAII	-	
Parser:	<i>ype</i> E MADI*local_acti	ion=LB should be incorrect.			local_ Proposed	link_statu <i>Respons</i>	ıs = FAI e	L Response Status O		
Suggestedl Change	Remedy e "Parser:MADI"	to "Parser:MADR"								
Proposed F	Response	Response Status O			<i>Cl</i> 57 Braga, Alo	SC 57 dobino	7.3.3	<i>P</i> 110 IOL	L 46	# 544
					Comment	Туре	т	Comment Status D		
C/ 57	SC 57.3.3	P 110	L 45	# 454	OAM	- should h	nave a s	witch on local_link_status and I	ocal_unidi	rectional values
Yoshimura,	Minoru	NEC			Suggeste	dRemedy				
Comment 7 "Local_ Figure s	<i>Type</i> T unidirectional" s 57-5.	Comment Status D should not be used as the cond	lition to transn	nit MAC client frames in	add ¸ loca transi	I_link_sta tioning to	tus = F/ discard	ALSE * local_unidirectional = F/	ALSE	
"Local link in t Accord If we u	_unidirectional" he receive direc ding to this defin se "Local_unidir	indicates the device is capable tion is not operation. (Line22, ition, "Local_unidirectional" do rectional" as the condition to tr	e of sending "C bage107) es not relate te ansmit MAC c	DAMPDUs" when the o "MAC client frames". lient frames, the	add ¸ loca transi	I_link_Stationing to	atus = O generat	K + local_unidirectional = TRUI e MAC:MADR state	Ē	
definitio	on of this variabl	e should be modified.		·	Proposed	Respons	е	Response Status 0		
Suggestedl	Remedy									

Modify the definition of "Local_unidirectional" or remove the variable from Figure 57-5.

Proposed Response Response Status **O**

C/ 57 SC 57.3.4	P 111	L 16	# 546	Cl	57 SC	C 57.4.2.2	P113	L 20	# 658
Braga, Aldobino	IOL			Pa	rsons, Glenn		Nortel Networks		
Comment Type T	Comment Status D			Co	omment Type	т	Comment Status D		
The Discard state in the	Parser state machine is of no	use.			ITU-T SG13	3 Q13 is defi	ining additional Ethernet link OA	M function	s that will be required for
SuggestedRemedy change !RxOAMPDU * I	ocal_action = DISCARD				carrier netw important th universal id	orks in at le hat the ITU-7 entification o	east 2 documents (draft Rec. Y.1 T be assigned an OAMPDU code of ITU-T Ethernet OAM frames.	7ethreq & epoint in Ta	Y.17ethoam). It is able 57-5 to allow the
to ELSE and transition of	lirectly to WAIT_FOR_RX			Su	ggestedRem	edy			
remove DISCARD state					In Table 57	-5:			
Proposed Response	Response Status O				Insert a new	v row above	'FD' containing:		
C/ 57 SC 57.4.2 Finn, Norman	P 111 Cisco Systems	L 50	# 217		FC ITU-T	Specific R Distingui	eserved for ITU-T Definition ished by ITU-T Recommendation	ns on Ethe	rnet OAM
Comment Type T	Comment Status D				Modify the r	ow above to	o read:		
Having different op-code	es, each of which is allowed to	carry a specific	set of TLVs,		05-FB Re	eserved R	Reserved for future use		
introduces error condition information in two place confusing, and non-inter	ons that need not exist. That is s in a protocol packet, you have operable interpretations of the	any time that an opportunit packet by the	you have the same y for invalid, eceiver.	Pro	oposed Resp	onse	Response Status O		
SuggestedRemedy				Cl	57 SC	C 57.4.2.2	P113	L 22	# 103
Either A) overlay the TL	V number space so that each o	p-code's first T	LV has code 1 (or 1)	, Bra	aga, Aldobino)	UNH-IOL		
or B) get rid of the op-co many interoperability pro	ode, and allow any mixture of T	LVs. Either wa	ly gets rid of a great	Co	omment Type	Е	Comment Status D		
Proposed Response	Response Status O				Lack of con	sistency			
				Su	ggestedRem	edy			
	D.444	1 50			A) IANA she	ould be spel	lled out		
C/ 5/ SC 5/.4.2	P 111 Hattorae Notworl	L 52	# 774		or B) OUI sho	uld be abbre	eviated		
		10		Pr	nnosed Resn	onse	Response Status 0		
Whats a "basic" frame?					00000				
SuggestedRemedy				Cl	57 SC	C 57.4.3.1	P 113	L 44	# 210
Delete "basic".				Fir	n, Norman		Cisco Systems		
Proposed Response	Response Status O			Co	omment Type Typo: "will"	E should be "\	Comment Status D		
				Su	<i>ggestedRem</i> Fix typo.	edy			
				Pro	oposed Resp	onse	Response Status O		

CI 57 SC 57.4.3.1 P 113	L 44	# 877	CI 57 SC	57.4.3.1	P113	L 48	# 775
Daines, Kevin World Wide	e Packets		Squire, Matt		Hatteras Netw	vorks	
Comment Type E Comment Status D Wrong word.			<i>Comment Type</i> There's no e	E Co easy way to easily	mment Status D v see what a Info PDU I	ooks like (ditto f	or other PDU types).
SuggestedRemedy Change "will" to "with".			SuggestedReme We should a	edy add a general dia	gram of what the OAM	PDU looks like	
Proposed Response Response Status O			common he	 eader (18B)			
C/ 57 SC 57.4.3.1 P 113 Martin, David Nortel Network Nortel Network	<i>L</i> 44 vorks	# 198	 Local OAM	I Info (nB)			
Comment Type E Comment Status D Typo.			Remote O/ <after peer<="" td=""><td>AM Info (nB) · discovered> </td><td></td><td></td><td></td></after>	AM Info (nB) · discovered> 			
SuggestedRemedy Change "initially send Information PDUs will or Information PDUs with only the local"	ly the local" to "	initially send	Proposed Respo	onse Res	ponse Status O		
Proposed Response Response Status O			C/ 57 SC Finn, Norman	57.4.3.1	P 113 Cisco System	L 52 s	# 211
			Comment Type	T Co	mment Status D		
CI 57 SC 57.4.3.1 P 113 Squire, Matt Hatteras N	L 48 etworks	# 776	The "L" of th introduces a values 0 and	ne "TLV" should n in unnecessary fa d 1. It also reduc	ot include the code and ailure condition and/or c es the maximum size o	d the length. Th opportunity for be of a TLV. Seems	is is because it ugs: the illegal Length s a bad tradeoff for
Comment Type TR Comment Status D		• • • • • • •	avoiding the	trivial arithmetic	of adding an extra 2.		
Is the remote OAM info TLV always there? What the peer? If its not always there, how does the re	are the contents in a ciever know if it sl	if we haven't talked to	SuggestedReme	edy			
In general, how do we know how to process TLV:	s (if there are any,	or how many)?	Change defi bytes after t	nition of OAM_In he length, not inc	formation_Length (and luding the type and leng	all other TLV le gth bytes, thems	ngths) to the number of selves.
SuggestedRemedy			Proposed Respo	onse Res	ponse Status O		
 In general, since most of our frames have TLV "Number of TLVs." Then the receiver knows how how many, you don't know when to end your loor 	s, add a field to th to parse the data	e common header for field (if you don't know	CI 57 SC	57.4.3.1	P113	L 53	# 878
2) Only send one TLV in the Info OAMPDU until	,ou enter LOCAL_	SEND_REMOTE_1.	Daines, Kevin	F 00	World Wide P	ackets	
3) Have a different TLV type (same format though TLV.	n) for local and ren	note OAM information	With remove needs to be	E CO al of loopback tim udpated.	er, and subsequent shi	rinking of OAM_	Information TLV, text
Proposed Response Response Status 0			SuggestedReme Change "22 "two-octet".	edy (0x16)" to read "2	20 (0x14)" on line 53. C	n line 54, chang	ge "four-octet" to read
			Proposed Respo	onse Res	ponse Status O		

CI 57 SC 57.4.3.1 P 113-115 L 48 # 503	CI 57 SC	57.4.3.1	P114	L 25	# 213
Lee Ho-Sook ETRI (Electronics Tele	Finn, Norman		Cisco Systems		
Comment Type E Comment Status D	Comment Type	TR	Comment Status D		
It would be better to add whole illustration of the informaton OAM PDU data fields as like the figure 55-9 of the previous draft version.	What do you you do if the	u do you re TLV is too	ceive a version field which is hig long? These are critical questi	her than yo ons.	u understand? What do
SuggestedRemedy	SuggestedReme	ədy			
Please refer the figure 55-9 of the draft version 1.2	Too-long TL	V or versio	n number too high should be ac	cepted. Re	ceiver handles what he
Proposed Response Response Status O	knows how levels, typic answer, her	to handle. ally requirir e.	I his future-proofs the protocol. In one to send muliple packets a	I he alterna at multiple le	tive is to negotiation revevels. 802.1 has the right
C/ 57 SC 57.4.3.1 P113-115 L 48 # 471	Proposed Respo	onse	Response Status O		
Comment Type E Comment Status D	CI 57 SC	57.4.3.1	P115	L 2731	# 199
It would be better to add whole illustration of the informaton OAM PDU data fields as like	Martin, David		Nortel Networks		
the figure 55-9 of the previous draft version.	Comment Type	т	Comment Status D		
SuggestedRemedy Please refer the figure 55-9 of the draft version 1.2	If I understa enterprise n	nd this cor umber in o	rectly, we are forcing every vend rder to generate an Information	lor to having PDU, due to	an IANA private the fact there is no null
Proposed Response Response Status O	value that ca IANA numbe	an be used er but do h	in the Enterprise_Identifier field ave an OUI number.	. Some ven	dors may not have an
	SuggestedReme	ədy			
C/ 57 SC 57.4.3.1 P 114 L 15 # 104 Braga, Aldobino UNH-IOL UNH-IOL Image: Compare the second se	Suggest pro as: 23:0 OUI	viding an e Enterprise	equivalent OUI Vendor Identifier Identifier (3 bytes)	field followir	ng the IANA one. Such
Comment Type E Comment Status D DISCARD should say; indicates that the device is discarding non-OAMPDUs received from	39:24, Dev 55:40, Ver	vice_Identif sion_Ident	er fier		
the subordinate sublayer	Proposed Respo	onse	Response Status O		
SuggestedRemedy					
indicates that device is discarding non-OAMPDUs received from subordinate sublayer	CI 57 SC	57.4.3.1	P 115	L 34	# 216
Proposed Response Response Status O	Finn, Norman		Cisco Systems		
	Comment Type	TR	Comment Status D		
	If proper use understands "reserved" fi	e of versior and ignor ield.	ing is done, that is, a receiver a es the parts he doesn't understa	ccepts high nd, then the	er versions than he ere is no need for a
	SuggestedReme	edy			
	Remove the	Reserved	field.		
	Proposed Respo	onse	Response Status 0		

C/ 57 SC 57.4.3.1 Thatcher, Jonathan	<i>P</i> 15 WWP	L 28	# 993	C/ 57 SC 57.4.3.2 Squire, Matt	P 115 Hatteras N
Comment Type T Question: Why isn't the SuggestedRemedy If this is not an oversigh Proposed Response	Comment Status D re an option to use an OUI i nt, comment widthdrawn. Response Status O	nstead of IANA i	n the Vendor ID field.	Comment Type T I think the sequence numb new PDU is formed/xmitte PDU has 2 events - which SuggestedRemedy Change "Each new" thru	Comment Status D er descriptions are wro d, not whenever a new sequence number is th end to:
C/ 57 SC 57.4.3.2 Squire, Matt	P 115 Hatteras Netv	L 34 works	# 778	The OAM client increment Notification OAMPDU form may be sent multiple times signaled in only one unique	s the Event Sequence red by the OAM client. with the same sequer Event Notification O/
Comment Type E Why do we have reserv SuggestedRemedy Delete reserved bytes in	Comment Status D red bytes? Purpose? If non n OAM info TLV.	e, delete.		transmitted multiple times) Upon receiving an Event N number with the last receiv currentEventSeqNum = last then the current event is a	lotification OAMPDU, t /ed Event Sequence N stEventSeqNum, duplicate. If it is a duj
Cl 57 SC 57 4 3 2	P 115	1 44	# 977	Event TLVs are defined in	57.5.
Arnold, Brian	Cisco Systen	15		Proposea kesponse – F	esponse Status U

Would like to see part of the event sequence number usage spelled out to remove any chance of ambiguity.

If an implementation chooses to send duplicate EN OAMPDUs, but builds and enqueues them spaced out over time rather than back-to-back, it would be a little clearer to add a sentence to indicate that the duplicate EN OAMPDU carries an identical event sequence number as the original, rather than a new sequence number. Basically, some people not privy to the development of OAM may question what is the meaning of "new", as in "new event". Some say that depends upon whether you're the OAM client or whether you're the queue.

SuggestedRemedy

Suggest adding the following sentence starting in the middle of line 44:

"...a particular event. Duplicate Event Notification OAMPDUs must contain the Event Sequence number of the original Event Notification OAMPDU for that event, even though Event Notification OAMPDUs may be queued to transmit or transmitted with out-of-order Event Sequence numbers. Each new event..."

Or something along those lines.

Proposed Response Response Status **O**

P802.3ah Draft 1.3 Comments

	00.	07.4.J.Z		P115	L 44	# 780
Squire, Mat	tt			Hatteras Ne	tworks	
Comment 7	Туре	т	Comment S	Status D		
I think t new PI PDU h	the seq DU is fo as 2 ev	uence nui rmed/xmi ents - whi	mber descript tted, not wher ch sequence	ions are wroi never a new o number is th	ng. The seq# get event happens. e at?	s bumped whenever a e.g. what happens if the
Suggested	Remed	V				
Change	e "Each	new" tł	nru end to:			
Notifica may be signale transm	ation O e sent n ed in on itted m	AMPDU fo nultiple tim y one uni-	ormed by the (nes with the si que Event No es).	OAM cliente DAM client. ame sequent tification OA	A particular Even ce number. Any MPDU (though th	inique Event It Notification OAMPDU particular event can be at PDU may be
Upon ro numbe	eceivin r with tl	g an Even ne last rec	t Notification	OAMPDU, th Sequence Nu	e receiver compa mber. If	ares the sequence
current then th and co Event	tEventS le curre lunted ii TLVs ai	eqNum = nt event is n XXXXX. re defined	in 57.5.	If it is a dupl	icate, it is discarc	led by the OAM client
current then th and co Event T Proposed F	EventS le curre unted in TLVs al Respon	eqNum = nt event is n XXXXX. re defined se	in 57.5.	If it is a dupl	icate, it is discarc	led by the OAM client
current then th and co Event ⁻ Proposed F	EventS le curre unted in TLVs al Respon SC :	eqNum = nt event is n XXXXX. re defined se	in 57.5.	If it is a dupl status O	icate, it is discard	ed by the OAM client
current then th and co Event ⁻ Proposed F C/ 57 Daines, Ke	EventS le curre unted ii TLVs al Respon SC : vin	eqNum = nt event is n XXXXX. re defined se 57.4.3.2	in 57.5.	If it is a dupl status O P 115 World Wide	icate, it is discard <i>L</i> 45 Packets	ted by the OAM client
current then th and co Event [–] Proposed F C/ 57 Daines, Ke Comment T Capital	EventS le curre unted il TLVs al Respon SC vin Type lization.	eqNum = nt event is n XXXXX. re defined se 57.4.3.2 E	in 57.5. Response S	If it is a dupl status O P 115 World Wide Status D	icate, it is discard <i>L</i> 45 Packets	ded by the OAM client # 879
current then th and co Event ⁻ Proposed F Cl 57 Daines, Ke Comment T Capital Suggested Change	EventS le curre unted in TLVs al Respon SC vin Type lization. Remed e "data	eqNum = nt event is n XXXXX. e defined se 57.4.3.2 E y ' to "Data'	in 57.5. Response S	If it is a dupl status O P 115 World Wide Status D ng locations:	icate, it is discard <i>L</i> 45 Packets	ded by the OAM client # 879
current then th and co Event ⁻ Proposed F Cl 57 Daines, Ke Comment T Capital Suggested Change pg 115 pg 115 pg 116 pg 116	EventS le curre unted in TLVs an Respon SC 4 vin Type lization. Remed e "data" i, line 4 i, line 5 i, line 4 i, line 12	eqNum = nt event is n XXXXX. re defined se 57.4.3.2 E y to "Data"	in 57.5. <i>Response</i> S	If it is a dupl status O P 115 World Wide Status D ng locations:	icate, it is discard <i>L</i> 45 Packets	# <mark>879</mark>

SC 57.4.3.2

CI 57	SC 57.4.3.2	P 11	5 L	48	# 504	CI 57	SC 5	57.4.3.2		P 115	L 48	# 472
Lee Ho-Soc	ok	ETRI (I	Electronics Te	ele		Lee Ho-So	ok		ET	RI (Electronic	s Tele	
Comment 7	ype E	Comment Status	D			Comment	Туре	Е	Comment Stat	tus D		
It would be better to add whole illustration of the data fields of the event notification OAM PDU. (with the same format with the above comment.) Additionally, event flag fields in subclause 57.4.2.1 must be moved to the content of subclause 57.4.3.2. This subclause must describe detailed OAM events in its OAM PDU. The event OAM PDU must have matched field with critical OAM events in table 57-2, an non-critical OAM events in table 57-3. It would be better to describe the brief sketch of each event field, and to inform the size each field and the total size of the event notification OAM PDU.						It would PDU. (Additio subclai This su The ev non-cri It would each fi	d be bet with the nally, ev use 57.4 ubclause rent OAI tical OA d be bet eld and	tter to add same for vent flag fi 4.3.2. e must des M PDU mu AM events tter to des the total s	d whole illustratio mat with the abo ields in subclaus scribe detailed C ust have matche in table 57-3. scribe the brief sk size of the event	n of the data f ive comment.) e 57.4.2.1 mu DAM events in d field with crit setch of each e notification O/	ields of the st be moved its OAM PD tical OAM e event field, a AM PDU.	event notification OAM I to the content of U. vents in table 57-2, and and to inform the size of
Suggestedl	Remedy					Suggested	Remedy	V				
This su 1) inser (as lik 2) move 57.4.3.3 3) add 57.4.3.3 4) inser 5) expla (the si	bclause can be t the figure of w e the figure 55-9 e the explanatio 2. the explanation 2. t the flag field re ain each field in ze of each field,	modfied in following w hole PDU format. 9 of the draft version 1 n about event flag field about non-critical ever elated with non-critical itemized format. and detailed format n	ray : .2) ds in subclaus nt in subclaus event to the e nust be descri	se 57.4.2.1 to t e 57.2.7.2 to th event notification ribed)	he subclause ne subclause on OAM PDU.	This su 1) inse (as lik 2) mov 57.4.3. 3) add 57.4.3. 4) inse 5) expl (the s	ubclause rt the fig the the fig the the exp 2. the exp 2. rt the fla ain eacl size of e	e can be n gure of wh gure 55-9 xplanation lanation a ag field rel h field in it ach field, a	nodfied in following ole PDU format. of the draft version about event flag about non-critical lated with non-critemized format. and detailed format.	ng way : on 1.2) fields in subc event in subc itical event to f nat must be de	lause 57.4.2 lause 57.2.7 the event no escribed)	2.1 to the subclause 2.2 to the subclause otification OAM PDU.
Proposed F	Response	Response Status	0			Proposed I	Respons	se	Response Stat	us O		
						<i>CI 57</i> Squire, Ma	SC 5	57.4.3.3	Ha	P 115 atteras Networ	L 54 ks	# 777
						Comment Variabl	<i>Type</i> le reque	TR ests should	Comment Stat dn't be processe	<i>tus</i> D d from passive	e guys. Ditt	o for loopback request.
						Suggested Add se station <or sho<="" td=""><td>Remedy entence respon- ould we</td><td>y "If the OA ds with an ignore it></td><td>M client receives "illegal request"</td><td>s a variable re error code as</td><td>quest from a defined in</td><td>a passive peer, the Fable 57-13."</td></or>	Remedy entence respon- ould we	y "If the OA ds with an ignore it>	M client receives "illegal request"	s a variable re error code as	quest from a defined in	a passive peer, the Fable 57-13."

Similar for 57.4.3.5.

Also, define "illegal request" in the error codes of 57-13.

Proposed Response Response Status **0**

Cl 57 SC 57.4.3. P116 L1 # [94] Thatcher, Jonathan WWP Ownent Type T Comment Status D If the remote end is set up to send multiple to the local end. Status D Ownent Type T Comment Status D Charge Status A P116 L13 # [44] Proposed Response First Status D Correction of reference 'See 57.4' is 'See 57.2.8'. Suggested/Remedy Arvey least, there should be a note indicating caution. Better yet, there should be a field that indicates the reptinon value so that the local end on 'oh, behave.' Proposed Response Response Status O Cl 57 SC 57.4.3.5 P116 L10 # [28] Diales, Kavin World Wide Packets Comment Type E Comment Status D Cl 57 SC 57.4.3.5 P116 L10 # [28] Dialew that the loopback Control OAMPDU data field contains only Loopback Time. The loopback Control OAMPDU data field contains only Loopback Time. <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>														
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Comment Type T Comme	Thatcher, Jonathan WWP			Fujita, Toshihiko Hitachi Communicatio										
If the remote and is sait up to send multiple Variable Response OAMPDUs (for redundancy), and the multiple services multiple of the local variable Request OAMPDUs, then the local can, effectively, over run the remote by requesting more than handle. Suggested/Remedy At very least, there should be a note indicating caution. Better yet, there should be a field that indicates the replition value so that the local end can 'oh, behave." Proposed Response Response Status O C157 SC 57.4.3.5 P116 L10 # [298 Comment Type E Comment Status D Takashi, Ezawa Oki Electric Industry C Comment Type E Comment Status D Takashi, Ezawa Oki Electric Industry C Comment Type E Comment Status D Takashi, Ezawa Oki Electric Industry C Comment Type E Comment Status D Takashi, Ezawa Oki Electric Industry C Comment Type E Comment Status D Takashi, Ezawa Oki Electric Industry C Comment Type E Comment Status D Takashi, Ezawa Oki Electric Industry C Comment Type E Comment Status D Proposed Response Response Status O C157 SC 57.4.3.5 P116 L13 # [200 Varin, David Nortel Networks Comment Type E Comment Status D Proposed Response Response Status O C157 SC 57.4.3.5 P116 L13 # [200 Varin, David Nortel Networks Comment Type E Comment Status D Proposed Response Response Status O Per comment Type T Comment Totals to P Per comment to remove extraneous loopback control OAMPDU is used to control the remote device's loopback Control OAMPDU is used to control the remote device's loopback Control OAMPDU is used to control the remote device's loopback status field is unspecified.* Suggested/Remedy Change See 57.4 for a discussion" to "See 57.2.8 for a discussion". Proposed Response Status O Net The Loopback Control OAMPDU is used to control the remote device's loopback status to read: The Loopback Control OAMPDU is used to control the remote device's loopback status to dial field is unspecified.* Suggested/Remedy Change See 57.4 for a discussion" to "See 57.2.8 for a discussion". Proposed Response Status O	Comment Type T Comment Status D						t Type	E	Comment Status	D				
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remote can handle. Change 'See 57.4' to 'See 57.2.8'. SuggestedRemedy Arvey least, there should be a note indicating caution. Batter yet, there should be a field that indicates the repitition value so that the local end can 'oh, behave." Proposed Response Response Status 0 C157 SC 57.4.3.5 P116 L10 # 298 Camment Type E Comment Status D Eastail, Ezawa World Wide Packets Comment Type E Comment Status D Eastail effect in change's that the deferd 1' supports that the deferd 1' supports that the deferd 1' supports that the deferd 1' support was the deferd 1' supports that the deferd 1' support to the table because of the clear zation. SuggestedRemedy Proposed Response Response Status D Incorrect cross-refarence. SuggestedRemedy Comment Type E Comment Type T Comment Type T Proposed Response Response Status D Per comment Type T Comment Type T Comment Type T Comment Type T Comment Type T Comment Type D Change 'See 57.4 for a discussion* to 'See 57.2.8 for a discussion* to 'See 57.4 for	redundancy), and the multiple is greater than the multiple for the local Variable Request OAMPDUs, then the local can, effectively, over run the remote by requesting more than the					SuggestedRemedy								
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Cl 57 SC 57.4.3.5 P116 L10 # [298] Comment Type E Comment Status D Font/size. Delive that the Loopback Control OAMPDU data field in the Draft 1.2. Why was it deleted? I suggest that the definition of Loopback Control OAMPDU data field is shown in the table because of the clearization. Comment Type E Comment Status D SuggestedRemedy SuggestedRemedy Comment Status D SuggestedRemedy Comment Status D Proposed Response Response Status O Cl 57 SC 57.4.3.5 P116 L13 # [200] Cl 57 SC 57.4.3.5 P116 L13 # [200] Per comment to remove extraneous loopback Control OAMPDU data field shall contain on of the loopback Control OAMPDU data field shall contain on of the loopback Control OAMPDU data field shall contain one of the loopback control OAMPDU data field shall contain one of the loopback control OAMPDU data field shall contain one of the loopback control OAMPDU data field shall contain one of the loopback control OAMPDU data field shall contain one of the loopback control the table S7-x. See 57.4 for a discussion of loopback column # 1 heading = Code						Daines, K	Cevin		World	d Wide Pack	tets			
Takashi, Ezawa Oki Electric Industry C Comment Type E Comment Status D Libelieve that the Loopback Control OAMPDU data field contains only Loopback Time. There was the table of the data field in the Draft 1.2. Why was it deleaded? I suggest in that the definition of Loopback Control OAMPDU data field is shown in the table because of the clearization. SuggestedRemedy SuggestedRemedy Perposed Response Response Status O Perposed Response Response Status O Cl 57 SC 57.4.3.5 P116 L13 # 200 Variani, David Nortel Networks D Per comment Type T Comment Type Comment Type E Comment Status D Per comment Status D Comment Type E Comment Status D Per comment Type T Comment Type Comment Type The Loopback Control OAMPDU is used to control the treme device's loopback state. The Loopback Control OAMPDU ata field shall contain one of the toopback codes found in Table 57-x. See 57.4 for a discussion of loopback of Column #1 heading = Code Column #1 heading = Description Row #3 = 71: "Statu Loopback" Proposed Response Response Status O Column #1 heading = Code Column #1 heading = Code Column #1 heading = Description	CI 57 SC	57.4.3.5	P116	/ 10	# 298	Commen	t Type	E	Comment Status	D				
Comment Type E Comment Status D Lebleve that the Loopback Control OAMPDU data field contains only Loopback Time. Change font to match start of paragraph in both 57.4.3.5 and 57.4.3.6. SuggestedRemedy SuggestedRemedy C Poposed Response Response Status O Cl 57 SC 57.4.3.5 P116 L13 # 200 Vlartin, David Nortel Networks D Per comment Status D Comment Type E Comment Status D Per comment Status D Comment Type E Comment Status D Per comment Status D Comment Type E Comment Status D Per comment Status D Incorrect cross-reference. SuggestedRemedy 1) Reword sub-clause to read: "The Loopback Control OAMPDU is used to control the remote device's loopback state. The Loopback Control OAMPDU data field shall contain one of the loopback codes found in Table 57-x. See 57.4 for a discussion of loopback codes found in Table 57-x. See 57.4 for a discussion of loopback column 41 heading = Code SuggestedRemedy 0 2) Add table 2) Add table Table name = Loopback Codes Column 41 heading = Code Column 41 heading = Code Column 42 heading = Code	Takashi, Ezawa		Oki Electric Indus	try C		Font/	size.							
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SuggestedRemedy Cl 57 SC 57.4.3.5 P116 L9 # 869 Proposed Response Response Status 0 Cl 57 SC 57.4.3.5 P116 L13 # 200 Comment Status D Cl 57 SC 57.4.3.5 P116 L13 # 200 Per comment to remove extraneous loopback time from loopback operation, this sub- clause needs to be re-worked. Comment Type E Comment Status D Incorrect cross-reference. SuggestedRemedy Change "See 57.4 for a discussion" to "See 57.2.8 for a discussion". Per comment for leopback codes found in Table 57-x. See 57.4 for a discussion of loopback column #1 heading = Code Column #1 heading = Code Column #1 heading = Code Column #1 heading = Code Column #1 heading = Code Column #1 ro": "Reserved" Row #3 = "2": "End loopback" Row #3 = "2": "End loopback" Row #4 = "3-255": "Reserved"	There was the definition of learization.	ne table of tl Loopback C	he data field in the Draft 1.2. When the data field is shortrol OAMPDU data field is shortrol OAMPDU data field is short of the d	ny was it de own in the	leted? I suggest that the table because of the	Proposed	l Respons	se	Response Status	0				
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Cl 57 SC 57.4.3.5 P 116 L 13 # 20 Martin, David Nortel Networks SuggestedRemedy 1) Reword sub-clause to read: "The Loopback Control OAMPDU is used to control the remote device's loopback state. The Loopback Control OAMPDU data field shall contain one of the loopback codes found in Table 57-x. See 57.4 for a discussion of loopback operation. The remainder of the data field is unspecified." SuggestedRemedy Change "See 57.4 for a discussion" to "See 57.2.8 for a discussion". Value Proposed Response Response Status O Value Row #1 = "0" :: "Reserved" Row #2 = "1" :: "Start Loopback" Row #4 = "3-255" :: "Reserved" Row #2 = "1" :: "Start Loopback" Row #4 = "3-255" :: "Reserved" Row #4 = "3-255" :: "Reserved"						Per comment to remove extraneous loopback time from loopback operation, this sub- clause needs to be re-worked.								
Martin, David Nortel Networks 1) Reword sub-clause to read: "The Loopback Control OAMPDU is used to control the remote device's loopback state. The Loopback Control OAMPDU data field shall contain one of the loopback codes found in Table 57-x. See 57.4 for a discussion of loopback operation. The remainder of the data field is unspecified." SuggestedRemedy Change "See 57.4 for a discussion" to "See 57.2.8 for a discussion". 2) Add table Proposed Response Response Status 0 2) Add table table name = Loopback Codes Column #1 heading = Code Column #2 heading = Description Row #1 = "0" :: "Reserved" Row #2 = "1" :: "Start Loopback" Row #4 = "3-255" :: "Reserved"	CI 57 SC	57.4.3.5	P 116	L 13	# 200	Suggeste	dRemedy	/						
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Row #3 = "2" :: "End loopback" Row #4 = "3-255" :: "Reserved" Proposed Response						Row	#2 = "1" :	: "Start Lo	oopback"					
Proposed Pesnonse Status						Row	#3 = "2" : #4 = "3-?'	: "End loc 55" ·· "Re	opback" eserved"					
						Proposeo	l Respons		Response Status	0				

			P802.3ah [Draft 1.3 Cor	nments						
C/ 57 SC 57.4.3.6	P 116	L 2022	# 201	CI 57	SC 57.5	P 116	L 32	# 990			
Martin, David	Nortel Networks			Thatcher,	Jonathan	WWP					
Comment Type E	Comment Status D			Comment	Туре Т	Comment Status D					
Font change.				If thes	e events are se	ent when a threshold is exceed	ed, why is it that	t the number also is			
SuggestedRemedy				Sent?							
"32-bit IANA Private	EnterpriseData field is unspec	cified." is sma	ller.	Suggester	aRemeay	a number oon ahanga hatwaa	a tha tima tha th	vrachald is avaaadad			
Proposed Response Response Status O					and the time that the PDU is sent, this should be made explicit.						
				If this is not the case, then why?							
C/ 57 SC 57.4.3.6 Squire, Matt	P 116 Hatteras Network	L 22 s	# 779	Proposed	Response	Response Status O					
Comment Type E	Comment Status D	appears to u	so smaller fonts than	CI 57	SC 57.5	P116	L 34	# 299			
the beginning. Ditto 57	7.4.3.7.	appears to u		Takashi, E	zawa	Oki Electric Ir	dustry C				
SuggestedRemedy				Comment	Туре Е	Comment Status D					
use consistent fonts.					Because terminology of "TLV_type" is used in the other definitions, I suggest that the						
Proposed Response Response Status O				terminology of "Event TLV_type" shall be used instead of "Event Type".							
				Suggeste	dRemedy						
<i>Cl</i> 57 <i>SC</i> 57.4.3.7 Martin, David	P 116 Nortel Networks	L 2829	# 202	Proposed	Response	Response Status 0					
Comment Type E	Comment Status D			CL 57	SC 57 5	P116	/ 50	# 781			
Font change.				Squire. Ma	att	Hatteras Netv	vorks	" [10]			
SuggestedRemedy				Comment	Type F	Comment Status D					
"24-bit Organizationa	ally UniqueData field is unspec	cified." is sma	ller.	Shoul	d clarify how co	ompatibility is attained w/vendo	r specifics all sh	aring same 128 event			
Proposed Response	Response Status 0		type values.								
				Suggeste	dRemedy						
CI 57 SC 57.43.6	P 116	L 22	# 566	Add sentence after table:							
Tom Mathey	Independent			Information OAMPDU. Thus, two vendors can each use the same value with a different							
Comment Type E	Comment Status D			meaning.							
				Proposed	Response	Response Status O					
SuggestedRemedy											
Font size for all lines sl	hould be the same. Also in next	paragraph.									

Proposed Response Response Status **O**
C/ 57	SC 57.5	P 116	L 52	# 978
Arnold, E	Brian	Cisco Systems		

Comment Status D Comment Type **T**

Event TLVs could theoretically be used to monitor and accumulate a continuum of error counts by setting the thresholds to zero (zero symbol errors, zero frames errors, etc.). If this is an intended usage of Event TLVs, then there could be an improvement made to support an OAM Client or MAC client in accurately building this continuum.

An implementation wishing to construct an accurate timeline of error events which exceed the set thresholds can only rely upon the time of error event notification OAMPDU receipt and/or the time period covered by the event itself, not the time of the OAMPDU's generation. This can lead to an incorrect reconstruction of the timeline, especially if OAMPDUs are lost, deferred, or arrive later due to initial loss then the arrival of a duplicate.

In order to accurately construct the timeline, it seems that the time reference of the builder/sender of the event notification OAMPDU could be included within the OAMPDU itself, such that the receiver can understand the time relationship between any two event notification OAMPDUs. This could also serve to remove ambiguity to allow the receiver to discern and report where there are gaps in time where no monitoring information is available.

This timestamp need not be very accurate nor complicated, and need only be as granular as the highest frequency of error event OAMPDU transmission (10 frames/sec). This proposal uses a timestamp that is incremented each 100msec.

SuggestedRemedy

A proposal to include this timebase information would alter these areas:

57.3.1.2 Variables

local time stamp

The parameter of the OAM CTL.request primitive, as defined in 57.2.5.4.

This indicates the current value of the OAM client time reference.

Value: two-octet integer (cleared on initialization of OAM sublaver, incremented every 100ms).

ind time stamp

The parameter of the OAM CTL indication primitive contains the 2-octet value of the time reference field of the most recent event notification OAMPDU frame to have been received.

57.5 Event TLVs

Each of the event TLVs would also contain a two-octet field which represents the value of the local_time_stamp variable provided by the service primitive. The event TLVs' length fields would be altered to adjust for the added field.

30.11.1.1.xxxx OAM Attributes

TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause Page 37 of 169 RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn C/ 57

For each of the error event objects, there could be an object that provides the time reference (timestamp) corresponding to the associated error event counters.

Proposed Response Response Status 0

CI 57	SC 57.5	P	117	L 5	#	302	
Ken, Muraka	ami	Mits	subishi Ele	ctric			

Comment Type T

This comment relates to the comment #163 on D1.2.

Not only the threshold but also the window size of non-critical events should be parameters in the Clause 30 MIB.

SuggestedRemedv

The following MIB parameters should be specified.

- Errored Symbol Window of Errored symbol period: aOAMLocalErrSymPeriodWindow
- Errored Frame Window of Errored frame seconds: aOAMLocalErrFrameSecsWindow
- Errored Frame Window of Errored frame period: aOAMLocalErrFramePeriodWindow
- Errored_Frame_Seconds_Window of Errored frame seconds summary: aOAMLocalErrFrameSecsSummaryWindow

Comment Status D

Proposed Response Response Status **O**

C/ 57	SC 57.5.1	P 117	L 8	# 995	
Thatcher,	Jonathan	WWP			

Comment Type Comment Status D TR

One second and one minute are unnecessarily restrictive lower and upper bounds.

Note that the upper bound for gigabit is $(2^32 \times 8 / 1 \text{ Gb}) = 30 \text{ seconds}$ Or 3 seconds for 10 Gig. or 0.3 seconds for 100 Gig....

SuggestedRemedy

Don't know exactly what we are attempting to accomplish. But, this is probably not doing it.

Proposed Response Response Status **O**

CI 57	SC 57.5.2	P117	L 20	# <u>783</u>	
Squire, Ma	att	Hatteras Net	works		
<i>Comment</i> Define	<i>Type</i> E e frame error.	Comment Status D			
Suggested	dRemedy				
Define	e what constitutes	a frame error (CRC? frame	e too big? frame	too small? etc.).	

Proposed Response

Response Status 0

SC 57.5.2

C/ 57 SC 57.5.4 Squire, Matt	P 118 L 14 Hatteras Networks	# 782	C/ 57 SC 57.8 Barrass, Hugh	P 122 Cisco Systems	L 51	# 943
Comment Type E Define Errored Second.	Comment Status D		Comment Type T Subclause 57.8 shou	Comment Status D Id not be required for OAM.		
SuggestedRemedy Add sentence: An errore frame error has occurred	d frame second is a one second interva	al wherein at least one	SuggestedRemedy Delete subclause 57.	8 Response Status O		
Proposed Response	Response Status O					
C/ 57 SC 57.5.4 Ken, Murakami	P 118 L 21 Mitsubishi Electric	# 301	C/ 57 SC 57.9 Braga, Aldobino	P UNH-IOL	L	# 105
Comment Type T It is described that the E However, in Table 57-3,	Comment Status D rrored_Frame_Seconds_Window is inc it is described that this window is conve	licated in terms of seconds. eyed in 100ms intervals.	replace PICS with PI	Comment Status D CS in document braga_oam_1_0	303.pdf	
SuggestedRemedy This inconsistency shoul	d be corrected.		replace PICS with PI Proposed Response	CS in document braga_oam_1_03 <i>Response Status</i> 0	303.pdf	
Proposed Response	Response Status O		C/ 57 SC 57.9.3.2	2 P125		# 881
C/ 57 SC 57.5.4	P118 L 25	# 621	Daines, Kevin	World Wide Pac	kets	
			With removal of loop	back timer, several PICS changes	s are needed.	
Comment Type I	Errored Frame Seconds Window to	15 minutes to align with the	SuggestedRemedy			
minimum binning period	typical of transmission equipment, to fa	acilitate the OLT design.	Change "non-zero loo	opback time" to "start loopback cc	ode" on lines 21 and	26.
SuggestedRemedy Increase the Errored_Fra	ame_Seconds_Window upper bound fr	rom 600 sec to 900 sec.	Remove LTE1 and L Change "loopback tin Remove "loopback tin	TE2 altogether. ner equal to zero" to "end loopbac mer equal to zero and " from line 4	ck code" on lines 42 44.	and 49.
Proposed Response	Response Status O		Proposed Response	Response Status O		
C/ 57 SC 57.7.3 Gerhardt, Floyd	P 121 L 39 Cisco Systems	# 887				
Comment Type E The 4th octet of the Data example.	Comment Status D a/Pad field has the incorrect value in the	e text next to the octet				
SuggestedRemedy value = 0x02 - MSB						
Proposed Response	Response Status O					

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

CI 57	SC Figure 57-5	P 110	L 45	# 565	C/ 57	SC Tab	le 57-9	P 115	L 18	# 215
rom Matney		Independent			Finn, Nor	man		Cisco System	ns	
Comment Ty	rpe T Comme	nt Status D		ha ahaala faa	Commen	<i>Туре</i> ТР	Comm	ent Status D	11- 11 (00	
For the e	idirectional should be for	NK_STATUS to sta	te IX_DAIA, t al=TRUE" rathe	ne check for er than false.	Not a	t all clear wr	at "Vendor Ider	ntifier" is for. Wha	t's it for??	
					Suggeste	dRemedy				
For the e local_uni	exit from state CHECK_LII idirectional should be for	NK_STATUS to sta "local_unidirectiona	te DISCARD, t al=FALSE" rath	he check for er than TRUE.	Eithe remo	r explain the ve it from the	semantics of w e document.	hat the receiver is	supposed to do	with this field, or
SuggestedRe	emedy				Proposed	Response	Respon	se Status O		
Verify an	nd change as above.									
Proposed Re	esponse Respons	e Status O			C/ 58	SC		Р	L	# 485
					Murphy, 1	om		Infineon		атаранан аланан алан
C/ 57 Finn, Normar	SC Table 57-6 n	P 114 Cisco Systems	L 17	# 212	Comment Jitter	t <i>Type</i> TF discussions	Commo for Clause 58 a	ent Status D wait a decision on	the clocking arc	hitecture of the PON
Comment Ty "Reserve not be se to do. Do	tree TR Comment ed and undefined" is vague is vague is vague ent" is better on the transmit is the particular is the particular	nt Status D e, and can lead to f nission side. On th cket invalid and ign	uture interoper e receive side, ored entirely?	ability problems. "Must we must decide what What?	Suggeste Need Proposed	dRemedy a decision c Response	of the larger gro Respon	up regarding EPO se Status O	N clock/timing st	ructure
SuggestedRe	emedy									
Change ' this value	"Reserved and undefined'	' to "Must not be se	ent". Ignore ang	y packet received with	CI 58	SC 10		P130	/ 4	# 802
Proposed Re	e con Senonse Respons	o Status O			John Geo	rge		OFS		" 002
торозей не	тезропзе пезропз				Commen	t Type F	Comm	ent Status D		
Cl 57 Finn. Normar	SC Table 57-7	P 114 Cisco Systems	L 35	# 214	The c	overview sho orks (PONs)	uld clearly state	e that this clause d	efines the PMDs	for passive optical
Commont Ty		nt Status D			Suggeste	dRemedy				
"Should": Otherwis may chai	s must be "must"s. Same se, you will not have intero nge these musts. But, un	e for table 57-8 and perability in the futu less they are MUS ⁻	same for every ure. This is the Ts instead of S	where else. spec for rev 1. Rev 2 HOULDs, you can	Chan Proposed	ge "over fibe Response	Respon	ssive optical netwo	orks (PONS)"	
					CI 58	SC 1.1		P 130	L 44	# 803
Suggesteare	emeay d fielde MUST he tronomit		The impored of	- reasint	John Geo	rge		OFS		
Proposed Re	esponse Respons	e Status O	i be ignored of	n receipt.	Commen	Type E	Comm	ent Status D		
					in la	DIE 58.1, dis	ances should b	e stated as minim	iums to meet obj	ectives
					Suggeste Chan	<i>dRemedy</i> ge "Nominal	Distance" to "M	linimum Distance'	,	
					Proposed	Response	Respon	se Status O		

C/ 58 SC 1.3	P 131	L 26	# 804	C/ 58	SC 58.1	P 130	L 10	# 430
John George	OFS			Dawe, Pie	rs	Agilent		
Comment Type E PON acronym missing	Comment Status D from terminology and convent	ions		Comment We ca	<i>Type</i> T an get more va	Comment Status D lue out of table 1, which is an o	orphan at prese	nt. We can put more
SuggestedRemedy add "PON - Passive Op	otical Network"			inform Suggested	ation up front	where the reader wants it, and	cut out clutter la	ater.
Proposed Response	Response Status O			At line Table In the m to 2	10, add sente 58-1 shows th table, change	ence: e primary attributes of each PN 'Nominal distance' to 'Minimun poriate	/ID type. n range', values	0.5 m to 10 km and 0.5
Cl 58 SC 58 Dawe, Piers	P 129 Agilent	L 1	# 410	Add ro In 58.3 tables	ows for minimu 3 and 58.4, ref	im and maximum channel inse er to Table 58-1 instead of 58-0	rtion loss 6 and 58-10, an	d delete those mini-
Comment Type E The title is a mouthful!	Comment Status D			In 58.1 senter	10, line 31, cha nce is wrong).	ange to 'The channel insertion	losses are giver	ו in Table 58-1.' (current
SuggestedRemedy				Proposed	Response	Response Status O		
l suggest: Physical Medium Deper 1000BASE-PX20 (long	ndent (PMD) sublayer and me wavelength passive optical ne	dium, type 10 tworks)	000BASE-PX10 and	C/ 58	SC 58.1	P130	L11	# 3
Proposed Response	Response Status O			Swanson,	Steven	Corning Inco	rporated	
				Comment A poin	<i>Type</i> E Iter is needed t	Comment Status D to Table 58-1		
CI 58 SC 58	P 133 Fricsson AB	L 6	# 596	Suggested	dRemedy			
Comment Type E	Comment Status D			Add a each F	sentence after PMD type."	r the paragraph to read: "Table	58-1 shows the	Primary attributes of
It would be nice to have Clause 60.	e a subclause called "PMD MD	IO functiona	I mapping" similar to	Proposed	Response	Response Status O		
SuggestedRemedy Copy or reference "Clau	use 60.2 PMD MDIO functiona	I mapping".		CI 58	SC 58.1	P130	L 36	# 4
Proposed Response	Response Status 0			Swanson,	Steven	Corning Inco	rporated	
				Comment Myste	<i>Type</i> E ry "From" in Ta	Comment Status D able header.		
				Suggested Delete	<i>dRemedy</i> e "From" in Tat	ble 58-1 (four places).		
				Proposed	Response	Response Status O		

C/ 58 SC 58.1	P 130	L 44	# 6	C/ 58	SC 58	6.1	P 130	L 46	# 80
Swanson, Steven	Corning Incorpo	rated		Swanson,	Steven		Corning Incorp	oorated	
Comment Type T Minimum range format in	Comment Status D			Comment Clarific	<i>Type</i> I cation to h	E narmonize	Comment Status D with Clause 60.		
SuggestedRemedy Use the format "0.5m to	10km" two places and "0.5m	to 20km" two p	laces in Table 58-1.	S <i>uggested</i> Add th	<i>IRemedy</i> e followin	ig text afte	r Table 58-1: "A 1000BASI	E-PX10 link (uses a 1000BASE-PX10-U
Proposed Response Response Status O PMD at one end a a 1000BASE-PX20 Typically, the 1550 Typically, the 1550 ("downstream") and ("downstream") and							00BASE-PX10-D PMD at t D at one end and a 1000B nd is used to transmit away 310 nm band towards the c	the other. A ASE-PX20-D from the ce	000BASE-PX20 link uses PMD at the other. nter of the network ream") although this
C/ 58 SC 58.1	P 130	L 44	# 5	arrang	ement or	notion of h	hierarchy, is not required."		can), annough this
		lateu		Proposed	Response	9 F	Response Status O		
Icorrect descriptor in Tal	ble 58-1.								
' SuggestedRemedy				C/ 58	SC 58	6.1	P 130	L 7	# 411
Change "Nominal distan	ce" to "Minimum range"			Commont		F	Agriefit		
Proposed Response	Response Status 0			Senter	<i>rype</i> r	⊑ s redrafting	r: MDIO is always optional	Remedy is	similar to CI 52 and 60
				1000B remed	ASE-X PO y.	CS)and PN	A are both in 36. Note of	her minor ec	litorial changes in the
C/ 58 SC 58.1	P 130	L 45	# 7	Suggested	Remedy				
Swanson, Steven	Corning Incorpo	rated		Revise	d sentend	ce:			
Comment Type T An additional attribute is	Comment Status D needed in Table 58-1.			In orde PCS a which	er to form nd PMA c may be a	a complet of Clause 3 ccessible f	e physical layer, a PMD sh 36, and optionally integrate through the management i	nall be integr ed with the m nterface	ated with the 1000BASE-X anagement functions
SuggestedRemedy				defined	d in Claus	se [22*ref*	or 45*ref*], which are here	by incorpora	ted by reference.
Add another row to Tabl 25, 24.5, dB" respective	e 58-1: "Maximum channel ins ly. Footnote to read: "At the ne	sertion loss (a)" ominal operatin	with entries "20, 19.5, g wavelength."	Proposed	Response	e F	Response Status O		
Proposed Response	Response Status O			C/ 58	SC 58	1	P130	/ 8	# 2
				Swanson,	Steven		Corning Incorp	orated	" [2
C/ 58 SC 58.1 Dawe, Piers	P 130 Agilent	L 46	# 412	Comment	Type 1	T	Comment Status D		
Comment Type E Need more introduction.	Comment Status D			Suggested	Remedy				
SuggestedRemedy				Chang	eClaus	se xx to			
Insert sentence: In an Ethernet passive o PMDs and receives burs branching topology. The	ptical network, a single "D" Pl sts from each "U" PMD over a e same fibers are used in both	MD breadcasts single mode fit directions.	to a number of "U" per network of	Proposed I	Response	e f	Response Status O		
Proposed Response	Response Status O								

 TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause Page 41 of 169
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 RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 C/ 58
 SC 58.1

			P802.3ah l	Draft 1.3 Co	nments				
C/ 58 SC 58.1.4 Tom Mathey	P 131 Independent	L 42	# 567	<i>Cl</i> 58 Radcliffe,	SC 58 Jerry	3.1.4.2	P 132 Hatteras Net	L 6 works	# 607
Comment Type E Copy/Paste SuggestedRemedy	Comment Status D			Comment This s subcla	<i>Type</i> I subclause auses 58.1	E should b 1.4.3 and	Comment Status D be subclause 58.1.4.1.1 and 1 5.1.4.4.	d be under 58.1.4	4.1. This also applies to
100BASE in two place Proposed Response	s should be 1000BASE as this Response Status O	clause is for 1	Gig.	Proposed	Response	9	Response Status O		
CI 58 SC 58.1.4 TAKESHI, KOMIYA Comment Type E missing	P 131 MITSUBISHI E Comment Status D	<i>L</i> 42 ELECTR	# 470	Cl 58 Dawe, Pie Comment Need	SC 58 ers <i>Type</i> I an entry fo	3.1.4.4 E or PMD_	P 132 Agilent Comment Status D SIGNAL.request(tx_enable	L 20 e).	# <mark>413</mark>
Modify "100BASE-PX1 "1000BASE-PX20".	0" into "1000BASE-PX10" and	d Modify"100B	ASE-PX20" into	Suggester Per ce	dRemedy omment.				
Proposed Response	Response Status O			Proposed	Response	Э	Response Status 0		
C/ 58 SC 58.1.4 Nojima, Kazuhiro	P 131 Panasinic Mob	L 54 ile Com	# 445	<i>Cl</i> 58 Dawe, Pie	SC 58	3.10	P 148 Agilent	L 26	# 423
Comment Type E In the PMD sublayer so "PMD_SIGNAL.request	Comment Status D ervice interface(58.1.4) descrip st" primitive written in 58.2.5 is	otions, not defined.		<i>Comment</i> 58.10 togeth	<i>Type</i> I and 58.11 her	E 1 are ver	Comment Status D y short and address related	d issues. They s	hould be brought
SuggestedRemedy Create Subclause "58.	1.4.#. PMD_SIGNAL.request".			Suggester Insert 58.10	<i>dRemedy</i> new level .1 Fiber op	2 headi ptic cabli	ng 'Fiber optic cabling'. Th ng model, and 58.10.2 Cha	en the subclause aracteristics of th	es become le fiber optic cabling.
Add the following text i	n Subclause 58.1.4.#.			Proposed	Response	9	Response Status O		
In the upstream, this p laser according to the	rimitive is generated by the MF granted time.	PCP to give the	e notice to turn on the	Cl 58 Swanson	SC 58	3.10	P148	L 31	# 36
58.1.4.#.1 Semantics of PMD_SIGNAL.indicate The tx_enable parame whether the PMD trans	of the service primitive e(tx_enable) ter can take on one of two valu smitter ON(ENABLE) or OFF (I	ues:ENABLE o DISABLE).	r DISABLE,indicating	Comment Incorr	Type ect referen	TR nces and	Comment Status D	eded for channel	insertion losses.
58.1.4.#.2 When gene The MPCP generates	erated this primitive to indicate a char	nge in the valu	e of tx_enable."	Rewo requir	rd the first ements sp	t sentend becified i	ce to read: "The maximum n Table 58-1."	channel insertion	l losses shall meet the
Proposed Response	Response Status O			Proposed	Response	9	Response Status O		

 TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause Page
 Page

 RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 C/ grade

C/ 58 SC 58.10	P148	L 32	# 37	C/ 58	SC 58.11.1	P148	L 47	# 38
Swanson, Steven	Corning Incorpo	brated		Swanson	, Steven	Corning Incor	porated	
Comment Type T Unneeded reference;	Comment Status D 526-14A is a MMF reference ar	nd this Clause	only specifies SMF.	Commen Clarif	<i>t Type</i> T fication of referen	Comment Status D ces.		
SuggestedRemedy				Suggeste	edRemedy			
Delete "ANSI/TIA/E	IA-526-14A [B14], Method B, ar	nd"		Rewo	ord to read: "The	fiber cable requirements are s	satisfied by the f	fibers specified in IEC
Proposed Response	Response Status O			6079 mode	3-2 Type B1.1 (di e) and ITU-T G.65	ispersion un-shifted single mo 52 as noted in Table 58-17."	ide) and B1.3 (lo	ow water peak single
				Proposed	d Response	Response Status 0		
C/ 58 SC 58.10 Dawe, Piers	P 148 Agilent	L 33	# 422	CI 59	SC 58 11 2	D149	. 54	# 20
Comment Type E	Comment Status D			Swanson	Steven	Corning Incor	L J4	# 39
Only one method, A-1	, applies for SMF			Owarison			polated	
SuggestedRemedy	500 444 (D44) wethod D1			Commen Cons	solidation of claus	es and clarification of require	ments needed.	
Delete ANSI/TIA/EIA-	-526-14A [B14], method B;'.			Suggeste	edRemedy			
Proposed Response	Response Status O			After	the current text, a	add the following:		
				"The	maximum link dis	stances for single mode fiber	are calculated b	ased on the allocation
C/ 58 SC 58.11	P 148	L 38	# 34	of 2 c	dB total connectio	on and splice loss.		
Swanson, Steven	Corning Incorpo	orated		The r	maximum discrete	e reflectance for single mode	connections sha	all be less than -26 dB."
Comment Type T Renumber clauses	Comment Status D			Delet	te "58.11.2.1 Con	nection insertion loss"		
SuggestedRemedy				Delet	te "58.11.2.2 Max	imum discrete reflectance"		
Move current 58.11 C cabling model - see 6	haracteristics of fiber optic cabli 0.10)	ng to 58.10 (a	ahead of Fiber optic	Proposed	d Response	Response Status O		
Proposed Response	Response Status 0							
				<i>CI</i> 58 Dawe, Pi	SC 58.11.2.2	2 P 149 Agilent	<i>L</i> 1	# 424
C/ 58 SC 58.11	P 148	L 40	# 35	Commen	t Type T	Comment Status D		
Swanson, Steven	Corning Incorpo	brated		Sugg	jested text:			
Comment Type T Clarification needed.	Comment Status D			Suggeste	edRemedy	any been coloulated on the c	accumption of 1	1 E dD for a 16:1 anlittar
SuggestedRemedy Reword the first sente specifications defined information only."	ence to read: "The 1000BASE-P in IEC 60793-2 and ITU-T G.65	X fiber optic o 52. They are s	cabling shall meet the shown in Table 58-17 for	and 1 conn- conn-	4, 7.5 or 8 dB (at 1.5 dB for connec ections with an av ections with a ma	the appropriate measurement tors and splices. For exampl verage insertion loss equal to eximum insertion loss of 0.75c	a scinption of 12 wavelength) for e, this allocation 0.5dB (or less) JB. Other arranç o of 1000PASE	4.5 db tof a 10.1 splitter, r fibre cable attenuation n supports three per connection, or two gements, such as a
Proposed Response	Response Status O			provi	ded the requirem	ents of Table 58–1 are met.	S OL LUOURASE-	-r AZU, may be used
				Proposed	d Response	Response Status O		

C/ 58 SC 58.11.3	P 150	/ 5	# 40	C/ 58	SC 58 12	P151	/ 1	# 426
Swanson, Steven	Corning Incor	porated		Dawe, Pie	rs	Agilent		120
Comment Type T Incomplete text.	Comment Status D			<i>Comment</i> Variou	<i>Type</i> E is editorial in PIC	Comment Status D		
SuggestedRemedy Add text; see 59.11.3 f Proposed Response	for sample text. Response Status O			Suggested line 1 line 13 line 17	<i>IRemedy</i> Shorten title in the second	step with clause title		
C/ 58 SC 58.11.3 Dawe, Piers	P 150 Agilent	L 6	# 425	line 21 p 152 line 12 <i>Proposed</i>	and 26 copy fro line 5 58.12.4.6 2 add two more: <i>Response</i>	om 59 or 60 Delete 'Environmental' and 'Fiber op <i>Response Status</i> O	tic cabling'	
Suggested text: SuggestedRemedy The 1000BASE-PX10 MDI. The MDI is the in Figure 58–5. Examples (a) Connectorized fiber (b) PMD receptacle When the MDI is a rem specifications of IEC 6 component performance General and guidance NOTE: Compliance tess Then you have to show Proposed Response	or 1000BASE-PX20 PMDs ar terface between the PMD and s of an MDI include r pigtail nateable connection, it shall n 1753-1-1, Fibre optic intercon ce standard - Part 1-1: interconnecting devices (con sting is performed at TP2 and v connectors in the figure! <i>Response Status</i> O	e coupled to the d the "fiber option neet the interface nectorg devices nectors). TP3, not at the	e fiber cabling at the cabling" as shown in ce performance s and passive	Cl 58 Murphy, Tr Comment Need Suggested Gener Proposed Cl 58 Swanson, Comment Clarific	SC 58.2.1 DM Type E PMD block diagr <i>IRemedy</i> ate Optical PMD <i>Response</i> SC 58.2.1 Steven Type T cation in line one	P 133 Infineon Comment Status D am diagram based on Fig 58-5 a Response Status O P 133 Corning Incorp Comment Status D e and missing figure for block of	L ind 59-2 L 15 porated diagram.	# <u>486</u> # <u>9</u>
Cl 58 SC 58.12 Lynskey, Eric Comment Type E Please use attached fil SuggestedRemedy See attached PDF and Proposed Response	P 151 UNH-IOL Comment Status D le as starting point for PICS. If FrameMaker files. Response Status O	L 1	# <mark>836</mark>	Suggested Rewor sublay Add a Proposed	IRemedy 'd the first senter 'er is standardize Figure 58-2 sho Response	nce to read: "For purposes of a ad at the points shown in Figur wing the block diagram. <i>Response Status</i> O	system conform re 58-2."	nance, the PMD

C/ 58 SC 58.2.1	P 133	L16	# 8	C/ 58 SC 58.2.3.2	P133	L 52	# 13
Comment Type E Clarification needed.	Comment Status D	orated		Comment Type E C Is this subclause needed?	omment Status D	Jialeu	
SuggestedRemedy Replace "of a type co	onsistent" with "of a fiber t	ype consistent	. "	SuggestedRemedy Delete 58.2.3.2			
Proposed Response	Response Status O			Proposed Response Re	sponse Status O		
C/ 58 SC 58.2.2 Dawe, Piers	P 133 Agilent	L 30	# 414	C/ 58 SC 58.2.4 Murphy, Tom	P 134 Infineon	L	# 477
Comment Type E Need to explain that in interrupted according t optical levels, 1, 0 and	Comment Status D one direction (upstream, "U" to PMD_SIGNAL.request(tx_e dark. I doubt there is a need	PMD transmitt nable). There for the 4th lev	ing), the flow of bits is are now basically three el subheadings.	Comment Type E C Repetition of signal detect t SuggestedRemedy	omment Status D ables		
SuggestedRemedy Per comment.				Proposed Response Re	esponse Status O		
Proposed Response	Response Status 0			C/ 58 SC 58.2.4	P134	L1	# 429
Cl 58 SC 58.2.2.1 Swanson, Steven Comment Type E Is this subclause need SuggestedRemedy Delete 58.2.2.1	P 133 Corning Incorp Comment Status D led?	L 34 borated	# 1 <u>0</u>	Dawe, Piers <i>Comment Type</i> T <i>C</i> Some Tx off powers are -39 <i>SuggestedRemedy</i> If some Tx off powers rema <i>Proposed Response Re</i>	Agilent omment Status D dBm in this clause. The in at -39 dBm, change the esponse Status O	∋ SD lower limit ∋ appropriate S	t must match. D lower limits to match.
Proposed Response	Response Status O			C/ 58 SC 58.2.4.1	P134	L 10	# 609
Cl 58 SC 58.2.2.2 Swanson, Steven Comment Type E Is this subclause need SuggestedRemedy Delete 58.2.2.2	P 133 Corning Incorr Comment Status D led?	L 38 borated	# [<u>11</u>	Comment Type T C The text states that the sign compliant. However, the ref compliant. SuggestedRemedy Remove the compliance red	omment Status D al detect function does no erenced tables (58-3 and quirement from tables 58-3	of need to dete 58-5) require th 3 and 58-5.	rmine if the signal is hat the signal be
r roposed nesponse							

C/ 58 Radcliffe ler	SC 58.2.4.2	P 134 Hatteras Network	L 15	# 608	CI 58 Takeshi	SC 58.2.4.2	2,58.2.4.3.1,58.2	. P 134135 MITSUBISHLE	L 133218	# 465
Comment Ty	vpe E	Comment Status D	5		Commen	t Type T	Comment S	Status D		
Change '	"downstream"	to "upstream"			The s OLT	signal detect in C PMD layer, appl	DLT PMD layer is y the CDR lock o	too difficult te letect function	chnique.Instead to the signal dete	of the signal detect in ect.
SuggestedRe	emedy				Suggeste	dRemedy	,		Ū	
Proposed Re	esponse	Response Status O			Delet and " claus	e "58.2.4.2 OLT 58.2.4.4.1 "OLT e.	PMD signal dete PX20 Signal De	ect(upstream)", tect" ,and defin	"58.2.4.3.1 OLT ne OLT signal de	PX10 Signal Detect" tect function in other
<i>Cl</i> 58 Yanagisawa,	SC 58.2.4.2 Hiroki	P 134 NEC Corporation	L 15	# 475	Proposed	l Response	Response S	tatus O		
Comment Ty	vpe T	Comment Status D			C/ 58	SC 58.2.4.3	3	P134	L 23	# 14
The curre	ent statement f	or the PMD Signal Detect function	on for the burst m	ode (upstream) is	Swanson	, Steven		Corning Incorp	orated	
ambiguo laver.	ous. It is unclea	r whether the Signal Detect for u	pstream is indisp	ensable to PMD	Commen	t Type TR	Comment S	Status D		
SuggestedRe	emedy				There	e are inconsister	ncies in the signa	I_detect value	definitions in Cla	auses 58, 59, and 60.
Remove should be	the Signal Det e defined in up	ect function for the burst mode (upper layer.	upstream) from P	MD layer. It	Suggeste	dRemedy				
Proposed Re	esponse	Response Status 0			comb	oine Tables 58-2	, 58-3, 58-4 and	58-5 into a sing	gle Table.	
					Delet	e underscores ir	n "input_optical_	power" four pla	ces in each Tab	e.
<i>CI</i> 58 Radcliffe, Jer	SC 58.2.4.2	P 134 Hatteras Networks	L 20	# 610	Clarif 60] o	y whether the re r <= limit in signa	equirement is >= al detect thresho	receive sensitiv ld (min) [as not	vity (max) [as no ted in Clause 59]	ted in Clause 58 and I
Comment Tv	vpe T	Comment Status D			Proposed	l Response	Response S	tatus O		
The text	states that the	signal detect function does not r	need to determine	e if the signal is						
complian	nt. However, the	e referenced tables (58-2 and 58	 -4) require that th 	e signal be	C/ 58	SC 58.3		P 135	L 52	# 15
SuggestedRe	emedy				Swanson	, Steven		Corning Incorp	oorated	
Remove	the compliance	e requirement from tables 58-2 a	nd 58-4.		Commen	t Type T	Comment S	Status D		
Proposed Re	esponse	Response Status O			Incor	rect reference.				
	,	,			S <i>uggeste</i> Chan	edRemedy lige "defined in	Table 58-6." to '	defined in Ta	able 58-1."	
					Proposed	l Response	Response S	tatus O		

P802.3ah Draft	1.3 Comments
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Cl 58 SC 58.3 P 136	L 17	# 606	CI 58	SC	58.3	P 139	L1	# 415
Radcliffe, Jerry Hatteras Netwo	orks		Dawe, Pie	ers		Agilent		
Comment Type E Comment Status D			Comment	Туре	т	Comment Status D		
This section address the 10km version. The text disc	usses the 20	km version	Alloca is 155	ation for	penaltie	s is insufficient for PX20 upstreating wavelength is 1480-150	am. Also, 0 nm?	measurement wavelength
SuggestedRemedy								
Change the "20.5" to "10.5" on this line and the "20" Proposed Response Response Status O	to "10" in two	places on the next line.	The m for PX	ninimum (20-D w	n channe re may w	I loss derived from Tx and Rx ta ish to reduce the max Rx powe	ables is 5 d r anyway.	IB not 10 dB, but at least
			Suggestee	dReme	dy			
Cl 58 SC 58.3 P136	L 21	# 16	Chang alloca	ge chan tion for	nel inser penalties	tion losses to 24 dB (1310 nm) s to 2 and 2.5 dB.	and 23.5 c	B (1550 nm). Change
Swanson, Steven Corning Incorp	orated		Sort o	out PX2	0 minimu	m channel loss and PX20-D ma	ax Rx powe	er.
Comment Type T Comment Status D Table 58-6 not needed.			Proposed	Respoi	nse	Response Status O		
SuggestedRemedy Delete Table 58-6; information is in Table 58-1.			CI 58	SC	58.3.1	P 136	L	# 480
Proposed Response Response Status O			Murphy, T	om		Infineon		
			Comment	Туре	TR	Comment Status D		
C/ 58 SC 58.3 P 137 Dawe, Piers Agilent	L 8	# 418	The d links o NOTE	istributi does no : The a	on of lau t ensure doption o	nched power and receiver sens the most cost effective PMD de of ER = 6 implies an ER penalty	itivity for th esign. (see v of >1 dB o	e power budget of the PON presentation murphy). compared to the ER = 9
Comment Type T Comment Status D			used	in initial	calculati	ons		
We should consider using RINxOMA in Clause 58. I metric and as a practical measurement.	t is preferable	both as a specification	Suggestee Reduc	dReme ce the F sarv ch	dy PON sens Janges to	sitivities by 1 dB and increase la	aunched po	owers accordingly. Make
SuggestedRemedy			Proposed	Resnoi	nse	Response Status 0		
Use RINxOMA in table 58-7 and 58-11. Change 58.4 58.8.6 Relative intensity noise optical modulation am	3.6 to: plitude (RINx	OMA)	Toposou	reepor	100			
RINxOMA is the ratio of noise to modulated optical s	ignal in the pr in 60 8 7	esence of a back	C/ 58	SC	58.3.1	P137	L	# 478
Proposed Response Response Status O			Murphy, T	om		Infineon		
			Comment Includ	<i>Type</i> le the C	T MA valu	Comment Status D es in dBm and uW in transmitte	r tables	
			Suggested See c	dRemed ommen	<i>dy</i> it			
			Proposed	Respoi	nse	Response Status O		

C/ 58	SC 58.3.1	P 137	L 11	# 450	C/ 58	SC 58.3.1.1	P137	L 22	# 17
Kuniaki, Mo	toshima	Mitsubishi Elec	ctric		Swanson	, Steven	Corning Inc	corporated	
Comment T	ype TR	Comment Status D			Comment	t Type E	Comment Status D		
Comme In case	of using ONU's	OFF time in case of using ON synchronized with OLT, Lase	NU's synchroniz	ed with OLT: has a crucial impact	Subc part c	lause header is n of 58.3.1 Transmi	ot needed - dangling subcla tter optical specifications.	ause. Include text	on spectral width as
on the t	ransmission effi	ciency of the upstream link, e ion efficiency of the shortest r	specially for sh	ort packets. For	Suggeste	dRemedy			
Laser O	N/OFF time of (600 ns, which can be improve	d to 84 % for L	aser ON/OFF time of	Delet	e "58.3.1.1 RMS	spectral width."		
16 ns		·			Proposed	l Response	Response Status O		
SuggestedF	Remedy				,	,	,		
We wou	uld like to propos	se 16 ns Laser ON/OFF time	for the system	employing ONU's				•	
synchro	nized with OLT.	We will submit a cost analys	is estimating th	e difference between	C/ 58	SC 58.3.1.1	P 137	L 25	# 611
differen	ce between the	m.			Radcliffe,	Jerry	Hatteras Ne	etworks	
Proposed R	Response	Response Status O			Comment Chan	<i>t Type</i> E ge "frequency" to	Comment Status D "wavelength"		
					Suggeste	dRemedy			
C/ 58	SC 58.3.1	P 137	L 11	# 451	Chan	ge "frequency" to	wavelength		
Kuniaki, Mo	toshima	Mitsubishi Elec	stric		Proposed	l Response	Response Status 0		
Comment T	ype TR	Comment Status D			1100000	1100001100			
Comme	ent on the maxin	num power during the Laser C	N/OFF time:						
So far, t	there has been i	no discussion on the transient	behavior of the	e ONU transmitter	C/ 58	SC 58.3.2	P 139	L	# 479
miaht b	e possible to give	ve a serious damage to OLT r	eceiver without	any regulation on the	Murphy, 1	Гот	Infineon		
maximu	im power of the	ONU		,	Comment	t Туре Т	Comment Status D		
SuggestedF	Remedy				Includ	de the OMA value	es in dBm and uW in receiv	er tables	
We wou	uld like to propos	se a specification on the maxi	mum power du	ring the Laser ON/OFF	Suggeste	dRemedy			
time. Fo	or example of th	e specification, we propose +	3dBm, which is	same as the maximum	See o	comment			
	bower of UNU at	t the steady state.			Proposeo	Response	Response Status 0		
Proposed R	lesponse	Response Status O							
					C/ 58	SC 58 3 2	P139	1	# 481
C/ 58	SC 58.3.1	P 137	L 19	# 267	Murphy 1	Tom	Infineon	-	<i>"</i> +01
TSUJI, SHI	NJI	SUMITOMO E	LECTRI		Osmussu	• Turne T			
Comment T	ype E	Comment Status D			Comment	t / ype I	Comment Status D	uppeggggrily big	h and not in line with
Table 5	8-7				claus	es 59 and 60 and	d it prohibits certain cost eff	ective free beam of	potics designs.
2 lines a	are the same.				Suggeste	dRemedy	· · · ·		p
SuggestedF	Remedy				Chan	ae the PON rece	eiver reflectance values to -	12 dB	
Delete o	one of the line ir	ncluding "Transmitter and disp	ersion penalty(max)".	Decision				
AISO TA					Proposed	i kesponse	Response Status 0		
Proposed R	esponse	Response Status O							

 TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause Page 48 of 169
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 RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 C/ 58 SC 58.3.2

C/ 58 SC 58.3.2	P 139	L 12	# 720	C/ 58	SC 58.4.1	P140	L 1	# 20
Urricariet, Christian	Finisar Corpora	ation		Swanson,	Steven	Corning Incor	porated	
Comment Type T Table 58-9	Comment Status D			Comment Subcl	: <i>Type</i> T ause 58.4.1 is t	Comment Status D he same as 58.3.1; should we	distinguish bet	ween PX10 and PX20?
require implementing complexity. A value of	e for 10km PON transceivers is a g Physical Contact in the receive of -14 dB would still be adequate	specified at -2 er, adding unno e.	0 dB. This value would ecessary cost and	Suggeste Chan	<i>dRemedy</i> ge 58.4.1 to rea	d "1000BASE-PX20 transmit c	optical specifica	itions"
SuggestedRemedy				Note:	If accepted, ch	ange 58.3.1 to read "1000BAS	E-PX10 transm	it optical specifications"
Change the value to	-14 dB. Performance would still	be adequate	with this value.	Proposed	Response	Response Status 0		
Proposed Response	Response Status O			1100000	Rooponoo			
				C/ 58	SC 58.4.1	P140	L 20	# 717
C/ 58 SC 58.4	P 138	L 39	# 18	Urricariet,	Christian	Finisar Corpo	ration	
Swanson, Steven	Corning Incorp	orated		Comment	Туре Т	Comment Status D		
Comment Type T Incorrect reference.	Comment Status D			Table A min	58-11 imum launch po	ower requirement of +1 dBm fo	or 1000BASE-P	X20-D is too high and
SuggestedRemedy				will ha impac	ave an impact o ct manufacturing	n laser reliability across the op g yield, which would of course i	erating temperating temperating temperating temperating temperature temperature temperature temperating tem	ature range. This would eiver cost.
Change "defined in	a Table 58-10." to "defined in T	able 58-1."		Suggeste	dRemedy			
Proposed Response	Response Status O			Chan dBm.	ge the minimum The optical buc	h launch power requirement for lget can still remain the same i	f the receiver s	(20-D in Table 58-11 to 0 ensitivity in Table 58-13
C/ 58 SC 58.4	P 139	L 37	# 19	receiv	ver at 1.25Gb/s.	ubin to -29 ubin. This increas	se can easily be	Supported by the AFD
Swanson, Steven	Corning Incorp	orated		Proposed	Response	Response Status O		
Comment Type T Table 58-10 is not ne	Comment Status D				SC 50 4 4	D140	1.00	# =
SuggestedRemedy				C/ 38 Bommol	SC 38.4.1	P 140	L 22	# [/41
Delete Table 58-10;	information is in Table 58-1.			Deminei,				
Proposed Response	Response Status 0			Comment	I Se 11 Extinct	Comment Status D	aduaa tha aana	itivity at the other and by
				1.5 dl	B. This penalty	is worse for an APD detector.		nivity at the other end by
				Suggeste	dRemedy			
				Chan	ge the extinction	n ratio (min) to 9 dB		
				Proposed	Response	Response Status 0		

C/ 58 SC 58.4.1	P 140	L 27	# 287	C/ 58	SC 58.4.2	P 142	L 37	# 718
Glen Kramer	Teknovus			Urricariet,	Christian	Finisar Corpo	oration	
Comment Type TR	Comment Status D			Comment	Туре Т	Comment Status D		
MPCP protocol uses tim	ne quanta = 16ns. 600 ns Tor	/Toff times equa	ates 37.5 time quantas.	Table	58-13		de to bo incrose	od from 28 dBm to 20
SuggestedRemedy				dBm, i	in order to mai	ntain the link budget at 29 dB i	if the minimum la	aunch power is
 Change the Ton(max 2. Change the Toff(max 	() to 512 ns (32 TQ) () to 512 ns (32 TQ)			decrea	ased from +1 d	IBm to 0 dBm, as suggested ir	n my Comment #	ŧ1.
Proposed Response	Response Status 0			Suggested	Remedy		0 D · T · · · -0	
				increa	sed from -28 d	Bm to -29 dBm.	U-D IN TADIE 58-	13 needs to be
C/ 58 SC 58.4.1	P 140	L 27	# 288	Proposed	Response	Response Status O		
Glen Kramer	Teknovus							
Comment Type T	Comment Status D			C/ 58	SC 58.4.2	P 142	L 38	# 721
It appears that there is i	more than 75%-consesus tha	t 256 ns Ton/To	ff times are achievable	Urricariet,	Christian	Finisar Corpo	oration	
without major circuit rec	iesign.			Comment	Туре Т	Comment Status D		
1 Change the Ton(max	to 256 ns (16 TO)			Table Receiv	58-13 ver Reflectance	e for 20km PON transceivers i	s specified at -20) dB. This value would
2. Change the Toff(max	x) to 256 ns (16 TQ)			require	e implementing	Physical Contact in the receiv	ver, adding unne	cessary cost and
Proposed Response	Response Status 0			compl	exity. A value o	of -14 dB would still be adequa	ite.	
				Suggested	Remedy	14 dB. Dorformanco would st	ill ha adaquata y	with this value
C/ 58 SC 58.4.1.1	P 140	L	# 482	Dranaad		-14 ub. Feriorinance would st	iii be adequate v	
Murphy, Tom	Infineon			Proposed	Response	Response Status 0		
Comment Type T	Comment Status D							
There is a discrepancy	between allocated power bud	get and spectral	curve calculations	C/ 58	SC 58.5	P143	L 10	# 22
SuggestedRemedy				Gemmant		Commont Status	ipolateu	
Need to re-examine the	Penalty allocations and the a	ssociated wordi	ing of these sections	Table	formatting			
Proposed Response	Response Status O			Suggester	Remedy			
				Merge	cells in 6 plac	es.		
C/ 58 SC 58.4.1.1	P 140	L 39	# 21	Proposed	Response	Response Status O		
Swanson, Steven	Corning Incorp	orated		,	,	• -		
Comment Type E Subclause is not neede	Comment Status D d.							
SuggestedRemedy Delete 58.4.1.1 RMS sp	pectral width and include text	as part of 58.4.1						
Proposed Response	Response Status O							

C/ 58 SC 58.5	P 143	L 23	# 416	C/ 58 SC 58.6	P 144	L 1	# 23
Dawe, Piers	Agilent			Swanson, Steven	Corning Incor	rporated	
Comment Type E Need max optical pow	Comment Status D wer for damage spec.			Comment Type TR Incomplete jitter bud	Comment Status D gets.		
SuggestedRemedy Add row to table 58-9	and 58-13 following clause 52	10GBASE-E.		SuggestedRemedy Complete Tables 58	15 and 58-16.		
Proposed Response	Response Status O			Proposed Response	Response Status O		
C/ 58 SC 58.5 Radcliffe, Jerry	P 143 Hatteras Netv	L 26 vorks	# 612	Cl 58 SC 58.6 Urricariet, Christian	P 144 Finisar Corpo	L 5 pration	# 722
Comment Type E In Table 58-14 a num 58.8.1 where only 2dl numbers and the spe As this is an informat	Comment Status D her of link penalty numbers an B is mentioned, a value not in actral properties needs to be fill tive clause, this comment is ed	e used. They all the table. The br ed. itorial.	refer back to clause idge between the	Comment Type E Table 58-15 Units for Total Jitter : SuggestedRemedy Change units to "UI"	Comment Status D should be "UI" instead of "U1".		
SuggestedRemedy				Proposed Response	Response Status 0		
Expand 58.8.1 for mo	ore information on epsilon to pe	enalty relationshi	р.				
Proposed Response	Response Status O						
C/ 58 SC 58.6 Murphy, Tom	P 143 Infineon	L	# 484				
Comment Type TR Jitter specifications for for downstream value	Comment Status D or PON may be spit into upstre es (CW operation) would be to	am and downstr use the 1000BA	eam. A starting point SE-BX values				
SuggestedRemedy							
Split sections 58.7 ar PX20 downstream tal	nd 58.8 to include upstream an bles, use the values from Table	d downstream. F e 59-9	For both -PX10 and -				

Proposed Response Response Status **0**

CI 58	SC 58.7	P 143	L 45	# 417	C/ 58	SC 58.8.1	P144	L 43	# 24
Dawe, Piers	5	Aglient			Swanson	, Steven		porated	
Comment 1	Гуре Т	Comment Status D			Commen	t Type E	Comment Status D		
I think t In eithe	the jitter will be o er case would ex	different between upstream an spect verv little distortion betwe	een TP2 and T	, not PX10 and PX20. P3 hence no change in	Notes	s incorrectly nur	nbered.		
DJ; how	wever, MPN will	add RJ upstream, and burst e	effects will add	DJ, particularly from	Suggeste	dRemedy			
TP3 to	TP4. It may be	that better performance than	clause 38 is ne	eded at TP1 and TP4.	Two i	notes are prese	nted; label the first "Note 1" and	d the second "N	ote 2"
are info	ormative so they	don't contain specifications.		. These subciduses	Proposed	l Response	Response Status 0		
Suggested	Remedy								
Combir PX20 (i	ne the subclause informative)'.	es into one, 'Jitter at TP1-4 fo	r 1000BASE-P	X10 and 1000BASE-	Cl 58 Swanson	SC 58.8.1 , Steven	P 144 Corning Incor	L 53 porated	# 25
'The er	tries in Table 58	3–15 and Table 58–16 represe	ent high-freque	ncy jitter (above 637	Comment	t Type E	Comment Status D		
kHz) ar	nd do not include	e low frequency jitter or wande	er. They are tw	o sided (peak-to-peak)	Clarif	ication of intent			
applies	to the upstream	n direction (U to D). All values	are informativ	e.'	Suggeste	dRemedy			
					Chan	ge "imposed l	by the middle column" to "ir	nposed by colu	mn 2"
' l able : (inform	58-15, 1000BAS ative)'	E-PX10 and 1000BASE-PX20	0 downstream j	itter budget	Proposed	l Response	Response Status O		
Rows T	P1, TP3, TP3 t	o TP4 and TP4: as clause 38.	Row TP2: sar	ne as DJ row TP3.					
Row TF	P2 to TP3: DJ 0.	. Remaining cells by calculation made for 1000BASE-BX10 and	on from others.	These are the same	01 50	00 50 0 40	D440	/ 50	" 00
Sugges			a may need te		C/ 58	SC 58.8.10	P 146	L 52	# 29
'Table	59-10, 1000BAS	E-PX10 and 1000BASE-PX20	0 upstream jitte	r budget (informative)'	owanson			porated	
Proposed F	Response	Response Status O			Incon	<i>t Type</i> I nplete clause	Comment Status D		
01 59	SC E9 7	DAAA	1.24	# 700	Suggeste	dRemedy			
Urricariet (SC 56.7	F 144 Finisar Corpor	L Z4 ation	# 123	Defin	e receive sensit	tivity measurements.		
		Commont Status D			Proposed	l Response	Response Status 0		
Comment I	ype ⊑ 38-16	Comment Status D							
Units fo	or Total Jitter sh	ould be "UI" instead of "U1".			C/ 58	SC 58.8.10) P146	L 54	# 428
Suggested	Remedy				Dawe, Pie	ers	Agilent		
Change	e units to "UI".				Commen	t Type T	Comment Status D		
Proposed F	Response	Response Status 0			Sugg	ested text			
					Suggeste	dRemedy			
					The r patter meas receiv	eceiver sensitiv rn {choose}. Th surement proced ver,	ity shall meet the specifications his pattern is designed to test th dure is further described in 60.8	of Table 58-9 o e receiver's cloo .10. In the case	or 58-13 with a test ck recovery. The e of the burst mode "D"
					Proposed	l Response	Response Status 0		

C/ 58 SC 58.8.11 Swanson, Steven	P 147 Corning Incorpor	L 7 ated	# 31	C/ 58 Dawe, Pier	SC 58.8.3	P 145 Agilent	L 14	# 419
Comment Type T Incorrect reference.	Comment Status D			Comment The idl	<i>Type</i> T e pattern is not t	<i>Comment Status</i> D he one in A36.2, nor is it a	data pattern.	
SuggestedRemedy "*ref*60.7.11" should r	read "See *ref*60.8.11"			Suggested ' nod	R <i>emedy</i> e transmitting a	repeating I2 idle pattern.'		
Proposed Response	Response Status O			Proposed I	Response	Response Status O		
C/ 58 SC 58.8.12 Nojima, Kazuhiro	P 147 Panasinic Mobile	L 12 Com	# 447	C/ 58 Swanson, S	SC 58.8.5 Steven	P 145 Corning Inco	L 26 prporated	# 26
Comment Type E 1000BASE-PX PMDs do And Signal speed is 1.2	Comment Status D on't specify the 100Mbps transr 5Gbps.	nission.		Comment T Incorre	<i>Type</i> T ct reference.	Comment Status D		
SuggestedRemedy Modify "100Mbps and 10	000Mbps" into "1.25Gbps"			"*ref* C	ause 60.7.6"	should read "*ref* Clause 6	60.8.6"	
Proposed Response	Response Status O			Proposed I	Response	Response Status O		
C/ 58 SC 58.8.13 Swanson, Steven	P 147 Corning Incorpor	L 14 ated	# 32	C/ 58 Swanson, S	SC 58.8.7 Steven	P146 Corning Inco	L 10 prporated	# 27
Comment Type E Unneeded clause.	Comment Status D			Comment Transn	<i>Type</i> TR hitter eye mask r	Comment Status D not defined.		
SuggestedRemedy Delete "58.8.13 OTHER	MEASUREMENT"			Suggested comple	Remedy te Figure 58-4.			
Proposed Response	Response Status 0			Proposed I	Response	Response Status O		
C/ 58 SC 58.8.13	P 147 Agilent	L 16	# 421	C/ 58 Swanson, S	SC 58.8.8 Steven	P146 Corning Inco	L 38 prporated	# 28
Comment Type T More tests needed for b	Comment Status D urst mode.			Comment Incomp	<i>Type</i> T blete clause.	Comment Status D		
SuggestedRemedy	smitter switch on time, transmi	ter switch-off tin	and receiver	Suggested Define	Remedy transmit rise/fall	characteristics.		
recovery time.	Response Status O			Proposed I	Response	Response Status O		

 TYPE: TR/technical required T/technical E/editorial Reditorial RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause Page 53 of 169

 C/ 58
 SC 58.8.8

Cl 58 Dawe, Piers	SC 58.8.8	P 146 Agilent	L 38	# 420	CI 58 Dawe, Piers	SC 58.9.2	P 147 Agilent	L 27	# 404
Comment T	vpe T	Comment Status D			Comment 7	vpe E	Comment Status D		
As an a subclau	II-SMF PMD cla se for it.	use, we don't have a risetime	spec here so	we don't need a test	As Clas line with	s 1 is (now) a 52, 53 and 6	a part of IEC 60825, this parag 60.	graph can be tid	ied up and brought into
SuggestedF Delete {	Remedy 58.8.8.				S <i>uggestedl</i> Modify	Remedy o: the first pa	araoraph with:		
Proposed R	Pesponse	Response Status 0			1000BA require single f	SE-LX10 and nents as definations	d 1000BASE-BX10 optical tran ned in IEC 60825-1, under an s whether coupled into a fiber	nsceivers shall o y condition of op or out of an ope	conform to Class 1 laser peration. This includes en bore.
C/ 58 Radcliffe, Je	SC 58.8.8 erry	P 146 Hatteras Netwo	L 38 orks	# 613	Modify	he PICS to fo	bliow.	to this one.	
Comment T This cla PMD th	ype T use references e clause should	Comment Status D rise and fall time measureme	s. As these a	re not required for this	Apply to Proposed F	959.9.2 also. esponse	Response Status 0		
SuggestedF Remove	Remedy e clause 58.8.8				CI 58	SC 58.9.2	P147	L 27	# 448
Proposed R	lesponse	Response Status O			Nojima, Ka: Comment 1	uhiro ype E	Panasinic M Comment Status D	lobile Com	
<i>CI 58</i> Nojima, Kaz	SC 58.8.9 :uhiro	P 146 Panasinic Mob	<i>L</i> 45 ile Com	# 446	Suggested		(" into "1000B&SE-PX"		
Comment T 1000BA	<i>ype</i> E SE-PX PMDs d	Comment Status D on't specify to adopt the multi	mode fiber.		Proposed F	esponse	Response Status O		
SuggestedF	Remedy								
Delete t effects	he expression " for a transmiter	for transmitter impairments w to be used with multimode fib	th modal(not o er".	chromatic) dispersion	<i>CI</i> 58 Nojima, Ka	SC 58.9.2 uhiro	P 147 Panasinic M	<i>L</i> 27 lobile Com	# 449
Proposed R	lesponse	Response Status O			Comment 7 Accord	ype E ng to laser cla	Comment Status D assifications, class 1 laser is	specified as up	to about 0.4 uW output.
<i>CI 58</i> Swanson, S	SC 58.8.9 teven	P 146 Corning Incorp	L 49 orated	# 30	Suggestedl Modify	Remedy Class1" into	"Class3A".		III(1000BA3E-FX-20-D).
Comment T	<i>ype</i> T ct reference.	Comment Status D			Proposed F	esponse	Response Status O		
SuggestedF "See *re	Remedy ef*60.7.9" sho	uld read "See *ref*60.8.9"							
Proposed R	esponse	Response Status O							

C/ 58 SC 58.9.5	P 147	L	# 483	C/ 58 SC 58.9.5	5 P147	L 54	# 33
Murphy, Iom	Infineon			Swanson, Steven	Corning Inco	prporated	
Comment Type E Combine labelling req	Comment Status D juirements into single piece of	text		Comment Type E Simplification need	Comment Status D		
SuggestedRemedy See comment				SuggestedRemedy Consolidate list of I	abelling requirements by using	an example (see	59.9.5 for text).
Proposed Response	Response Status O			Proposed Response	Response Status O		
C/ 58 SC 58.9.5 Radcliffe, Jerry	P 147 Hatteras Netv	<i>L</i> 49 vorks	# 614	C/ 58 SC 58.9.5 Dawe, Piers	5 P148 Agilent	L 22	# 405
Comment Type E Do we really need this recall ever having see	Comment Status D s labeling section? Clause 38.9 en them followed, other than th	9 has similar rec le laser safety la	quirements and I do not ubels.	Comment Type E Following suggestic	Comment Status D on to label for temperature.		
SuggestedRemedy Eleminate clause 58.9 Proposed Response	9.5. Alternately, use clause 59 Response Status O	.9.5 as a model		Add sentence: It is recommended specify the conditio	that either the label or readily a ons of operation including tempe	vailable product c arature requireme	locumentation should nts.
				Apply to all three op	ptics clauses.		
Cl 58 SC 58.9.5 Dawe, Piers	P 147 Agilent	L 51	# 427	Proposed Response	Response Status O		
Comment Type E I think the label can as approach is a long-win	Comment Status D s well have the full PMD identi nded way of saying it anyway.	fication as most	of it; and this list	C/ 58 SC 58-2 Yokomoto, Tetsuya	P 145 Japan	L 48	# 969
SuggestedRemedv				Comment Type E	Comment Status D		
Replace p147 line 51 supporting documenta applicable safety warr U).	to p148 line 21 with 'It is record ation) be labeled in a manner with hings and the applicable port t	mmended that e visible to the use ype designation	each PHY (and er, with at least the (e.g., 1000BASE-PX10-	Missing SuggestedRemedy The mark in a polyr And change "transf	nominal is "+". fer function(58-2)" to the same o	description as ITL	J-T G957.
Proposed Response	Response Status O			"H(p)=(105+105y+4 Proposed Response	45y2+10y3+y4)/105" Response Status O		

C/ 58 SC 58-3 Yokomoto, Tetsuya	<i>P</i> 145 Japan	L 53	# 970	C/ 58 SC Table 58-15 P 144 L 5 # 597 Jonsson, Ulf Ericsson AB
Comment Type E he definition of OMEC	Comment Status D GAr needs to be described.			Comment Type E Comment Status D 'U1' should be 'UI' in the table
SuggestedRemedy OMEGAr = 2*PAI*fr				SuggestedRemedy Change 'U1' to 'UI'. Change this at a few more places throughout Clause 58.
Proposed Response	Response Status O			Proposed Response Response Status O
Cl 58 SC Genera John George	I P OFS	L 4	# 805	C/ 58 SC Table 58-7 P 137 L 10 # 473 Yanagisawa, Hiroki NEC Corporation
Comment Type E Identifying single moor redundant. Also, SMF manufacturers and th	Comment Status D de fiber as "SMF" under headir ⁻ is used as part of multiple tra hus is not an appropriate term t	ngs in tables ide demarks by one o be used in a s	ntified as Fiber Type is of the fiber tandard.	Comment Type T Comment Status D The current extinction ratio of 6dB is a burden to both ONU and OLT receiver. If the extinction ratio could not be changed from 6dB, it would be reasonable to change OMA specification to higher number to reduce sensitivity penalty.
SuggestedRemedy				SuggestedRemedy
Change "SMF" to "SM	M" in all cases in which such is	described as a	fiber type.	Change Launce OMA(min) to keep the minimum amplitude equivalent to 9dB extinction
Proposed Response	Response Status O			ratio. The specific changes are: 1000BASE-PX10-D from 0.48mW to 0.62mW 1000BASE-PX10-U from 0.76mW to 0.98mW
Cl 58 SC Table 5 Yanagisawa, Hiroki	8-11 <i>P</i> 140 NEC Corpora	L 26 tion	# 474	Proposed Response Response Status O
Comment Type T The current extinction extinction ratio could specification to highe	Comment Status D n ratio of 6dB is a burden to bo not be changed from 6dB, it w r number to reduce sensitivity	th ONU and OL ould be reasona penalty.	T receiver. If the black of the	C/ 58 SC Table 58-7,58-11 P 137140 L 11132729 # 967 Yokomoto, Tetsuya Japan
SuggestedRemedy				The definition of Top/Toff needs to be described
Change Launce OMA	A(min) to keep the minimum an	nplitude equivale	ent to 9dB extinction	
ratio.	- 3re-			Suggesteurcementy The definition of Ton/Toff needs to be described
1000BASE-PX10-D fi 1000BASE-PX10-U fi	rom 1.51mW to 1.95mW rom 0.76mW to 0.98mW			Proposed Response Response Status O
Proposed Response	Response Status O			

C/ 58 SC Table58-12 TAKESHI, KOMIYA	<i>P</i> 142 MITSUBISHI E	<i>L</i> 22 LECTR	# 468	CI 58 Yokomoto	SC TEXT , Tetsuya	<i>Р</i> 134 Japan	L 15	# 968
Comment Type E missing	Comment Status D			Comment Missir	<i>Type</i> E ng	Comment Status D		
SuggestedRemedy Modify "Figure58-2" into '	'Figure58-3".			Suggested Chang	<i>dRemedy</i> ge "downstream"	" to "upstream".		
Proposed Response	Response Status O			Proposed	Response	Response Status 0		
CI 58 SC Table58-15 TAKESHI, KOMIYA	, Table58-16 <i>P</i> 144 MITSUBISHI E	<i>L</i> 524 LECTR	# 469	C/ 59 John Geor	SC 1 rge	Р 154 OFS	L 25	# 808
Comment Type E Different item name is us	Comment Status D ed in Table58-15 and Table	58-16.		Comment Chanr 8	<i>Type</i> E nel Insertion loss	Comment Status D s in table 59-1 redundant with o	channel insertior	n loss stated in table 59-
SuggestedRemedy Please unity item name in Point".	n table 58-15 and table 58-1	6."Compliance Po	pint"or"Reference	Suggested remov	dRemedy ve channel inser	tion loss row from table 59-1		
Proposed Response	Response Status O			Proposed	Response	Response Status O		
C/ 58 SC Table58-7,7 TAKESHI, KOMIYA	Fable58-9 <i>P</i> 136139 MITSUBISHI E	<i>L</i> 415 LECTR	# 466	Cl 59 John Geor	SC 10 rge	P 167 OFS	L 53	# 809
Comment Type T Signaling speed range sp	Comment Status D becification is not decided.			Comment refere	<i>Type</i> E nced tables 59-7	Comment Status D 12 and 59-13 do not exist.		
SuggestedRemedy Propose that signaling sp	beed (range) is 1.25+/-100pp	om[GBd].		Suggested Chang	dRemedy ge reference to T	Table 59-8 or create tables 59-	·12 and 59-13.	
Proposed Response	Response Status O			Proposed	Response	Response Status 0		
CI 58 SC Table58-8 TAKESHI, KOMIYA	<i>P</i> 138 MITSUBISHI E	<i>L</i> 25 LECTR	# 467	<i>CI</i> 59 Swanson,	SC 58.2.3.1 Steven	P133 Corning Incor	L 49 porated	# 12
Comment Type E missing	Comment Status D			<i>Comment</i> Is this	<i>Type</i> E subclause need	Comment Status D ded?		
SuggestedRemedy Modify "Figure58-1" into '	'Figure58-2".			Suggested Delete	dRemedy e 58.2.3.1			
Proposed Response	Response Status O			Proposed	Response	Response Status O		

 TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause Page 57 of 169
 Page 57 of 169

 RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 C/ 59
 SC 58.2.3.1

C/ 59 SC 59 P 153 L 10 # 381 C/ 59 SC 59.1 P154 L 24 # 719 Dawe, Piers Agilent Urricariet, Christian **Finisar Corporation** Comment Status D Comment Type Comment Status D Comment Type Е т Notes 2 and 4 should be obsolete now. Note 8 is. Table 59-1 The maximum range for 1000BASE-LX10 on 62.5 um MMF is defined as 550m. This is SuggestedRemedy only valid if the bandwidth of the fiber is 500 MHz.km or higher. Remove them. SuggestedRemedy Proposed Response Response Status 0 Add a footnote in Table 59-1 that specifies that the 550m on 62.5 um MMF is valid only if the bandwidth is 500 Mhz.km or higher. Proposed Response Response Status 0 C/ 59 SC 59 P 153 L 26 # 615 Radcliffe, Jerry Hatteras Networks C/ 59 SC 59.1 P154 / 24 # 43 Comment Status D Comment Type Е Swanson, Steven Corning Incorporated CPR is no longer defined for the transmitters Comment Type E Comment Status D SuggestedRemedy Incorrect format for minimum range. Remove the reference to CPR in the editors notes box SuggestedRemedy Proposed Response Response Status 0 Change minimum range values to read: "0.5m to 10km, 0.5m to 550m, 0.5m to 10km, 0.5m to 10km" C/ 59 SC 59 P 155 L 42 # 591 Proposed Response Response Status 0 Jonsson, Ulf Fricsson AB Comment Status D Comment Type E C/ 59 SC 59.1 P154 L 28 # 997 It would be nice to have a subclause called "PMD MDIO functional mapping" Thatcher, Jonathan WWP SuggestedRemedy Comment Type T Comment Status D Copy or reference "Clause 60.2 PMD MDIO functional mapping" Insert text like on page 178, line 34 here with appropriate changes for PMD type. Proposed Response Response Status 0 SuggestedRemedy Per comment C/ 59 SC 59.1 P154 L17 # 42 Proposed Response Response Status **O** Swanson, Steven Corning Incorporated Comment Type E Comment Status D Mysterious "From" in Table header. SuggestedRemedy Delete "From" in Table 59-1 header (2 places).

P802.3ah Draft 1.3 Comments

Proposed Response

Response Status 0

CI 59	SC 59.1	P 154	L 28	# 81	C/ 59	SC 59.1	P 154	L 50	# 592
Swanson,	Steven	Corning Incorpo	rated		Jonsson, l	Jlf	Ericsson /	AB	
Comment	Туре Е	Comment Status D			Comment	Туре Е	Comment Status D		
					It woul	d be nice to	have a subsection similar to	Clause 60 called	"Terminology and
Suggested	Remedy				Currenter	Domodu			
Add th PMDs and a	e following text a at each end whil 1000BASE-BX10	fter Table 59-1: "A 1000BASE- e a 1000BASE-BX10 link uses)-D PMD at the other. Typically,	LX10 link uses 1000BASE-B the 1550nm b	3 1000BASE-LX10 (10-U PMD at one end pand is used to	Suggested Add a referer	subclause	similar to Clause 60 "Terminol	ogy and convention	ons". Include appropriate
transm toward require	hit away from the ds the center ("up ed."	center of the network ("downst stream"), although this arrange	ream") and the ment or notior	e 1310 nm band of hierarchy, is not	Proposed	Response	Response Status 0		
Proposed	Response	Response Status 0			C/ 59	SC 59.1	P154	L 7	# 382
					Dawe, Pier	rs	Agilent		
C/ 59	SC 59.1	P 154	L 28	# 383	Comment	Туре Т	Comment Status D		
Dawe, Pie	rs	Agilent			Senter minor	nce needs r editorial ch	edrafting: MDIO is always opti anges in the remedy):	onal. Similarly to	CI.52 and 60 (note also 5
Comment Need people Suggested Add pa A 1000 link us other. ("dowr	Type E more text to expla have opposing i <i>Remedy</i> aragraph: DBASE-LX10 link ies a 100BASE-E Typically the 155 ostream") and the	uses 1000BASE-LX10 PMDs at X10-U PMD at one end and a 0 nm band is used to transmit at 1310 nm band towards the ce	As experience we need to e: at each end wh 1000BASE-BX away from the nter ("upstrear	e has shown that xplain at length. nile a 1000BASE-BX10 .10-D PMD at the center of the network n"), although this	Suggested Revise PCS a which which Also re	IRemedy ed sentence er to form a ind PMA of may be acc are hereby evise the P	e: complete physical layer, a PM Clause 36, and optionally integ essible through the managem incorporated by reference. CS to follow.	ID shall be integra grated with the ma ent interface defi	ated with the 1000BASE-X anagement functions ned in Clause 22*ref*,
arrang the PN oppos	ement, or the no IDs at each end ite directions.	tion of hierarchy, is not required of a link which transmit in these	d. The suffixes directions and	"D" and "Ŭ" indicate d receive in the					
Proposed	Response	Response Status O			C/ 59 Jonsson, l	SC 59.1 Jlf	P 154 Ericsson /	<i>L</i> 9 Ав	# 586
					Comment	Туре Т	Comment Status D		
CI 59 Swanson,	SC 59.1 Steven	P 154 Corning Incorpo	L 4 rated	# 41	The m in Clau	anagement Jse 45.	functions are also accessible	through the mana	agement interface defined
Comment Clause	<i>Type</i> T e 59 includes MN	Comment Status D			Suggested Chang	<i>lRemedy</i> je to: "Ma	nagement Interface defined in	Clause 22*ref* or	^r Clause 45*ref*,"
Suggested Delete	lRemedy e "single mode	." in the first sentence.			Proposed	Response	Response Status O		
Proposed	Response	Response Status O							

C/ 59 SC 59.1.2	P 154	L 50	# 385	C/ 59	SC 59.1.3	P155	L 42	# 384
Dawe, Piers	Agilent			Dawe, Piers		Agilent		
Comment Type E	Comment Status D	iseful		Comment T	ype E	Comment Status D stuff about semantics of prim	nitives - not sure	
SuagestedRemedy				SuggestedF	Remedy			
Copy it with changes as subclauses into narrativ	s necessary from 58.1.3 or 60 ve to be much more compact.	0.1.3. We coul	d recast all three	If we do	, copy it as an	nended from 60.1.4.n		
Proposed Response	Response Status O			Proposed R	esponse	Response Status O		
	P 154	/ 50	# 44	CI 59	SC 59.1.3	P 155	L 43	# 47
Swanson, Steven	Corning Incorr	orated	# 44	Swanson, S	teven	Corning Inco	orporated	
Comment Type T	Comment Status D			Comment T Missing	ype T subclauses??	Comment Status D		
Missing subclause.				SuggestedF	Remedy			
SuggestedRemedy Add Clause 59.1.3 Terr	minology and conventions (se	e 60.1.3 for te	xt).	In Claus included	se 60, several d in Clause 59	subclauses (60.1.4.1- 60.2) o also?	describe primitive	es. Should they be
Proposed Response	Response Status O			Proposed R	esponse	Response Status O		
C/ 59 SC 59.1.3 Swanson, Steven	P 155 Corning Incorp	L 31 porated	# 45	<i>Cl</i> 59 Radcliffe, Je	SC 59.10	P 157 Hatteras Net	L 53 tworks	# 618
Comment Type T Clarification.	Comment Status D			Comment T	ype T ocation, and th	Comment Status D rough the following pages, th	nere are a numbe	er of references to
SuggestedRemedy				Tables \$	59-12 and 59-	13. I cannot find these tables		
Reword the first senten entities."	ce to read: "8B/10B code-g	roups between	the PMA and PMD	SuggestedF Include	Remedy the tables			
Proposed Response	Response Status O			Proposed R	esponse	Response Status O		
C/ 59 SC 59.1.3 Swanson, Steven	P 155 Corning Incore	L 32	# 46	C/ 59 Swanson, S	SC 59.10 teven	P167 Corning Inco	L 53 prporated	# 66
Comment Type T Clarification.	Comment Status D			Comment T	ype T et reference.	Comment Status D		
SuggestedRemedv				SugaestedF	Remedv			
Reword sentence to rea signals suitable for the	ad: " The PMD translates the specified medium."	serialized data	of the PMA to and from	Reword the requ	the second se irements spec	entence to read: " The maxim cified in Table 59-1.	num channel inse	ertion loss shall meeet
Proposed Response	Response Status O			Proposed R	esponse	Response Status O		

 TYPE: TR/technical required T/technical E/editorial Reditorial Reditorial RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause Page 60 of 169

 C/ 59
 SC 59.10

Cl 59 SC 59.10 Swanson, Steven	P 168 Corning Incorpo	L 11 prated	# 67	<i>Cl</i> 59 Swanson,	SC 59.11 Steven	P 168 Corning Inco	L 50 prporated	# 70
Comment Type T Incorrect Figure labels.	Comment Status D			Comment Harmo	<i>Type</i> T onization with C	Comment Status D lause 60.		
SuggestedRemedy Change "EX" to "LX" in	Figure 59-7 (2 places).			Suggested Move consis	<i>Remedy</i> Clause 59.11 to tent with Claus	appear before the current 59	9.10, Fiber optic	cabling model to be
Proposed Response	Response Status O			Proposed	Response	Response Status 0		
Cl 59 SC 59.10 Thatcher, Jonathan	<i>P</i> 168 WWP	L 11	# 1014	C/ 59	SC 59.11	P 168	L 52	# 71
Comment Type T What is the "EX" in "EX Ditto line 29	Comment Status D MMF Channel"?			Swanson, Comment Clarifi	<i>Type</i> T cation of intent a	Comment Status D and incorrect reference.	rporated	
SuggestedRemedy Remove EX.				Suggested Rewor optic d	<i>Remedy</i> d the first two s abling shall me	entences to read: "The 1000 et the specifications defined	BASE-BX and 1 in IEC 60793-2 a	000BASE-LX10 fiber and ITU G.652. They are
If there is a good reasor	n to have this, somewhere say	what it mean	S.	showr	in Table 59-11	for information only."		
Proposed Response	Response Status O			Proposed	Response	Response Status O		
C/ 59 SC 59.10.1 Swanson, Steven	P 168 Corning Incorpo	L 41 prated	# 68	Cl 59 Thatcher,	SC 59.11 Jonathan	<i>Р</i> 168 WWР	L 53	# 1015
Comment Type T Unneeded subclause.	Comment Status D			Comment Accore	<i>Type</i> T ding to this sub-	Comment Status D clause, the cable specificaion	s are "shown in	Table 59-13 for
SuggestedRemedy Delete 59.10.1.				1. This	s should be Tab	le 59-11.		
Proposed Response	Response Status O			2. But Suggested Fix	, footnote "a" in <i>IRemedy</i>	T 59-11 says that the dispers	sion values are r	normative.
C/ 59 SC 59.10.2 Swanson, Steven	P 168 Corning Incorpo	L 45 prated	# 69	Proposed	Response	Response Status O		
Comment Type T Unneeded subcaluse.	Comment Status D							
SuggestedRemedy Delete 59.10.2.								
Proposed Response	Response Status O							

C/ 59 SC 59.11.1 Swanson Steven	P 169 Corning Incorpo	L 7 Irated	# 72	Cl 59 Swanson S	SC 59.11.2.1	P 169 Corning In	L 54	# 74
Comment Type T	Comment Status D			Comment T	ype T	Comment Status D		
SuggestedRemedy Reword first sentence to fibers specified in IEC 6 Type B1.3 (low water po	o read: "The fiber optic cable re 50793-2 Type B1.1 (dispersion eak single-mode fiber) and ITU	equirements un-shifted si I-T G.652 as	are satisfied by the ngle-mode fiber) and noted in Table 59-11."	Suggestedf "Table Proposed R	Remedy § 59-13" shou desponse	ld read "Table 59-1" Response Status O		
Proposed Response	Response Status O			C/ 59	SC 59.11.2.1	P170	L 2	# 407
Cl 59 SC 59.11.1 Radcliffe, Jerry Comment Type E I believe that the table r SuggestedRemedy change reference	P 169 Hatteras Networ Comment Status D reference should be to Table 59	L 9 rks Ə-11.	# 6 <u>19</u>	Dawe, Piers Comment T Is it rea SuggestedF Check. The ma and spli	ype T Ily 1 dB for 1550 Remedy Possibly chang ximum link dista ce loss for 1000	Agilent Comment Status D) nm? ge to: ances are calculated base)BASE-LX10 and 1000BA	ed on an allocation SE-BX.	n of 2 dB total conection
Proposed Response	Response Status O			Proposed R	esponse	Response Status O		
Cl 59 SC 59.11.2 Swanson, Steven	P 169 Corning Incorpo	L 45 rated	# 73	Cl 59 Thatcher, Jo	SC 59.11.2.1 Dinathan	<i>Р</i> 170 WWP	L 2	# 1016
Comment Type T Simplification of text.	Comment Status D			Comment T 1 dB co	<i>ype</i> TR nnection (missp	Comment Status D belled in text) and splice lo	oss is not enough	for a 10 km link.
SuggestedRemedy Delete "59.11.2.1 Conn and include text in 59.1 Proposed Response	ection insertion loss" and "59.1 1.2. <i>Response Status</i> 0	1.2.2 Maxim	um discrete reflectance"	We sho 10km lii ensure	uld be much mo hks may require that the total att	bre clear that the specifica that the fiber be specially enuation specification car	ation for the cable v selected for atte n be met.	plan is key and that full nuation in order to
				SuggestedF	Remedy	explicit.		
Cl 59 SC 59.11.2.1 Dawe, Piers Comment Type T Connection insertion los	P 169 Agilent Comment Status D ss is not specified any more.	L 48	# 406	Text so To ensu at 1550 no more dB of lo	mething like: ure operation, a nm. A fiber tha e than 1.5 dB of ss for connecto	channel must have no mo t just meets the maximum loss for connectors and s rs and splices at 1550 nm	ore than 6 dB loss loss specification splices at 1310 nn loto meet the char	at 1310 nm and 5.5 dB ns in 59.11.1 will require n, and no more than 1.0 nnel requirements.
Change 'specified' to 'd	efined'.			Proposed R	lesponse	Response Status O		
Proposed Response	Response Status O							

C/ 59 SC 59.11.2.1	P 170	L3	# 75	C/ 59	SC 5	9.12	P 171	L 1	# 408
		Doraled		Dawe, Pie	#1S	_	Agilent		
Incorrect text.	Comment Status D			Pleas	<i>ι ype</i> e clean ι	∟ µp the su	bclause title.		
SuggestedRemedy				Suggeste	dRemed	/			
Reword sentence to rea calculated based on an	ad: "The maximum link distar allocation of 2 dB total conn	ces for single	e-mode fiber are ice loss."	Follov 59.12	v the ma .3 Major	in clause capabiliti	title. Also 59.12.3 title is two es/options	titles combin	ed in error:
Proposed Response	Response Status O			(follov 59.12 medit (follov	ved by a .4 PICS um, type ved by P	table) the proforma 1000BAS MD funct	en tables for Physical Medium D SE-LX10 and 1000BASE-BX10 ional specifications).	Dependent (P D	MD) sublayer and
C/ 59 SC 59.11.3 Swanson, Steven	P 170 Corning Incor	L 22 porated	# 76	Proposed	Respon	se	Response Status O		
Comment Type E Note misplaced.	Comment Status D			C/ 59	SC 5	i9.12	P 172	L 7	# 409
SuggestedRemedy				Dawe, Pie	ers		Agilent		
Place note on separate	line from preceding text.			Comment	Туре	Е	Comment Status D		
Proposed Response	Response Status O			Vario be ref	us editori lected in	al. Main the PICS	issue is that I think the distict S.	identity of -D	and -U PMDs needs to
				Suggeste	dRemed	/			
C/ 59 SC 59.11.4 Dawe, Piers	P 170 Agilent	L 28	# 364	p172 in this p173	line 7 P clause.	lease do Suggest	n't use OLT and ONU which a **BD and *BU re 'and management functions	re confusing	and not necessary at all
Comment Type T We should not have ren	Comment Status D	aterial becau	se it was not identical to	p173 Call th	line 41: o ne items	hange ti BD1, BD	the to 'PMD to MDI optical spe- 2, BD3 of status BD:M. Clone	, cifications for e the subclau	[·] 1000BASE-BX10-D'. se for BU.
38.11.4. However, we oboth 38.11.4 and 38.11.	can make it clear that the sar 4, by adding a reference.	ne patchcord	s can be compliant to	Proposed	Respon	se	Response Status O		
SuggestedRemedy									
Reinstate it. Add a sen The requirements of thi	tence at the end of the first p is subclause are virtually iden	aragraph: ntical to those	of 38.11.4.' Delete PICS	C/ 59 Thatcher,	SC 5 Jonatha	59.2 n	<i>Р</i> 15 WWP	L 40	# 996
Proposed Response	Response Status O			Comment Befor	<i>Type</i> e 59.2 (n	T ew 59.22	Comment Status D) put text like section 60.2		
				Suggester Per co	dRemed <u>y</u> omment	/			
				Proposed	Respon	se	Response Status O		

	VVVP			Curanaan Ctarran	Corning Inco	rnorotod	
Comment Type I Comn	nent Status D	,		Comment Type T	Comment Status D	orporated	
Add new subsclause like 60.2 be SuggestedRemedy Per comment	nse Status)		Clarification. SuggestedRemedy Add a sentence a by implementers.	fter the first paragraph to read: "٦ '	TP1 and TP4 are	reference points for use
				Proposed Response	Response Status O		
C/ 59 SC 59.2.1 Swanson, Steven	P 155 Corning Incorpo	L 51 prated	# 48	CI 59 SC 59.2	.4 P156	L 54	# 616
Comment Type T Comm	nent Status D			Radcliffe, Jerry	Hatteras Net	tworks	
Clarification.				Comment Type T The text states the compliant Howey	Comment Status D at the signal detect function does er the referenced table (58-2) re	not need to dete	rmine if the signal is
Reword the first sentence to rea	d: "For purposes of sy	/stem conform	nance, the PMD	SuggestedRemedy			,
sublayer is standardized at the p	points shown in Figure	959-2."		Remove the comp	bliance requirement from table 58	3.2	
Proposed Response Respon				Proposed Response	Response Status 0		
Cl 59 SC 59.2.1 Swanson, Steven	P 155 Corning Incorpo	L 52 prated	# 49	C/ 59 SC 59.2	.4 P157	L 20	# 387
Comment Type E Comm Clarification.	nent Status D			Comment Type T	Comment Status D		
SuggestedRemedy Modify the second sentence to r	read: "between 2 and	d 5 m in lengt	h, of a fiber type	U Tx, and similarl	y for D.	or required to resp	und to a signal norm a -
Pronosed Response Respo	nse Status O			One fix (rather ug	ly) is to have 3 PMD columns ins	tead of two.	
				Proposed Response	Response Status O		
C/ 59 SC 59.2.1 Thatcher, Jonathan	<i>P</i> 155 WWP	L 52	# 999	C/ 59 SC 59.2	.4 P157	L 22	# 386
Comment Type T Comm Since we have changed the min length of the minimum patch co	nent Status D imum distance to 0.5 rd used for testing to 0	meters, we sł).5 m. This sh	nould also change the ould be global	Dawe, Piers Comment Type T Inequality is wron	Aglient Comment Status D g.		
throughout.	-		-	SuggestedRemedy			
SuggestedRemedy	"hotwoon 0 E on 1 E m			Table entries like:	Input optical power <= signal de	tect threshold (mi	n) in Table 59-x FAIL
Proposed Response Response	nse Status O	n" everywnere	e în ciause.	Input optical power	er >= receiver sensitivity (max) in <i>Response Status</i> O	Table 59-x AND	compliant OK

 TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause
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 RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 C/ 59
 SC 59.2.4

C/ 59 SC 59.2.4	P 157	L 22	# 51	C/ 59	SC 59.3	P 157	L 37	# 388
Swanson, Steven	Corning Incor	rporated		Dawe, Pie	rs	Agilent		
Comment Type TR	Comment Status D			Comment	Type E	Comment Status D		
Signal_detect value c	definition needs to be harmoniz	zed with Clause	58 and 60	Imple	menting decisio	on to document mechanically co	mputed OMA v	alues.
SuggestedRemedy				Suggestee	dRemedy			
Clarify whether the in 60] -30 dBm [as note	put optical power requirement d in Clause 59]?	is -45 dBm [as r	noted in Clause 58 and	Here, NOTE extinc	insert: — In this subcl tion ratio and a	ause and 59.4, the specification verage launch power (min) or re	ns for OMA hav eceiver sensitivi	e been derived from ty (max). The
60] or <= limit in sign	al detect threshold (min) [as no	oted in Clause 5	9]?	Insert	OMA rows in the	he four Tx, Rx tables.		
Proposed Response	Response Status O			Proposed	Response	Response Status O		
C/ 59 SC 59.3 Swanson, Steven	P 157 Corning Inco	L 33	# 52	C/ 59 Thatcher.	SC 59.3 Jonathan	<i>Р</i> 159 WWP	L 15	# 1 <u>1003</u>
Comment Type T Incorrect reference.	Comment Status D			Comment Table	<i>Type</i> T 59-5 & 59-7	Comment Status D	12 dP)	
SuggestedRemedy "Table 59-13" should	read "Table 59-11"			Suggestee	dRemedy		12 ub).	
Proposed Response	Response Status 0			Per co	omment			
				Proposed	Response	Response Status O		
Cl 59 SC 59.3 Thatcher, Jonathan	<i>P</i> 157 WWP	L 33	# 1000	C/ 59	SC 59.3.1	P157	L 46	# <u>1001</u>
Comment Type T	Comment Status D			i natcher,	Jonathan	VVVVP		
Reference to table 59	9-13 wrong			Comment	Type E	Comment Status D		intent with the
SuggestedRemedy				rest o	f the document	and with the referenced table.	t would be mor	e consistent with the
Fix.				Suggestee	dRemedy			
Proposed Response	Response Status O			Per co	omment			
				Proposed	Response	Response Status 0		

C/ 59 SC 59.3.1 Radcliffe, Jerry	P 157 Hatteras Networl	L 47 (S	# 617	C/ 59 SC 59.3.2 Thatcher, Jonathan	<i>Р</i> 158 WWР	L 24	# 1002
Comment Type E Change "frequency" to	Comment Status D "wavelength"			Comment Type T Shouldn't there be an	Comment Status D	ation in table 59-3	(see Table 60-5, 60-7)
SuggestedRemedy Change "frequency" to	"wavelength"			SuggestedRemedy ?			
Proposed Response	Response Status O			Proposed Response	Response Status O		
C/ 59 SC 59.3.1 Dawe, Piers	P 158 Agilent	L 1	# 389	Cl 59 SC 59.3.2 Dawe, Piers	P 159 Agilent	L 15	# 392
Comment Type T Add row to tables 59-3	Comment Status D and 59-6: Optical return loss tol	erance -X dE	3. X might be 12.	Comment Type T Table 59-5 and 59-7:	Comment Status D reflectance sign is wrong.		
SuggestedRemedy Add the row.				SuggestedRemedy -12			
Proposed Response	Response Status O			Proposed Response	Response Status O		
C/ 59 SC 59.3.1 Dawe, Piers	P 1 58 Agilent	L 30	# 390	C/ 59 SC 59.4 Swanson, Steven	P159 Corning Inco	L 36 prporated	# 53
Comment Type E	Comment Status D			Comment Type T	Comment Status D		
Following reader feedb	ack, making the intent of tables	58-8, 58-12 a	nd 59-4 clearer. I	Clarification.			
SuggestedRemedv				SuggestedRemedy			
Make the left columns	bold. Insert '(informative)' after	0.115. Replac	ce the table entries	supports all media ty	pes listed in Table 59-11 acc	E-BX-10-D compile	ant transceiver
e.g. 1292, 3.00 and 13 3 with ones representir	34, 3.00 with 129x, 3.50 and 133 ng these changes.	3x, 3.50. Repl	ace fig. 58-2, 58-3, 59-	Proposed Response	Response Status 0		
Proposed Response	Response Status O						
CI 59 SC 59 3 1	P 158	/ 51	# 301	Cl 59 SC 59.4 Thatcher, Jonathan	<i>Р</i> 161 WWP	L 17	# 1006
Dawe, Piers	Agilent			Comment Type T	Comment Status D		
Comment Type T Table 59-4: the spectra	Comment Status D I width limit slope in the 1490 ba	and is over-fus	ssy and we have	Table 59-7 appears to rows) + Optical return	o be missing rows of specific loss.	ations. Compare to	o Table 59-5 (last 3
abandoned it in clause	58.			It also appears to be	missing the footnotes from Ta	able 59-5	
SuggestedRemedy				SuggestedRemedy			
Change 0.96 to 0.88. (1480 to 1500 0.88 0	Consider collapsing the two rows	s into:		Add to table.			
Proposed Response	Response Status 0			Proposed Response	Response Status O		

 TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause
 Page 66 of 169

 RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 C/ 59
 SC 59.4

C/ 59	SC 59.4.1	P 160	L 34	# 393	C/ 59	SC 59.5	P161	L 41	# 55
Dawe, Pie	ers	Agilent			Swanson	, Steven	Corning Inco	porated	
Comment Pleas	<i>Type</i> T e add decision ti	Comment Status D ming offsets row to table 59-6.			Commen Clarif	<i>t Type</i> T iication.	Comment Status D		
Suggestee Per co	<i>dRemedy</i> omment.				<i>Suggeste</i> "Cha	edRemedy nnel insertion lo	ss a" should read "Maximum c	hannel insertion	loss a"
Proposed	Response	Response Status O			Proposed	l Response	Response Status O		
Cl 59	SC 59.4.2	P 160	L 28	# 1005	C/ 59	SC 59.6	P161	L 51	# 395
					Dawe, Fit				
Figure	59-3 is information	tive (normative is table 59-4).			Comment I thin	<i>t Type</i> I k the iitter will be	comment Status D e different between SMF and N	/MF, but on SM	F. X10 and BX10
Suggestee Identii	dRemedy fy as "informative	e." If desired, add footnote poin	ting to Table 5	9-4.	shoul chang conta	ld be similar. W ge in DJ; howev ain specification	e would expect very little disto er, MPN will add RJ. These si	rtion between TI ubclauses are in	P2 and TP3 hence no formative so they don't
Proposed	Response	Response Status O			Suggeste	dRemedy			
					Com	bine the subclau	uses into one, 'Jitter at TP1-4	or 1000BASE-L	X10 and 1000BASE-
CI 59	SC 59.4.2	P 161	L 1	# 394	BX10	(informative) [*] .			
Dawe, Pie	ers	Agilent			'The o	entries in Table	59–9 and Table 59–10 represe	ent high-frequen	cy jitter (above 637 kHz)
Comment Pleas 59-7.	<i>Type</i> T e add Stressed e	Comment Status D eye jitter, Jitter corner frequency	/ and Sinusod	ial jitter rows to table	fiber inforr	sures. Table 59 while Table 59– native.'	-9 applies to 1000BASE-LX10 10 applies to 1000BASE-LX10	and 1000BASE on multimode f	-BX10 on single mode iber. All values are
Suggestee	dRemedy				'Table	e 59-10, 1000B/	ASE-LX10 and 1000BASE-BX	10 jitter budget f	or SMF (informative)'
Value	s and footnotes	as table 59-5.			Rows	STP1, TP3, TP3 TP2 to TP3: D I	to TP4 and TP4: as clause 38	Row TP2: sar tion from others	ne as DJ row TP3.
Proposed	Response	Response Status 0			may	need revision in	future.		
CI 59	SC 59.5	P 161	L 26	# 54	'Table Value	e 59-10, 1000B/ es as clause 38	ASE-LX10 jitter budget for MM and current table 59-9 for now	F (informative)' . May need slig	ht revision in future.
Swanson,	Steven	Corning Incorp	orated		Proposed	l Response	Response Status O		
<i>Comment</i> Table	<i>Type</i> E formatting.	Comment Status D							
Suggestee Resiz	<i>dRemedy</i> e Table 59-8 and	d merge cells (two places).							
Proposed	Response	Response Status 0							

CI 59	SC 59.6	P 162	L 5	# 724	CI 59	SC 59.8		P 162	L 43	# 1008		
Urricariet,	Christian	Finisar Corpora	ation		Thatcher,	Jonathan	W	/WP				
Comment Table Units f	<i>Type</i> E 59-9 for Total Jitter sho	Comment Status D build be "UI" instead of "U1".			Comment Optica	<i>Type</i> TR al testing incom	Comment Sta plete (2 of 2 for C5	<i>tus</i> D 9; also for C	36)			
Suggested Chang	<i>Remedy</i> ge units to "UI".				After of figure	completing part out how to:	1 of these 2, it is e	essential to ge	et together with	the logic folk (C36) to		
Proposed	Response	Response Status O			1. Ens patter 59, the	sure that the sys ns are currently e logic folk won	stem can create th in an informative a 't know to look the	e test pattern annex (36A). e for logic tes	s required for e Even if the path st requirements	each test. Some test terns are called out in s unless some change		
Cl 59 Urricariet,	SC 59.7 Christian	P 162 Finisar Corpora	L 29 ation	# 725	 in made elsewhere. 2. Ensure that the system can count the errors indicated. In short, the OAM functions be added will not be "optional" for this PMDs. 							
Comment Table Units f	<i>Type</i> E 59-10 for Total Jitter sho	Comment Status D ould be "UI" instead of "U1".			3. Car test fra async 4. For	n operate the lir ames when the hronous. those that are	nk in a mode that s link is not up (no F synchonous, it mus	upports these Rx) for tests ir st be verified	e tests. The PH n Part 1 of the o that the four pa	Y must be able to send comment that are not artners are doing what		
Suggested Chang	<i>Remedy</i> ge units to "UI".				Suggestee	dRemedy						
Proposed	Response	Response Status 0			Meet v C59.	with logic peopl	e. Discuss and eva	luate capabil	lities for C36, a	nd requirements for		
					Proposed	Response	Response Sta	tus O				
					<i>Cl</i> 59 Thatcher,	SC 59.8 Jonathan	W	P 162 WP	L 43	# 1007		
					Comment Optica	<i>Type</i> TR al testing incom	Comment Sta plete (1 of 2 for C5	<i>tus</i> D 9; also for C6	60)			
					It is es require there	ssential that eac ed. Some indica the test method	ch optical test be c ate need, most do I needs to specify	learly evaluat not. This is es specific wave	ed for when as specially impor elength drop/ad	ynchronous data is tant for the BiDi, where d mechanisms.		
					Suggestee	dRemedy						
					1. Ider Trans	ntify each test t mit optical wave	hat requires async eform; TDP; Rx Se	hronous oper nsitivity; Tota	ation from: Exti I Jitter; Stresse	inction ratio; OMA; RIN; ed Rx		
					2. Cre	eate scheme for	testing BiDi with a	synchronous	operation.			
					Proposed	Response	Response Sta	tus O				

C/ 59 SC 59.8	P 162	L 45	# 56	CI 59 SC Swanson Steven	59.8.11	P 165 Corning Incorr	L 20	# 61
Comment Type E Clarification.	Comment Status D	oluco		Comment Type Clarification	т	Comment Status D	Joraleu	
SuggestedRemedy Reword first sentence	to read: "All optical measurem	ents"		SuggestedRemea Should this Cl	y ause be re	placed by a reference to 60	.8.12?	
Proposed Response	Response Status O			Proposed Respon	se	Response Status O		
C/ 59 SC 59.8.1 Swanson, Steven	P 162 Corning Incorp	L 51 orated	# 57	Cl 59 SC S Dawe, Piers	59.8.11	P 165 Agilent	L 20	# <mark>401</mark>
Comment Type E Meet Pier's wishes.	Comment Status D			Comment Type Need to choos equivalent?	T se betweer	Comment Status D CI.38 style jitter measurem	ents or XAUI st	yle. they should be
SuggestedRemedy Reword the first sente assured in relation to r Proposed Response	ence to read: "the wavelength a measurement procedures" <i>Response Status</i> 0	nd spectral wic	ith (RMS) shall be	SuggestedRemed Choose. Eith line 30 (which defined) with '	ly er way, rep is no longe at', and rer	lace '0.5 dB greater than (to er appropriate because of th nove 'of 9 dB' from line 32.	account for ey e way stressed	e opening penalty)' on sensitivity is now
C/ 59 SC 59.8.1	P162	L 53	# 396	Proposed Respon	se	Response Status O		
Dawe, Piers <i>Comment Type</i> T This note needs to be think). We can follow	Agilent Comment Status D made precise (although the im clause 58. I have tweaked the	precison does words slightly	n't matter in practice, I to be clearer still	CI 59 SC S Dawe, Piers Comment Type Stressed sens	59.8.13 T sitivity norm	P 166 Agilent Comment Status D native or informative? I think	L 19	# 402
Change to: 'The allow wavelength range by t	able range of central waveleng the actual RMS spectral width a	ths is narrower at each extrem	than the operating e.	SuggestedRemed Replace 'shall	y be' with 'is	5.		
Proposed Response	Response Status O			Proposed Respon	se	Response Status O		
C/ 59 SC 59.8.10 Dawe, Piers	P 165 Agilent	L 14	# 400	Cl 59 SC Swanson, Steven	59.8.13	P 166 Corning Incorp	L 20 porated	# 62
Comment Type T The second paragraph	Comment Status D h is redundant with 59.8.13.			Comment Type Incorrect refer	T rence.	Comment Status D		
SuggestedRemedy Delete the second par	ragraph. Extend the first with:	11		SuggestedRemea "of 60.7.11	<i>y</i> " should re	ead "of *ref*Clause 60.8.1	1"	
Proposed Response	Response Status O			Proposed Respon	se	Response Status O		

CI 59	SC 59.8.14	P 166	L 31	# 403	C/ 59	SC 59.8.5	P163	L 35	# 59	
Comment It wou	<i>Type</i> T Id be helpful to m	Comment Status D	doing this meas	surement.	Comment T	<i>Type</i> T ct reference.	Comment Status D	porateu		
Suggested Extend Altern Proposed	dRemedy d the first paragra atively the two si Response	aph with: gnals may be combined in th <i>Response Status</i> O	e optical domair	۱.	Suggested "*ref* Proposed F	Remedy Clause 60.7.6. Response	" should read "*ref*Clause (Response Status O	60.8.6"		
C/ 59	SC 59.8.3	P 163	L 23	# 397	<i>Cl</i> 59 Dawe, Pier	SC 59.8.7 s	P 163 Agilent	L 51	# 398	
Dawe, Piers Agilent Comment Type T Comment Status D Need to mention FOTP-4A. Need to mention back reflections.				Comment Type T Comment Status D Adding more text. We might be able to use a common eye mask subclause across the three optics clauses, but this makes them very similar.						
SuggestedRemedy Revise sentence: Extinction ratio is defined according to the methods specified in ANSI/TIA/EIA-526-4A with the node transmitting a repeating idle pattern I2 and with minimal back reflections into the transmitter, lower than -20 dB				SuggestedRemedy Insert after 'logic ZERO and ONE respectively.': 0 and 1 on the unit interval scale are to be determined by the eye crossing means. A clock recovery unit (CRU) may be used to trigger the scope for mask measurements. It should have a high frequency corner bandwidth of less than or equal to the jitter corner frequency specified in the transmitter table, and a slope of -20 dB/decade.						
C/ 59	SC 59.8.3	P 163	L 23	# 58	Proposed F		Response Status 0		# 00	
Swanson, Steven Corning Incorporated Comment Type T Comment Status D Harmonization with Clause 60. BuggestedRemedy Reword 59.8.3 to read: "Extinction ratio shall be measured using the methods specified in ANSI/TIA/EIA-526-4A [B13]. This measurement may be made with a node transmitting a data pattern defined in *ref*36A.2. As defined in Clause 36*ref*, this is coded as /K28.5/D16.2/ which is binary 001111 1010 100100 0101 or 110000 0101 011011 0101. The extinction ratio is measured with -20 dB back reflections into the transmitter." Proposed Response Response Status 0					CI 59 SC 59.8.9 P165 L1 # 60 Swanson, Steven Corning Incorporated Comment Type T Comment Status D Incorrect reference. SuggestedRemedy "See *ref*Clause 60.7.9" should read "See *ref*Clause 60.8.9" Proposed Response Proposed Response Response Status O					

CI 59	SC 59.8.9	P 165	L 7	# 399	C/ 59	SC 59.9.3		P167	L 33	# 65	
Dawe, Piers Agilent			Swanson, Steven Corning Incorporated								
Comment Type E Comment Status D					Comment Type E Comment Status D						
		cleany.			Ciarii						
SuggestedRemedy Insert new sentence: ' (TDP). The TDP limit is a requirement. See'				Suggesteakemeay Reword first sentence to read: "It is recommended that proper installation practices, as defined by applicable local codes and regulations, be followed in every instance in which such practices are applicable."							
Apply to a	all three optics	s clauses.			Proposed	Response	Response	Status O			
Proposed Response Response Status O											
Cl 59 Swanson Ste	SC 59.9.2	P 167 Corning Incor	L 19	# 63	C/ 59 SC 59.9.5 Thatcher, Jonathan			<i>Р</i> 167 WWP	L 47	# 1013	
Comment Typ Simplifica	ant Type E Comment Status D Inplification of text.				Comment Type E Comment Status D Reference should be to 59.9.2.						
SuggestedRemedy Reword first sentence to read: "1000BASE-X optical transceivers described"				escribed"	Replace Proposed Response Response Status O						
Proposed Response Response Status O				Toposed Response Response Status							
					C/ 59	SC Figure	59-7	P168	/ 20	# 595	
C/ 59	SC 59.9.2	P 167	L 20	# 64	Jonsson,	Ulf		Ericsson AB			
Swanson, Steven Corning Incorporated Comment Type E Comment Status D Editorial. SuggestedRemedy Add a space between the first and second sentence.				Comment Type E Comment Status D Delete the words 'OLT' and 'ONU'. Add 'Tx' and 'Rx' respectively under 'PMD' in the PMD boxes. SuggestedRemedy Per comment							
Proposed Re	esponse	Response Status O			Proposed Response Response Status O						
					<i>Cl</i> 59 Jonsson,	SC Figure 5	59-1	P 155 Ericsson AB	L 14	# 589	
					Comment MII sł	t <i>Type</i> E nould be GMII	Comment	Status D			
					Suggeste Chan	<i>dRemedy</i> ge 'MII' to 'GMII'	in the figure				
					Proposed	Response	Response	Status O			

C/ 59 SC Figure 59-2 P 156 L 11 # 590 Jonsson, Ulf Ericsson AB	C/ 59 SC Table 59-3 P 158 L 8 # 593 Jonsson, Ulf Ericsson AB
Comment Type E Comment Status D Align the picture with Clause 60.	Comment Type E Comment Status D
SuggestedRemedy Copy Figure 60-2	SuggestedRemedy Change to: "1260 to 1360". Change a few more instances in other Clause 59 tables.
Proposed Response Response Status O	Proposed Response Response Status O
C/ 59 SC General P L4 # 806 John George OFS OFS </td <td>CI 59SC Table 59-6P 160L 49# 476Yanagisawa, HirokiNEC Corporation</td>	CI 59SC Table 59-6P 160L 49# 476Yanagisawa, HirokiNEC Corporation
Comment Type E Comment Status D Identifying single mode fiber as "SMF" under headings in tables identified as Fiber Type is redundant. Also, SMF is used as part of multiple trademarks by one of the fiber manufacturers and thus is not an appropriate term to be used in a standard. SuggestedRemedy Change "SMF" to "SM" in all cases in which such is described as a fiber type. Proposed Response Response Status O	Comment Type T Comment Status D The current extinction ratio of 6dB is a burden to the receiver, since it causes about 2dB penalty in sensitivity. SuggestedRemedy Add OMA(min) specification as same as Clause 58 and 60. To keep the minimum apmlitude equivalent to 9dB estinction ratio, the following numbers are proposed: Launch OMA(min) 1000BASE-BX10-D 0.20mW
C/ 59 SC Table 59-1 P 154 L 19 # 587 Jonsson, Ulf Ericsson AB Ericsson	1000BASE-BX10-U 0.20mW Proposed Response Response Status O
Comment Type E Comment Status D Incorrect symbol 'u' in '62.5 um MMF'.	C/ 59 SC Table 59-9 P162 L 5 # 594
SuggestedRemedy Change 'u' to the correct symbol for 'micro'. Change this also in several other tables throughout Clause 59.	Comment Type E Comment Status D 'U1' should be 'UI' in the table
Proposed Response Response Status O	SuggestedRemedy Change 'U1' to 'UI'. Change this at a few more places throughout Clause 59.
C/ 59 SC Table 59-1 P 154 L 24 # 588 Jonsson, Ulf Ericsson AB	Proposed Response Response Status O
Comment Type E Comment Status D '-' should be changed to 'to', e.g. '0.5 m to 10 km'. Add space between value and unit, e.g. '0.5 m' SuggestedRemedy Per comment Make similar changes throughout Clause 59	
Proposed Response Response Status O	

TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause Page RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn C/L5
C/ 60 SC 60.1	P 178	L 21	# 77	C/ 60	SC 60.1.4.1	P 180	L 18	# 362
Swanson, Steven	Corning Incorr	porated		Dawe, Pie	rs	Agilent		
Comment Type E	Comment Status D			Comment	Type E	Comment Status D		
Mysterious "From" in h	eader of Table 60-1.			lt's a p	bity we have this	offputting material so early in a	clause whi	ch is not about computer
SuggestedRemedy				progre	ess to the next s	ubject.	e it take ies	s space so the reader can
Delete "From" in Table	e 60-1 (2 places).			Suggested	dRemedy			
Proposed Response	Response Status O			Delete '60.1.4 'The s	e the 5th level su 4.n.1 Semantics emantics of the	ubheadings 60.1.4.n.n. In the ca of the service primitive', use a s service primitive are PMD_UNI	ase of sentence: e TDATA.req	.g. uest(tx_bit).' (three
C/ 60 SC 60.1	P178	L 26	# 78	occas	ions).			
		Dorated		Proposed	Response	Response Status O		
Comment Type T	Comment Status D							
				C/ 60	SC 60.10	P 204	L 39	# 92
SuggestedRemedy	alangth" to "Naminal aparating	a wavalanath"		Swanson,	Steven	Corning Incorpo	orated	
		gwavelength		Comment	Туре Т	Comment Status D		
Proposed Response	Response Status O			Clarifi	cation of intent.			
				Suggested	dRemedy			
C/ 60 SC 60.1 Swanson, Steven	P 178 Corning Incorp	L 27 porated	# 79	Rewor optic o showr	rd the first three cabling shall me n in Table 60-14	sentences to read: "The 100BA et the specifications defined in I for information only;"	SE-LX10 ai EC 60793-2	nd 100BASE-BX10 fiber 2 and ITU G.652. They are
Comment Type T Incorrect wavelength.	Comment Status D			Proposed	Response	Response Status O		
SuggestedRemedy Change "1550 nm" to '	'1490 nm" in Table 60-1.			C/ 60	SC 60.10	P 204	L 41	# 584
Proposed Response	Response Status 0			JUIISSUII, (
				IEC x	<i>Type</i> T xx. I believe IEC	60793 is the correct reference.		
C/ 60 SC 60.1.4	P 180	L 13	# 365	Suggested	dRemedy			
Dawe, Piers	Agilent			Repla	ce "IEC xxx" wit	h "IEC 60793"		
Comment Type E This is the place to wa	Comment Status D rn the reader of the delay requ	uirements.		Proposed	Response	Response Status O		
SuggestedRemedy Insert: NOTE - Delay	requirements which affect the	PMD layer are s	specified in 24.6*ref*.					

Proposed Response Response Status **O**

C/ 60 SC 60.10.1	P 205	L 1	# 376	CI 60 SC 6	0.10.14	P 206	L 10	# 95
Dawe, Fleis	Aglient			Swanson, Steven		Conning incon	porateu	
Comment Type E This subclause mark	Comment Status D ed as informative, contains at	least one specifi	cation.	Comment Type Editorial	E (Comment Status D		
SuggestedRemedy Delete '(informative)'				SuggestedRemedy Delete semico	/ lon and "a)"	in text.		
Proposed Response	Response Status O			Proposed Respons	se F	Pesponse Status O		
C/ 60 SC 60.10.1	P 205 Corning Inco	L 17	# 93	C/ 60 SC 6 Swanson, Steven	0.10.2	P 205 Corning Incorr	L 28	# 94
Comment Type T Clarification of intent	Comment Status D			Comment Type Clarification of	T references.	Comment Status D		
SuggestedRemedy Reword the first sent requirements specifie	ence to read: "The maximum o ed in Table 60-1."	channel insertior	losses shall meet the	SuggestedRemedy Reword first se Table 60-14."	/ entence to re	ad: "(low water peak si	ngle mode) and	I ITU G.652 as noted in
Proposed Response	Response Status 0			Proposed Respons	se F	esponse Status O		
C/ 60 SC 60.10.1	P 205	L 44	# 377	C/ 60 SC 6	0.10.3	P 205	L 50	# 378
Dawe, Piers	Agilent			Dawe, Piers		Agilent		
Comment Type E	Comment Status D			Comment Type	т	Comment Status D		
The footnote needs a wavelength and Disp	amplification. The issue here i	s that the limits of met individually	of Zero dispersion , but that the dispersion	Are these alloc SuggestedRemedy	cations corre	ct? Also, there is no othe	er fibre but SMF	in this clause.
or cable specs here.	we leave that to the experts.	se coefficients.		Revised sente	nce:			
SuggestedRemedy				The maximum	link distance	es are calculated based o	n an allocation	of 2 dB total connection
Extend the footnote: and dispersion slope	See IEC 60793 or G.652 for c	orrect use of zer	o dispersion wavelength	and splice loss As this leaves	ses. two paragra	phs of barely a line, comb	pine them.	
Proposed Response	Response Status O			Proposed Respons	se R	esponse Status O		

C/ 60 SC 60.10.3 P 205 L 51 # 1017 Thatcher Jonathan WWP	C/ 60 SC 60.3.1 P 182 L 3 # 82 Swanson Steven Corring Incorporated
Comment Type TR Comment Status D	Comment Type T Comment Status D
1 dB connection (misspelled in text) and splice loss is not enough for a 10 km link.	Clarification.
We should be much more clear that the specification for the cable plan is key and that fu 10km links may require that the fiber be specially selected for attenuation in order to ensure that the total attenuation specification can be met.	SuggestedRemedy Reword the first sentence to read: "For purposes of system conformance, the PMD sublayer is standardized at the points shown in Figure 60-2."
We need to make this explicit.	Proposed Response Response Status O
SuggestedRemedy	
Text something like:	C/ 60 SC 60.3.1 P 182 L 4 # 1018 Thatcher, Jonathan WWP
To ensure operation, a channel must have no more than 6 dB loss at 1310 nm and 5.5 d at 1550 nm. A fiber that just meets the maximum loss specifications, in 60 10 2 will requi	Comment Type T Comment Status D
no more than 1.5 dB of loss for connectors and splices at 1310 nm, and no more than 1. dB of loss for connectors and splices at 1550 nm to meet the channel requirements.	Since we have changed the minimum distance to 0.5 meters, we should also change the length of the minimum patch cord used for testing to 0.5 m. This should be global throughout.
Froposed Response Status	SuggestedRemedy
	Change "between 2 and 5 m" to "between 0.5 and 5 m" everywhere in clause.
C/ 60 SC 60.11 P 208 L 13 # 379	Proposed Response Response Status O
Comment Type E Comment Status D	
Various editorial. Main issue is that I think the distict identity of -D and -U PMDs needs to be reflected in the PICS. Also I'm not sure that the MDI connector spec is an 'INS' item and it's not mandatory.	C/ 60 SC 60.3.4 P 183 L 10 # 366 Dawe, Piers Agilent Agilent <t< td=""></t<>
	Comment Type T Comment Status D
Line 11 Duplicate, as *BD and *BU	This is a bit pedantic, but aU signal detect is not required to respond to a signal from a - U Tx, and similarly for D.
Line 42 FN7, change 'parameter' to 'behavior'	SuggestedRemedy
p209 line 13 Duplicate 60.11.3.3 as *BD and *BU.	One fix (rather ugly) is to have 3 PMD columns instead of two.
Proposed Response Response Status O	Proposed Response Response Status O
	C/ 60 SC 60.3.4 P 183 L 5 # 83 Swanson, Steven Corning Incorporated
	Comment Type T Comment Status D Harmonization of signal_detect value definition.
	SuggestedRemedy
	Clarify whether the requirement is >= receive sensitivity (max) [as noted in Clause 60] or <= limit in signal detect threshold (min) [as noted in Clause 59]?
	Proposed Persona Persona Status

Cl 60 SC 60.41 P185 L30 # lg6 Comment Type E Comment Type F Comment Type F Comment Type F Comment Type T C									
Comment Type E Comme	C/ 60 SC 60.4.1 Swanson, Steven	P 183 Corning Incorp	L 40 porated	# 85	Cl 60 Swanson,	SC 60.5.1 Steven	P 185 Corning Inco	L 33 rporated	# 86
Suggested/Remedy Rename 60.4.1: "100BASE-EX10 transmitter optical specifications. Proposed Response Response Status 0 Cl 60 SC 60.4.1 P183 L43 # [4] Suggested/Remedy Comment Status D Comment Status Comment Status D Suggested/Remedy Add the following sentence: "It shall also meet a transmit mask of the eye measurement as defined in 60.8.8. Proposed Response Response Status O Cl 60 SC 60.4.1 P184 L23 # [363] O Add the following sentence: "It shall also meet a transmit mask of the eye measurement as defined in 60.8.8. Proposed Response Response Status O Cl 60 SC 60.4.1 P184 L23 # [363] O O 60 SC 60.5.1 P185 L37 # [367] Dawe, Piers Aglient D It we move to assuming single side clock recovery the mask would have to be made much longer. Also the indicative jitter value in 60.7 would be substantially reduced, and way wish to consider puting more emphasis on a stessed or semi-stressed sensitive specificationed. Pais of the relative in editors in othe cloce of the editors in othe loce. This range is wider than the assoctiated transmitter to allow interoperation with legacy transcover. Comment Type T Commen	Comment Type E Clarification of clause	Comment Status D title to distinguish between 60.	4.1. and 60.5.	I.	Comment Clarifi	<i>Type</i> E cation of clause	Comment Status D e title to distinguish between 60	0.4.1. and 60.5.	1.
Proposed Response Response Status O Proposed Response Response Status O C1 60 SC 60.4.1 P183 L43 # a	SuggestedRemedy Rename 60.4.1: "100E	BASE-LX10 transmitter optical	specifications.		Suggested Renar	<i>Remedy</i> ne 60.5.1: "100	BASE-BX10 transmitter optica	al specifications	
Ci 60 SC 60.4.1 P183 L43 # [84] Swanson, Steven Corning Incorporated Comment Stetus D Mussing requirement. SuggestedRemedy Add the following sentence: 'It shall also meet a transmit mask of the eye measurement as defined in 60.8.8. Comment Stetus D Proposed Response Response Status O Ci 60 SC 60.5.1 P185 L36 # [87] Comment Steven Comment Stetus D Mussing requirement. D SuggestedRemedy Add the following sentence: 'It shall also meet a transmit mask of the eye measurement as defined in 60.8.8. Proposed Response Response Status O Ci 60 SC 60.5.1 P184 L23 # [83] Dave, Piers Aglient Comment Type T Comment Status D Dave, Piers Aglient Comment Status D SuggestedRemedy Per comment. SuggestedRemedy Control to base the andinging around for a while, Let's write the real note or allow the idea. How many legacy receivers in the 1580-1600 nm range are out there? SuggestedRemedy Option 1, add fortonte to table 60-8: This range is wider than the assoctaied transmitter to allow interoperation with legacy transceivers. ¹ Option 3, add fortonte to table 60-8: This range	Proposed Response	Response Status O			Proposed	Response	Response Status O		
Comment Type T Comment Status D Missing requirement. SuggestedRemedy Add the following sentence: 'It shall also meet a transmit mask of the eye measurement as defined in 60.8.8. Proposed Response Response Status O Cl 60 SC 60.4.1 P184 L23 # 363 Dawe, Piers Agilent Comment Type T Comment Status D If we move to assuming single sided clock recovery the mask would have to be made much longer. Also the indicative jitter value in 60.7 would be substantially reduced, and we specific consider putting more emphrasis on a stessed or semi-stressed sensitivity spec. Comment Type T Comment Status D SuggestedRemedy Per comment. Similarly 100BASE-BX10. Proposed Response Response Status O Cl 60 SC 60.5 P184 L18 # 1020 Thatcher, Jonathan WWP Comment Type T Comment Status D Candid return loss' should be -12 (not +12) dB in Table 60-5 SuggestedRemedy Response Status O Yopssed Response Response Status D D Note charase charaging around for a while. Let's write the ediors' note. Proposed Response Response Status D D Note charase charaging around for a while. Let's write the ediors' note. Proposed Response <td>C/ 60 SC 60.4.1 Swanson, Steven</td> <td>P 183 Corning Incorp</td> <td>L 43 porated</td> <td># 84</td> <td>Cl 60 Swanson,</td> <td>SC 60.5.1 Steven</td> <td>P 185 Corning Inco</td> <td>L 36 rporated</td> <td># 87</td>	C/ 60 SC 60.4.1 Swanson, Steven	P 183 Corning Incorp	L 43 porated	# 84	Cl 60 Swanson,	SC 60.5.1 Steven	P 185 Corning Inco	L 36 rporated	# 87
SuggestedRemedy Add the following sentence: "It shall also meet a transmit mask of the eye measurement as defined in 60.8.8. Proposed Response Response Status O Cl 60 SC 60.4.1 P 184 L 23 # 363 Dawe, Piers Agilent Cl 60 SC 60.5.1 P 185 L 37 # 367 Dawe, Piers Agilent Comment Type T Comment Status O Cl 60 SC 60.5.1 P 185 L 37 # 367 If we nove to assuming single sided clock recovery the mask would have to be made much longer. Also the indicative jitter value in 60.7 would be substantially reduced, and we spec. SuggestedRemedy D This editors' note has been hanging around for a while. Let's write the real note or abandon the idea. How many legacy receivers in the 1580-1600 nm range are out there? SuggestedRemedy SuggestedRemedy D This editors' note has been hanging around for a while. Let's write the real note or alow interoperation with legacy transceivers. D SuggestedRemedy Per comment. Similarly 100BASE-BX10. D This addite following sentence: "It shall also meet a transmit mask of the eye measurement as defined; in consider putting more emphasis on a stessed or sensitivity spec. Cl 60 SC 60.5 P 184 L 18 1 1020 Thatcher,	Comment Type T Missing requirement.	Comment Status D			<i>Comment</i> Missir	<i>Type</i> T g requirement.	Comment Status D		
Proposed Response Response Status O Cl 60 SC 60.4.1 P 184 L 23 # 363 Dawe, Piers Agilent Comment Status D If we move to assuming single sided clock recovery the mask would have to be made much longer. Also the indicative jitter value in 60.7 would be substantially reduced, and we sponse Comment Status D SuggestedRemedy Per comment. Similarly 100BASE-BX10. This editors' note has been hanging arrow like Let's write the real note or abandon the idea. How many legacy receivers in the 1580-1600 nm range are out there? SuggestedRemedy Per comment. Similarly 100BASE-BX10. This editors' note has been hanging arrow like Let's write the real note or abandon the idea. How many legacy receivers in the 1580-1600 nm range are out there? Cl 60 SC 60.5 P 184 L 18 # 1020 Thatcher, Jonathan WWP WWP Option 2, delet the editors' note. Proposed Response Response Status O Proposed Response Response Status D Response Status O Status O "optical return loss" should be -12 (not +12) dB in Table 60-5 SuggestedRemedy per comment Proposed Response Response Status O Proposed Response Response Status O Status	SuggestedRemedy Add the following sent defined in 60.8.8.	ence: "It shall also meet a trar	nsmit mask of t	he eye measurement as	<i>Suggested</i> Add th define	<i>IRemedy</i> ne following ser d in 60.8.8.	ntence: "It shall also meet a tra	ansmit mask of	the eye measurement as
Ci 60 SC 60.4.1 P184 L23 # 363 Dawe, Piers Agilent Comment Type T Comment Status D If we move to assuming single sided clock recovery the mask would have to be made much longer. Also the indicative jitter value in 60.7 would be substantially reduced, and we may wish to consider putting more emphasis on a stessed or semi-stressed sensitivity spec. Ci 60 SC 60.5.1 P185 L37 # 367 SuggestedRemedy Per comment. Similarly 100BASE-BX10. This editors' note has been hanging around for a while. Let's write the real note or abandon the idea. How many legacy receivers in the 1580-1600 nm range are out there? Ci 60 SC 60.5 P184 L18 # 1020 Thatcher, Jonathan WWP WWP Comment Status D Option 1, add foothote to 12 (not +12) dB in Table 60-5 SuggestedRemedy per comment. Proposed Response Response Status D N "optical return loss" should be -12 (not +12) dB in Table 60-5 SuggestedRemedy D N Proposed Response Response Status O O SuggestedRemedy N Proposed Response Response Status O O SuggestedRemedy N Proposed Response Response Status O O SuggestedRemedy	Proposed Response	Response Status O			Proposed	Response	Response Status O		
Comment Type T Comment Status D If we move to assuming single sided clock recovery the mask would have to be made may wish to consider putting more emphasis on a stessed or semi-stressed sensitivity spec. T Comment Type T Comment Status D SuggestedRemedy Per comment. Similarly 100BASE-BX10. Proposed Response Response Status O O Cl 60 SC 60.5 P 184 L 18 1020 Option 1, add footnote to table 60-8: This range is wider than the assoctaied transmitter to allow interoperation with legacy transceivers.' Option 2, delete the editors' note. Proposed Response T Comment Status D Comment Type T Comment Status D "optical return loss" should be -12 (not +12) dB in Table 60-5 SuggestedRemedy Per comment Proposed Response Response Status O Proposed Response Response Status D In table 60-5 SuggestedRemedy O "per comment Proposed Response Response Status D O	C/ 60 SC 60.4.1 Dawe, Piers	P 184 Agilent	L 23	# 363	<i>Cl</i> 60 Dawe, Pie	SC 60.5.1	P 185 Agilent	L 37	# 367
SuggestedRemedy Per comment. Similarly 100BASE-BX10. Proposed Response Response Status O C/ 60 SC 60.5 P 184 L 18 # 1020 Thatcher, Jonathan WWP Comment Type T Comment Status D "optical return loss" should be -12 (not +12) dB in Table 60-5 SuggestedRemedy Per comment Proposed Response Response Status O	Comment Type T If we move to assumir much longer. Also the may wish to consider p spec.	Comment Status D ng single sided clock recovery e indicative jitter value in 60.7 v putting more emphasis on a st	the mask woul would be subst essed or semi-	d have to be made antially reduced, and we stressed sensitivity	Comment This e aband Suggested	<i>Type</i> T ditors' note has on the idea. H <i>Remedy</i>	Comment Status D s been hanging around for a w ow many legacy receivers in th	hile. Let's write he 1580-1600 n	the real note or m range are out there?
Proposed Response Response Status 0 Cl 60 SC 60.5 P 184 L 18 # 1020 Thatcher, Jonathan WWP Comment Type T Comment Status D "optical return loss" should be -12 (not +12) dB in Table 60-5 SuggestedRemedy Per comment Proposed Response Response Status O	SuggestedRemedy Per comment. Similar	rly 100BASE-BX10.			Optior allow i Optior Optior	1, add footnot nteroperation v 2, delete the e	e to table 60-8: 'This range is vith legacy transceivers.' editors' note.	wider than the	assoctaied transmitter to
C/ 60 SC 60.5 P 184 L 18 # 1020 Thatcher, Jonathan WWP Comment Type T Comment Status D "optical return loss" should be -12 (not +12) dB in Table 60-5 SuggestedRemedy per comment Proposed Response Response Status O	Proposed Response	Response Status O			Proposed	Response	Response Status O		note.
Comment Type T Comment Status D "optical return loss" should be -12 (not +12) dB in Table 60-5 SuggestedRemedy per comment Proposed Response Response Status O	C/ 60 SC 60.5 Thatcher, Jonathan	<i>Р</i> 184 WWP	L 18	# 1020					
SuggestedRemedy per comment Proposed Response Response Status O	Comment Type T "optical return loss" sh	Comment Status D nould be -12 (not +12) dB in Ta	ble 60-5						
Proposed Response Response Status O	SuggestedRemedy per comment								
	Proposed Response	Response Status O							

TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause Page 76 (RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn C/ 60

C/ 60	SC 60.6	P 187	L	# 981	C/ 60	SC 60.	В	P 188	L 13	# 1009
Seto, Koich	niro	Hitachi Cable			Thatcher,	Jonathan		WWP		
Comment 7	Туре Т	Comment Status D			Comment	Type T	R	Comment Status D		
My con	nment is to resol	lve my previous comment to	Draft1.0 (com	ment#144) on the foot	Optica	al testing in	complete	e (2 of 2 for C60; also for C 2	24)	
to provi Statem (Sorry t	ide the reason u ient to be incorpo this comes in so	sed by TTC to obtain wavele orated by the editor." I'd like t late)	ngth range. o provide the	statement I promised.	After of figure	completing out how to:	part 1 of	these 2, it is essential to ge	et together wit	h the logic folk (C24) to
Suggested	Remedy				1. Ens	sure that the	e system	1 can create the test patterns 60 the logic folk won't know	s required for	each test. Even if the
Add foo to 1600 directio	otnote to Table 6 Onm to achieve b onal optics with th	60-8: "Receive wavelength ran backword compatibility with ex he transmit center wavelength	nge of 100BAS kisting implem h of 1500nm.	SE-BX10-U is defined up entations of 100Mbps bi-	requir 2. Ens addec	ements unlessure that the sure that the	ess som e system "optiona	e change in made elsewhere a can count the errors indica al" for this PMDs.	e. ited. In short,	the OAM functions being
Proposed F	Response	Response Status 0			3. Car test fr async	n operate th ames when hronous.	the link in	a mode that supports these is not up (no Rx) for tests in	e tests. The P Part 1 of the	HY must be able to send comment that are not
C/ 60	SC 60.6	P 187	L 32	# 88	4. For	ired.	are sync	chonous, it must be verified i	that the lour p	arthers are doing what
Swanson, S	Steven	Corning Incor	porated		Suggestee	dRemedy				
Comment 7 Missing	<i>Type</i> T g Table entry.	Comment Status D			Meet C60.	with logic p	eople. D	iscuss and evaluate capabili	ities for C24,	and requirements for
Suggestedl Add "Fi	<i>Remedy</i> iber type" row to	Table 60-9.			Proposed	Response		Response Status 0		
Proposed F	Response	Response Status 0			C/ 60 Thatcher,	SC 60. Jonathan	8	<i>Р</i> 188 WWP	L 13	# 1012
<i>Cl</i> 60 Thatcher, J	SC 60.7 Ionathan	<i>P</i> 186 WWP	L 18	# 1021	Comment Optica	<i>Type</i> T al testing ind	R complete	Comment Status D e (1 of 2 for C60)		
Comment 7 optical	<i>Type</i> T I return loss" sho	Comment Status D buld be -12 (not +12) dB in Ta	able 60-7		It is es requir there	ssential tha ed. Some ii	t each o ndicate r	ptical test be clearly evaluate need, most do not. This is es	ed for when a specially impo	synchronous data is ortant for the BiDi, where
Suggested	Remedy				Suggester	dRomody	liiuu nee	eus lo specify specific wave	aengin urop/a	du mechanisms.
per con	nment				1. Ide	ntifv each te	est that r	equires asynchronous opera	ation from: Ex	tinction ratio: OMA: RIN:
Proposed F	Response	Response Status O			Trans	mit optical	waveform	n; TDP; Rx Sensitivity; Total	I Jitter; Stress	sed Rx
					2. Cre	ate scheme	e for test	ting BiDi with asynchronous	operation.	
					Proposed	Response		Response Status O		

C/ 60 SC 60.8	P 188	L 15	# 89	C/ 60	SC 60.8.1.1	P 188	L 41	# 368
Swanson, Steven	Corning Incorr	porated		Dawe, Pie	rs	Agilent		
Comment Type T Clarification.	Comment Status D			<i>Comment</i> Revisi	<i>Type</i> T ons to test pattern	Comment Status D		
SuggestedRemedy				Suggested	dRemedy			
Reword first sentence	to read: "All optical measurem	nents except TI	DP shall"	Shorte	en at line 35: '	ones in the 4B/5B encoded	data prior to NRZ	I transmission as shown
Proposed Response	Response Status 0			in Tab	le 60–11.'			
C/ 60 SC 60 8 1 1	P188	1 32	# 1019	Extend	d at line 41: ' t ating periods of	his sequence gives a near w high and low transition dens	vorst case ISI patt ity to test CDR pe	tern and provides erformance.'
Thatcher, Jonathan	WWP	202		Be mo	ore psoitive at lin	ne 48: ' the resulting data s	tream has baseli	ne'
Comment Type TR Also line 43. It is essential that this	Comment Status D	ined (includina	DA. SA. LT) to ensure	Revise and st 1;impl seque	e table 60-11: re art of packet;de ementation spe nce 1;Frame ch	eplace present 4 rows with co estination address;source address; cific 2;low transition density; neck sequence 2. Insert new	olumns, insert firs dress; implement X;high transition o second column,	t column with rows: Idle ation specific density;X;Frame check title 'Number of octets',
that all systems can be	e tested in at least one commo	on way.		rows 1	12;6;6;32;?;?;?;	?;4. Two rows (contents 32;	and 4) straddle th	e 1/2 alternatives in first
SuggestedRemedy				row. F before	-III in remainder the meeting.	of table and remove the edi	tors note! I will t	try to progess this
Work with logic folk to something that cannot that gets dropped at e	fully specify the frames. Most t accidentally be forwarded to t ither the MAC, the MAC CTL,	likely, the fram he bridge. Or, or the OAM sul	e type should be t should be something blayers.	Proposed	Response	Response Status O		
Proposed Response	Response Status O			C/ 60 Thatcher,	SC 60.8.11. Jonathan	1 <i>P</i> 198 WWP	L 50	# 1023
				Comment	Туре Т	Comment Status D		
				Not cle nothin the TE	ear why text rela g to do with this DP measuremer	ated to test fiber and transve s test. The implication of havi nt. There isn't	rsal filter is mention ing this here is that	oned here. Those have at there is some tie to
				Suggested	dRemedy			
				Remo	ve text.			
				Proposed	Response	Response Status 0		

				P802.3ah D	oraft 1.3 Co	omments			
C/ 60	SC 60.8.11.2	P 200	L 15	# 374	C/ 60	SC 60.8.12	P 203	L 1	# 1025
Dawe, Pie	ers	Agilent			Thatcher	, Jonathan	WWP		
Comment	t Type E	Comment Status D			Commen	nt Type T	Comment Status D		
We n could	leed to get the equ l be improved.	ation out of the step-by step	o list; in any case	e the flow of the text	Wha must	t are the requirem t be generating a s	ents on the system to allow th specific pattern wich can also	is test to be rur be programmed	n? In short, the system d into the BERT. What
Suggeste	edRemedy				is thi	s (both C59 and C	,00).		
Move and n follow –9 A	e lines 15-26 'Vertion nove p201 lines 13 v it, resulting in: 'jit N can be approx	cal closure is measured s 3-14 'A N can be approxima ter components. Vertical clo imated given in 60.8.5 F	hown in Figure 6 ted given in 60 osure is measure for this test	60–9.' to p199 line 47 0.8.5.'to immediately ed shown in Figure 60	Suggeste Defir the s	edRemedy ne patter, get adde system can suppor	ed to C24 and C36 (or wherevent this. This may need to be re	er the Chief war quired.	nts this) and ensure that
Proposed	l Response	Response Status O			Proposed	d Response	Response Status O		
C/ 60	SC 60.8.11.3	P 202	L 6	# 1024	Cl 60 Jonsson,	SC 60.8.12	P 203 Ericsson AB	L 4	# 583
Thatcher, Comment	Jonathan <i>t Type</i> T	WWP Comment Status D			Commen Miss	nt Type E ed '.' between "6	Comment Status D 60.10.3" and "The"		
Suggeste	edRemedy	e?			Suggeste Inser	edRemedy rt '.'			
Proposed	l Response	Response Status 0			Proposed	d Response	Response Status O		
C/ 60	SC 60.8.11.4	P 202	L 44	# 375	Cl 60 Swanson	SC 60.8.2 n, Steven	P189 Corning Incorp	L 12 porated	# 90
Comment	ers t Type T	Agilent Comment Status D			Commen Clari	<i>t Type</i> E fication.	Comment Status D		
Suggeste	edRemedy				Suggeste Title	edRemedy for 60.8.2 should	read: "Center wavelength and	spectral width	measurements"
Corre	ect to 0.05 * f2/ f +	S - 0.05			Proposed	d Response	Response Status 0		
Proposed	l Response	Response Status O							
					<i>Cl</i> 60 Dawe, Pi	SC 60.8.2	P 189 Agilent	L 19	# 369
					Commen	nt Type T	Comment Status D		
					This think	note needs to be .). We can follow	made precise (although the in clause 58. I have tweaked the	precison does	n't matter in practice, I to be clearer still
					Suggeste	edRemedy			
					Char	nge to: 'The allowa elength range by tl	able range of central waveleng	ths is narrower at each extrem	than the operating e.
					Proposed	d Response	Response Status 0		

<i>Cl</i> 60 Dudek, Mike	SC 60.8.3	P 189 Picolight	L 25	# 729	C/ 60 Dawe, Pier	SC 6	60.8.7.2	P 191 Agilent	L 46	# 372
Comment Ty Transmi the 1's c would b	/pe T ters (particularly lensity of patter se better to use	Comment Status D y DC coupled) will tend to give n being transmitted. In order to only balanced patterns.	different output get more repro	powers depending on ducible results it	Comment Add Fe Suggested	Type OTP-107 IRemedy	E 7 to the lis	Comment Status D t of informative references.		
SuggestedR Change 4B/5B N	<i>emedy</i> to "This measu IRZI encoded d	rement may be made with the ata stream.	node transmittir	g any valid balanced	Per co Proposed	mment. Respons	It may ha se	ave a more up-to-date name. <i>Response Status</i> O		
Proposed Re	esponse	Response Status O			<i>Cl</i> 60 Dudek, Mil	SC 6	60.8.8	P 192 Picolight	L 44	# 730
Cl 60 Dawe, Piers Comment Ty Idle patt	SC 60.8.5 /pe E erns vary betwe	P 189 Agilent Comment Status D een PMDs and we should take o	L 39 care to avoid mi	# 370	Comment I think met wi cut off transm	<i>Type</i> that it is th a mu very lov nitter wo	T s necessar ch more b v (less tha n't work w	Comment Status D y to include in addition to this alanced pattern. If a vendor v n 1KHz) then this mask becor ith an AC coupled receiver.	test a tighte were to make mes far too e	r mask that has to be e their Tx low frequency easy to pass, and the
SuggestedR Change Proposed Re	Pemedy to 'idle (10101. esponse	for 100BASE-LX10 and 100B Response Status O	ASE-BX10) sec	juence.'	Suggested Either a Inclu same	IRemedy Ide a see as SON	cond test ET OC3	condition with a pattern (simila	ar to K28.5) v	with an eye mask the
Cl 60 Dawe, Piers Comment Ty	SC 60.8.5 /pe T	P 189 Agilent Comment Status D	L 45	# <u>371</u>	b State freque Proposed	e that the ncy of 1 <i>Respon</i> s	e mask m 00KHz. se	ust be met with the signal AC <i>Response Status</i> O	coupled with	n an AC coupling 3dB
Does an SuggestedR Delete 'o	iyone remembe <i>Remedy</i> optional' here ar	r why the filter for OMA measund in Fig. 3.	rements snould	de optional?	CI 60 Swanson,	SC 6 Steven	60.8.8	P194 Corning Incorpo	L 7 prated	# 91
Proposed Re	esponse	Response Status O			Comment Clarific	<i>Type</i> cation.	Т	Comment Status D		
C/ 60 Tom Mathey	SC 60.8.5	P 190 Independent	L 16	# 568	Are tra	ansmit ri: Respon:	y se/fall cha se	racteristics needed?		
<i>Comment T</i> y The /H/ value in	/pe E code group for a 100 BASE cla	Comment Status D 100BASE is 00100. It seems s ause.	strange to refere	nce a 1000 BASE	, ropeded	reepend				
SuggestedR Review	emedy and correct.									
Proposed Re	esponse	Response Status O								

C/ 60 SC 60.8.9 Dudek, Mike	P 194 Picolight	L 1222	# 731	C/ 60 SC Dudek, Mike	C 60.8.9.4	P 196 Picolight	L 38	# 735
Comment Type E This standard is not co	Comment Status D ncerned with multi-mode fiber			<i>Comment Type</i> Good luck fi	E Inding the 10	Comment Status D De-12 point at 125Mb/s.		
SuggestedRemedy Delete references to m	ulti-mode fiber.			SuggestedReme Reword the	edy section to a	llow extrapolation.		
Proposed Response	Response Status O			Proposed Respo	onse	Response Status O		
C/ 60 SC 60.8.9 Jonsson, Ulf	P 194 Ericsson AB	L 25	# 585	Cl 60 SC Dawe, Piers	C 60.8.9.5	P 196 Agilent	L 52	# 373
Comment Type E Consider moving the N of the test methods, no as early as 60.8.7.3.	Comment Status D OTE. Procedures for testing m t only for TDP. The first instan	ultimode fiber ce of multimod	is described for several e component testing is	Comment Type We have dis SuggestedReme Replace ithe	T scovered that edy	Comment Status D at receiver created wander ca	an vary.	
SuggestedRemedy Move the NOTE to Clar	use 60.8, page 188, line 18.			Proposed Respo	onse	Response Status O		
Proposed Response	Response Status O							
	P 195	/ 18	# 724	C/ 60 SC Dudek, Mike	C 60.9.9.1	P 194 Picolight	L 49	# 732
Dudek, Mike	Picolight	210	π [1 34	Comment Type	т	Comment Status D		
Comment Type T	Comment Status D			0.2UI for rise will potentia	e and fall tir lly affect the	ne on a reference transmitter e result)	r at 125Mb/s is	ridiculously long, (and
SuggestedRemedy				SuggestedReme Reduce 0.2	e <i>dy</i> UI to 0.1UI.			
Delete reference to mu	Itimode fiber. Also on page 19	b line 14		Proposed Respo	onse	Response Status 0		
Proposed Response	Response Status 0							
C/ 60 SC 60.8.9.2	P 195 Picoliabt	L 52	# 733	Cl 60 SC Jonsson, Ulf	C Figure 60	-5 <i>P</i> 193 Ericsson AB	L 2	# 582
Comment Type T The editor's note does	Comment Status D not appear to match the text.			Comment Type The eye ma e.g. Clauses	E sk picture d s 58, 59 and	Comment Status D oes not use the same templa 152.	ate/style as the	eye mask pictures for
SuggestedRemedy Delete editor's note, (or	r change optical return loss tol	erance in the T	x tables)	SuggestedReme Redraw the	edy eye mask p tive Frame f	icture using the Clause 52 eg	ye mask picture	e template (which is
Proposed Response	Response Status O			Proposed Respo	onse	Response Status O		

 TYPE: TR/technical required T/technical E/editorial Reditorial RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause Page 81 of 169
 Page 81 of 169

 C/ 60
 SC Figure 60-5

C/ 60	SC General	Р	L 4	# 807	C/ 61	SC 2.1.3.2	P 221	L 2,3 and 9,	# 982
John Georg	e	OFS			Rahul Bhu	shan	STMicroelectro	onics Inc	
Comment T Identifyi redunda manufa	ype E ing single mode ant. Also, SMF is cturers and thus	Comment Status D fiber as "SMF" under hea s used as part of multiple is not an appropriate terr	dings in tables iden trademarks by one n to be used in a st	tified as Fiber Type is of the fiber andard.	Comment Given 10Pas related	<i>Type</i> E that FIFO's are s-T networks of to number of	Comment Status D e used to transfer frames betwee over MII which is 100Mbps(as per frames stored in the FIFOs befor	en Half/Full Duplex פר Clause 23.2.2.1) סרפ they are read סי	2Base-TL and , latency issues ut in either
SuggestedF	Remedy SMF" to "SM"	in all cases in which such	is described as a f	her type	transm Suggested	nit/receive path IRemedy	s, is not clear.		
Proposed R	Response	Response Status O		bol type.	Proposed	Posponso	Popponso Status O		
CI 64	80	D 244		# 050 h	Floposed	Response	Response Status		
O'Mahony, I	Barry	Intel R&D	LI	# 659	C/ 61 O'Mahony	SC 44 Barry	P 214 Intel R&D	L 44	# 669
Comment T Title on commo	<i>ype</i> E ly references PC n to the two EFN	Comment Status D S sublayer, but the Claus A Copper PHY's	e also describes ha	andshaking procedures	Comment Minor	<i>Type</i> E re-wording.	Comment Status D		
SuggestedF Modify t	Remedy title to: "Physical	Coding Sublayer (PCS) a	and Handshaking, t	ype 10PASS-T and	Suggested Chang	IRemedy le "TPS-TC fun	ction" to "TPS-TC functions"		
2BASE Proposed R	-1" Response	Response Status O			Proposed	Response	Response Status O		
<i>Cl</i> 61 O'Mahony, I	SC Barry	P 211 Intel R&D	L1	# 661	C/ 61 Tom Mathe	SC 61 ey	P 211 Independent	<i>L</i> 1	# 569
Comment T Port typ	<i>ype</i> E be names seem i	Comment Status D	ASS-T", and the ot	her is "2BASE-TL".	Comment There differe	<i>Type</i> T are numerous nt things for the	Comment Status D block diagrams in this clause. I e same subject.	Many of them confl	lict and show
SuggestedF Globally	Re <i>medy</i> y, change "2BAS	E-TL" to "2BASE-T"			Suggested Provid	<i>IRemedy</i> e one really go	od block diagram with correct la	abeling and with su	fficient detail, all
Proposed R	Response	Response Status O			pieces subcla	and all layers, uses. The unv	such that this one diagram can vashed masses will appreciate	be referred to by r your effort.	multiple
CI 61	SC	P 211	/ 17	# 660	Proposed	Response	Response Status O		
O'Mahony, I	Barry	Intel R&D	217	# 000					
Comment T	<i>ype</i> E f abbreviations, '	Comment Status D 'EFM" is not listed, althou	gh it is used in the	Clause text					
SuggestedF Add "EF	Remedy FM: Ethernet in t	he First Mile"							
Proposed R	Response	Response Status O							

C/ 61	SC 61.1	P 212	L 3	# 643	C/ 61	SC	61.1		P 212	L 3	# 662
Venugopal,	, Padmabala	InterOperabil	ity Labora		O'Mahony	, Barry		I	ntel R&D		
Comment	Type E	Comment Status D			Comment	Туре	E	Comment St	atus D		
2BASS gives tl	S-TL and 10PASS he data rate requ	S-T must be swaped for a be irements for each phy techr	etter flow with so nology	econd sentence which	Text in D1.2 (n this su Commei nt)	ibclause nt #591	e sounded stilted a resolution not imp	and odd; e.g plemented co	., text in parent prrectly (the wo	heses not needed. Also, ord "all" should not be
Suggested	Remedy				Prese	dDomoo	h.,				
Line 3	first sentence mu	ist be changed to"			Suggested		iy 0 [.]				
" 10PA Mile."	SS-T and 2BASE	E-TL are Physical Layer sigr	nalling systems	for Ethernet in the first	2BAS	E-T and	I 10PAS	S-T are Physical	Layer signal	ing systems fo	r Ethernet in the first mile.
Proposed I	Response	Response Status O			These minim Optior	e PHYs o ium of 2 nally, tra	deliver a Mb/s ov insmissi	a minimum of 10 l ver distances of up ion over multiple of	Mb/s over dis o to 2700 me copper pairs	stances of up to eters, using a s is supported.	o 750 meters, and a ingle copper pair.
C/ 61	SC 61.1	P 212	L 3	# 744	The c	opper ca	ategory	of EFM PHY's is	based on DS	SL PMD's used	in the access network
Commont			WUIKS		in pub	lic as w	ell as pr	ivate networks; th	nerefore they	shall be capat	ble of compliance with
The first	st sentences save	s "2BASE-TL and 10PASS-"	TL", the second	savs these "PHYs	appro	priate re	egulatory	y, governmental a	ind regional i	requirements.	
deliver.	10Mb/sand 2M	lb/s". Should talk about the	m in the same	order in both sentences.	Unlike	e 100BA	SE-T an	nd 1000BASE-T, v	voice-grade	copper network	s have channel
Suggested	Remedy				chara behav	cteristics vior only	s that ar in terms	e very diverse an s of averages, sta	d therefore indard deviat	t is conventionation tions and perce	al to discuss the channel entage worst case.
Change	e order in first se	ntence to 10PASS-TL and 2	2BASE-TL		Proposed	Respon	ise	Response Sta	atus O		0
Proposed I	Response	Response Status O			,	,		,			
					C/ 61	SC	61.1.1		P212	L 19	# 663
					O'Mahony	, Barry		I	ntel R&D		
					Comment	Туре	Е	Comment St	atus D		
					"differ	s" is gra	mmatica	ally incorrect.			
					Suggestee	dRemea	ly				
					Chang chann	ge to "di iels".	ffer". Al	lso, in line 20, cha	ange "coppei	r channel" to "a	ccess network copper
					Proposed	Respon	ise	Response Sta	atus O		
					C/ 61	SC	61.1.1		P 212	L 30	# 745
					Squire, Ma	att		ł	Hatteras Net	works	
					<i>Comment</i> Margii	<i>Type</i> n should	T d be 5dB	Comment St 3. Its 5 in several	atus D other places	S.	
					Suggested Margii	dRemed n should	<i>ly</i> d be 5dB	3 not 6.			
					Proposed	Respon	ise	Response Sta	atus O		

Squire, Matt	P 212 Hatteras Netwo	L 37 rks	# 746	C/ 61 SC O'Mahony, Barry	61.1.4.1	P 212 Intel R&D	L 49	# 665
Comment Type E	Comment Status D			Comment Type	Е	Comment Status D		
At this point, its not c confusing.	lear what the PTM-TC gamma in	terface is, so ma	aking it an objective is	Reference to	Figure 61	1 incorrect.		
SuggestedRemedy Reword to "To provid	le functional layering within the P	CS to ensure co	mpatibility with the	Change to 6	ay 1-2. Inse	Response Status 0		
Proposed Response	Response Status O		d in [6995.1]).					
				C/ 61 SC	61.1.4.1	P 213	L 13	# 897
C/ 61 SC 61.1.2	P 212	L 38	# 664	Cravens, George	;	Minaspeea		
O'Mahony, Barry	Intel R&D			Comment Type 64b/65b enc	E apsulation	Comment Status D refers to bits not bytes, so us	se lowercase "b".	
As stated here, this i	s not an adopted objective.			SuggestedReme	dy			
The baseline, in Note that resides on top o the TPS-TC. Howev TC. Also, the gamm PTM-TC, is not the s	S_to_ Editor_1_0302 Note #1, do f the gamma-interface, which is the er, the adopted TPS-TC for EFM- a-interface described in the text, ame (extra signals, etc.) Therefo	bes say we will one term for the in -Cu, 64Byte/65B while similar to t re, the PTM-TC	lo an adaptation layer tterface on the top of yte, is not the PTM- hat defined for the should not be	64b/65b Enc Proposed Respo	apsulation	Response Status O		
explicitly mentioned	here.			C/ 61 SC	61.1.4.1	P 213	L 15	# 893
This does not preclu	de defining the gamma-interface	for the new TPS	-TC to closely	Cravens, George	; _	Mindspeed		
resemble that for the	PTM-TC.			Comment Type	Т .1·	Comment Status D		
SuggestedRemedy				The Gamma	Interface s	should be marked "Optional"	(same as the MI	l interface).
Change text to:				SuggestedReme	dv			
Change text to:				00				
Change text to: "To provide function: for xDSL systems (T	al layering in the PCS which ensu PS-TC g interface)."	res compatibility	with the interface	In Figure 61 Add "(Optior	·1: hal)" next to	the Gamma Interface.		
Change text to: "To provide function: for xDSL systems (T Proposed Response	al layering in the PCS which ensu PS-TC g interface)." <i>Response Status</i> 0	res compatibility	with the interface	In Figure 61 Add "(Optior Proposed Respo	1: nal)" next to onse	the Gamma Interface. Response Status O		
Change text to: "To provide function: for xDSL systems (T Proposed Response Cl 61 SC 61.1.3 Squire, Matt	al layering in the PCS which ensu PS-TC g interface)." <i>Response Status</i> O <i>P</i> 212 Hatteras Netwo	res compatibility <i>L</i> 49 rks	with the interface	In Figure 61 Add "(Optior Proposed Respo	1: nal)" next to onse	the Gamma Interface. Response Status O		
Change text to: "To provide function: for xDSL systems (T Proposed Response C/ 61 SC 61.1.3 Squire, Matt Comment Type E Table reference wror clear (which is which	al layering in the PCS which ensu PS-TC g interface)." <i>Response Status</i> O <i>P</i> 212 Hatteras Netwo <i>Comment Status</i> D Ig, and the difference between "fu ?). These terms aren't part of the	res compatibility <i>L</i> 49 rks unctions" and "su ∋ glossary in Sec	# 747 ubsections" is not	In Figure 61 Add "(Optior Proposed Respo	1: al)" next to nse	the Gamma Interface. <i>Response Status</i> O		
Change text to: "To provide function: for xDSL systems (T Proposed Response C/ 61 SC 61.1.3 Squire, Matt Comment Type E Table reference wror clear (which is which SuggestedRemedy	al layering in the PCS which ensu PS-TC g interface)." <i>Response Status</i> O <i>P</i> 212 Hatteras Netwo <i>Comment Status</i> D ng, and the difference between "fu ?). These terms aren't part of the	res compatibility <i>L</i> 49 rks unctions" and "se ≩ glossary in Sec	# 747 # 747 ubsections" is not	In Figure 61- Add "(Optior Proposed Respo	1: al)" next to	the Gamma Interface. <i>Response Status</i> O		
Change text to: "To provide function: for xDSL systems (T Proposed Response Cl 61 SC 61.1.3 Squire, Matt Comment Type E Table reference wror clear (which is which SuggestedRemedy 61-1 should be 61-2, function/subsection.	al layering in the PCS which ensu PS-TC g interface)." <i>Response Status</i> O <i>P</i> 212 Hatteras Netwo <i>Comment Status</i> D ng, and the difference between "fu ?). These terms aren't part of the and maybe just use "component	res compatibility <i>L</i> 49 rks unctions" and "se ≥ glossary in Sec s" or "parts" inst	# 747 # 747 ubsections" is not ction 1. ead of	In Figure 61 Add "(Optior Proposed Respo	1: al)" next to	the Gamma Interface. <i>Response Status</i> O		

Page 84 of 169 C/ 61 SC 61.1.4.1

C/ 61	SC 61.1.4.1	P 213	L 15	# 666	C/ 61	SC 61.1.4.	1 P 21	3	L 43	# 748
O'Mahony,	, Barry	Intel R&D			Squire, M	latt	Hattera	as Networ	ks	
Comment	Туре Т	Comment Status D			Commen	t Type E	Comment Status	D		
Refere Baseli	ence to gamma ir ne (rezvani_1_03	nterface as dividing line betwe 802), TPS-TC is part of PCS.	en PCS and Pl	MA is incorrect. In	We u section without	use alpha/beta a on that defines	and gamma interfaces ra what these interfaces are exections are confusing	ther libera e? The de	ally very early etails are alre	y. Can we at add a eady provided later, but
Suggested	dRemedy				Suggooto			to the rea		
Chang	ge from "gamma	interface" to "alpha/beta interf	ace".		Suggeste Add a	a section definir	ng the various alpha/beta	a/damma i	interfaces	
Editor Encap	may also wish to sulation function	label boundary between PHNs as being the gamma interface	PMI Aggregation ce.	ion and 64B/65B	Proposed	d Response	Response Status	0		
Proposed	Response	Response Status 0								
					C/ 61	SC 61.1.4.	1 P 21	3	L 52	# 894
C/ 61	SC 61.1.4.1	P 213	L 35	# 523	Cravens,	George	Mindsp	eed		
Zion Shoh	et	Infineon			Commen	t Type T	Comment Status	D		
Comment	Type T	Comment Status D			Chan	nge the word "fra	ame" to "fragment" to ref	lect suppo	ort for PMI a	ggregation.
Add a	function of extra	cting/adding the Preamble&SI			Suggeste	edRemedy				
SFD b Modify an SF Fig 61 the M	ytes have been o / line 4 on page 2 D Byte is prepen -2 on page 213: AC-PHI Rate mat	extracted from it, is transferred 214 to read: "The frame is pas ded to it, and then it is passed add a functional block, named ching block and the PHI PMI	d" sed across the d up across d "Preamble/SF Aggregation blo	gamma-interface, then " D Add/Drop" between ock.	interf to pre Matcl TC is	ace at the rate event further tra hing function pr s ready.	of the MII clock. The TPS nsfer until it is ready to a events the transfer of an	3-TC(s) wi ccept and other frag	vill then signa other fragme gment across	al across the ã-interface nt. The MAC-PHY Rate s the MII until the TPS-
Proposed	Response	Response Status 0			(Note	e: The gamma	symbol got squashed an	d turned i	nto the "ã" s	ymbol shown above.)
					Proposed	d Response	Response Status	0		
C/ 61	SC 61.1.4.1	P 213	L 40	# 667						
O'Mahony,	, Barry	Intel R&D			C/ 61	SC 61.1.4.	1 P 21	4	L 5	# 895
Comment	Type E	Comment Status D			Cravens,	George	Mindsp	eed		
Add m	nore description to	o TPS-TC boxes.			Commen	t Type T	Comment Status	D		
Suggested	dRemedy				Chan	nge the word "fra	ame" to "fragment" to ref	lect suppo	ort for PMI a	ggregation.
Add "6	64B/65B Encapsu	ulation"			Suggeste	edRemedy				
Proposed	Response	Response Status O			Repla In the The f MAC simul	ace the paragra e receive directi fragment is pas -PHY Rate Mat Itaneous transfe	ph with the following text on the TPS-TC(s) signal sed across the ā-interfac ching function may delay er of Transmit and Recei	: (Bold sh s that a wl e and pas the trans ve frames	nows the cha hole fragment ssed up acro sfer of the fragment if required.	inges) nt is ready for transfer. iss the MII interface. The agment to avoid
					(Note	e: The gamma	symbol got squashed an	d turned i	nto the "ã" s	ymbol shown above.)
					Proposed	d Response	Response Status	0		

C/ 61 SC 61.1.4. O'Mahony, Barry	1.1 P 214 Intel R&D	L 17	# 668	C/ 61 O'Mahony, Ba	SC 61.1.4.1. arry	1	P 214 Intel R&D	L 25	# 714
Comment Type E Minor re-wording sug	Comment Status D ggested.			Comment Typ Incomple	e T te description	Comment	Status D		
SuggestedRemedy Change: "It is importa simultaneously receiv To: "It is important to simultaneously receiv	ant to note that Clause 4 [see C ve and transmit data when confi note that Clause 4 [see Clause ving and transmittling data wher	ause 4] allows gured for half 4] does not p configured fo	the MAC to duplex operation" rohibit the MAC from r half duplex operation"	SuggestedRe Insert par The trans the MAC	<i>medy</i> agraph: mitter MAC-F frame, and fo	PHY Rate Mac	ching function s sulting data frar	trips the Preamb ne to the PMI A	ble and SFD fields from ggregation Function.
Proposed Response	Response Status O	L 23	# 896	Modify su The PHY prepends	bsequent par buffers comp the Preamble	agraph to rea	d as follows: rames. On rece lds, and sends	ption of a compl it to the MAC at	ete frame the PHY 100Mb/s.
Cravens, George	Mindspeed			FIODOSECI KE	sponse	Response	Status U		
Comment Type E	Comment Status D								
Use parameters to de bytes) and a set of re approved.	efine the maximum frame length eferences. This should prevent of	rather than ju conflicts if/whe	ist a number (1522 en Tag Stacking gets	C/ 61 Squire, Matt Comment Typ	SC 61.1.4.1.4	4 Comment	P 214 Hatteras Netv Status D	L 55 vorks	# <mark>799</mark>
SuggestedRemedy Replace the text sho	w below (from line 23):			(line 55 d	oesn't exist if	you're looking	g for it)		
a maximum length With the following tex	n frame, i.e. 1522 bytes (see 3.5 xt:	4.2.7.1 and 4	.4).	Suggest layer mar been ask	we add anothe agement and ed many time	er overview se d Ethernet OA es.	ection that discu M. The questic	usses the relatio on about EoC vs	nship between physical Ethernet OAM has
bytes (see 3.5, 4.2.7)	.1 and 4.4)).	size + qragr	TenxSize, currently 1522	SuggestedRe	medy				
Proposed Response	Response Status O			61.1.4.1.4	Overview of	Management			
				Ethernet	OAM (Clause	57) runs over	r an aggregated	set of PMIs in a	a PMD. The Ethernet

OAM operates as long as there is at last one PMI in the PMD thats operational. The physical xDSL PMIs in Clauses 62 and 63 each have their own management channel that operates per loop (EoC/voc). The PMI OAM is used for loop activation, aggregation, and maintenance of an individual loop. Ethernet OAM is used to monitor and maintain the aggregate.

<maybe someone can come up with something better>

Proposed Response Response Status **O**

C/ 61 SC 61.1.5.1 O'Mahony, Barry	<i>P</i> 215 Intel R&D	L 21	# 670	<i>Cl</i> 61 Squire, M	SC 61.1.5.4	P 215 Hatteras Networ	L 32 ks	# 749
Comment Type E This subclause needs	Comment Status D text.			Comment Figure	<i>Type</i> E e reference is wro	Comment Status D		
SuggestedRemedy Proposed text:				Suggester Figure	dRemedy e 61-2 should be	61-3.		
The PCS, PMA, and the by different manufactu	ne MDI are defined to provide rers. Designers are free to imp	compatibility am plement circuitry	nong devices designed within the PCS and	Proposed	Response	Response Status O		
Proposed Response	Response Status O		specifications are met.	C/ 61 O'Mahony	SC 61.1.5.4 v, Barry	P 215 Intel R&D	L 33	# 673
C/ 61 SC 61.1.5.2	P 215	L 23	# 671	Comment Figure	<i>Type</i> E e reference incorr	Comment Status D ect.		
Comment Type E	Comment Status D			Suggeste chang	dRemedy ge "61-2" to "61-3	n		
SuggestedRemedy Proposed text:				Proposed	Response	Response Status O		
When the PHY is inco MII is optional, provide	rporated within the physical bo	ounds of a DTE,	conformance to the	C/ 61 Cravens,	SC 61.1.5.4 George	P 215 Mindspeed	L 33	# 898
that of a system with a incorporate an interfac does not have the full of	full MII implementation. For e e between PCS and MAC tha output current drive capability	example, an inte t is logically equ called for in the	grated PHY may ivalent to the MII, but MII specification.	Comment Refer	<i>Type</i> E ence should be to	Comment Status D Figure 61-3 (not 61-2).		
Proposed Response	Response Status O			Suggeste Chan	<i>dRemedy</i> ge reference to F	gure 61-3.		
<i>Cl</i> 61 <i>SC</i> 61.1.5.3 O'Mahony. Barry	<i>P</i> 215 Intel R&D	L 25	# 672	Proposed	Response	Response Status O		
<i>Comment Type</i> E subclause has no text	Comment Status D			C/ 61 Tom Math	SC 61.1.5.4	P 215 Independent	L 36	# 571
SuggestedRemedy delete subclause (I car any is necessary).	n't think of any appropriate tex	t, can anyone e	lse? Nor does it seem	Comment There to be indica	<i>Type</i> T is no 45.2.2.1 in the PMI Available ites that this is a l	Comment Status D this draft. What is referred to a register in table 45-11, but with PCS register.	is the PMD / n a 3.x.y MM	Available register seems D address which
Proposed Response	Response Status O			Suggester Corre under	<i>dRemedy</i> ct all references, standable.	make sure inter-clause names	are identical	, and make the text
				Proposed	Response	Response Status 0		

	P 215	L 36	# 750	C/ 61	SC 61.1.5.4.1	P 216	L 29	# 751
Squire, Matt	Hatteras Netw	Orks		Squire, Ma	μ	Hatteras Netwo	rks	
Comment Type E	Comment Status D			Comment	Type E	Comment Status D		
This paragraph and the easy sentences of desc	description in general is hard	l to follow. Sug lifficult once so	gest adding a couple of	Fig ref	ference wrong			
registers are for.				Suggestee	dRemedy			
SuggestedRemedy				61-3 s	should be 61-4.			
Before "Note that" add "The PMD Available rec aggregated into a partic	d the following: gister controls which loops (P cular PMD. This register valu	MA/PMD instar e is limited by t	nces) may be he physical connectivity	Proposed	Response	Response Status O		
in the device, may be find as PMIs are aggregated that they are not part of	urther constrained by manag d into other PMDs (which cau	ement, and is a ses their bit to	additionally constrained be zero'd in the PMDs	C/ 61 Cravens, (SC 61.1.5.4. 1 George	P216 Mindspeed	L 29	# <mark>901</mark>
PMD at the particular per connectivity, i.e. which i	oint in time. The PMD Aggre loops (PMA/PMD instances)	gate register in are being aggre	dicates the actual egated into the	Comment Refere	<i>Type</i> E ence should be to	Comment Status D Figure 61-4 (not Figure 61-3).		
Proposed Response	Response Status O			Suggested Chang	dRemedy ge the reference t	o Figure 61-4.		
C/ 61 SC 61.1.5.4	P 215	L 37	# 674	Proposed	Response	Response Status O		
				C/ 61	SC 61.1.5.4.1	P 216	L 29	# 676
minor re-wording to rem	nove "must"			O'Mahony	, Barry	Intel R&D		
SuggestedRemedy change "must be" to "is	".			Comment incoor	<i>Type</i> E rect Figure refere	Comment Status D		
Proposed Response	Response Status 0			Suggested chang	dRemedy je 61-3 to 61-4			
C/ 61 SC 61.1.5.4.1	P 215 Intel R&D	L 50	# 675	Proposed	Response	Response Status O		
Comment Type E incorrect punctuation.	Comment Status D			C/ 61 Cravens, (SC 61.1.5.4.1 George	P 216 Mindspeed	L 33	# 899
SuggestedRemedy change comma to eithe	r semicolon, or period.			Comment Minor	<i>Type</i> E readability chang	Comment Status D		
Proposed Response	Response Status 0			Chang	ge amereni io ic	amerent nom .		
				Suggested Repla	ce the sentence	with the following (change show	vn in Bold):	
				Simila instan	urly, the number of ces addressed by	f PCS instances may be differe y one MDIO bus.	ent from the r	number of PMA/PMD
				D	-			

 TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause
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 RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 C/ 61
 SC 61.1.5.4.1

C/ 61 SC 61.1.5.4	.2 <i>P</i> 216	L 42	# 900	C/ 61 SC 61.1.5.4.2 P216 L 50 # 903
Cravens, George	Mindspeed			Cravens, George Mindspeed
Comment Type E Make the word "config	Comment Status D guration" plural.			Comment Type E Comment Status D Reference should be to Figure 61-6 (not Figure 61-5).
SuggestedRemedy Change "configuration	n" to "configurations".			SuggestedRemedy Change reference to Figure 61-6.
Proposed Response	Response Status O			Proposed Response Response Status O
C/ 61 SC 61.1.5.4 O'Mahony, Barry	.2 P 216 Intel R&D	L 45	# 677	C/ 61 SC 61.1.5.5 P 220 L 16 # 678 O'Mahony, Barry Intel R&D Intel R
Comment Type E incorrect Figure refere	Comment Status D			Comment Type E Comment Status D This subclause has no text
SuggestedRemedy change 61-4 to 61-5.	Also, in line 50 change 61-5 to	61-6.		SuggestedRemedy Strawman text (need better term than "subtype", however):
Proposed Response	Response Status 0			The 10PASS-T and 2BASE-T EFM Copper PHY's, in conjunction with the MAC specified in Clauses 1 through 4, are used for point-to-point communications on the access network between Control Office (C.O.) conjunction and Customer Promise Equipment (CEE)
C/ 61 SC 61.1.5.4 Squire, Matt	.2 P 216 Hatteras Netwo	L 46 orks	# 752	For both 10PASS-T and 2BASE-T port types, there are two each subtypes, depending on whether the PHX is intended for operation in the C.O. or the Customer Promise. A C.O.
Comment Type E Figure references wro	Comment Status D ong, line 46,50.			subtype can communicate with a CPE subtype and vice versa. A C.O. subtype cannot connect to another C.O. subtype; similarly, a CPE subtype cannot connect to a CPE
SuggestedRemedy Fix references.				[Also, add C.O. and CPE to list of abbreviations in editor's notes.]
Proposed Response	Response Status O			Proposed Response Response Status O
C/ 61 SC 61.1.5.4 Cravens, George	.2 P 216 Mindspeed	L 46	# 902	C/ 61 SC 61.1.5.6 P 220 L 18 # 679 O'Mahony, Barry Intel R&D Intel R Intel R </td
Comment Type E Reference should be	Comment Status D to Figure 61-5 (not Figure 61-4)).		Comment Type E Comment Status D This subclause has no text.
SuggestedRemedy Change reference to I	Figure 61-5.			SuggestedRemedy Move 2nd and 3rd paragraphs from subclause 61.1.4.2 and put them here.
Proposed Response	Response Status O			Proposed Response Response Status O

C/ 61 SC 61.11	P 278	L 20	# 644	C/ 61	SC 61.2.1.3	.4 P 221	L 35	# 904
venugopai, Padmabala	InterOperabilit	y Labora		Cravens, C	Jeorge	Mindspeed		
Comment Type E Remove reference to 2	Comment Status D 2PASS-TL			Comment Minor	<i>Type</i> E readability com	Comment Status D ments:		
SuggestedRemedy Remove reference 2P	ASS-TL in line 20 and line 33			Suggested Move	lRemedy 61 2 2 after Fig	ures 61-7 61-8 and 61-9		
Proposed Response	Response Status 0			Refer	to the Figures ir shown in Figure	n order: (change text to:) e 61–7, Figure 61–8 and Figure	61-9.	
C/ 61 SC 61.2.1.1 O'Mahony, Barry	<i>P</i> 220 Intel R&D	L 26	# 715	Proposed	Response	Response Status O		
Comment Type T Incomplete specification	Comment Status D			C/ 61 O'Mahony,	SC 61.2.2 , Barry	P 221 Intel R&D	L 41	# 680
SuggestedRemedy Insert paragraph:				Comment PAF is	<i>Type</i> E s not used "with	Comment Status D EFM copper PHYs", as the PA	F is part of the	PHY.
Upon receipt of a MAC SFD fields, and transm	C frame from on the MII, the Pl nit the resulting data frame acr	HY shall discare	d the Preamble and al link.	Suggested Chang	<i>Remedy</i> ge "and EFM co	pper PHYs" to "in EFM copper	PHYs"	
Modify subsequent part	ragraph to read:			Proposed	Response	Response Status O		
The PHY shall buffer a sending it to the MAC	a received data frame and prep at a rate of 100Mb/s.	end Preamble	and SFD fields before	C/ 61	SC 61.2.2	P 221	L 45	# 681
Proposed Response	Response Status O			O'Mahony	, Barry	Intel R&D		
C/ 61 SC 61.2.1.1	P 220	/ 29	# 753	Comment Saying	<i>Type</i> E g "the PAF inter	Comment Status D faces with the PHYs" is incorre	ct, as the PAF	is part of the
Squire. Matt	Hatteras Netw	orks	" [155	(ayyre				
Comment Type T	Comment Status D			Suggested	Remeay	interfecce with the individual T		a and DMDa"
Says PHY "may" supp Shouldn't this be a "mu existing MACs, and sir	ort not sending to MACs that of ust". Otherwise, we'd have inc nce old MACs can't change, ne	can't rcv/xmit si compatibility pro ew PHYs have	multaneously. bblems with certain pre- to be adaptable.	Proposed	Response	Response Status O	F 3-1 05, FIMA	
<i>SuggestedRemedy</i> Make it a must.								
Proposed Response	Response Status 0							

C/ 61 SC 61.2.2 Tom Mathey	P 221 Independent	L 50	# 574	C/ 61 O'Mahony,	SC 61.2.2.1 Barry	P 223 Intel R&D	L 46	# 683
Comment Type T	Comment Status D			Comment 7	vpe E	Comment Status D		
The text Supports ag aggregation of 1 link.	gregation of 2 to 32 PHYs" does	not allow the	very useful case of an	"MAC f SFD, w	rame" is not dei hich is not what	fined in definitions; sublclause t we want.	e 3.2 defines it to	o include preamble and
SuggestedRemedy				Suggested	Remedy			
Follow the lead of 80. link.	2.3ad, Link Aggregation, and allo	ow the very use	eful aggregation of 1	1.4.96 Addres	contains a defin s, Length Field,	ition of "data frame" (consists logical link control (LLC) Data	of Destination A a, PAD, and Fra	Address, Source me Check Sequence).
Proposed Response	Response Status O			Change	e "MAC frame" 1	to "data frame".		
				Proposed F	Response	Response Status O		
C/ 61 SC 61.2.2	P 221	L 50	# 754					
Squire, Matt	Hatteras Netwo	orks		C/ 61	SC 61.2.2.1	P 224	<i>L</i> 1	# 684
Comment Type T	Comment Status D			O'Mahony,	Barry	Intel R&D		
I think (hope) we can about before (meetin	support one link in an aggregate gs ago), though I don't remembe	ed group. I know	ow this was talked	Comment 7 Figure	<i>Type</i> E 61-10 is almost	Comment Status D identical to Figure 61-2.		
SuggestedRemedy Change "2-32 PHYs"	to "up to 32 PHYs".			Suggestedl Delete	Remedy 61-10; redirect	references to 61-2.		
Proposed Response	Response Status O			Proposed F	Response	Response Status O		
C/ 61 SC 61.2.2 O'Mahony, Barry	<i>P</i> 221 Intel R&D	L 52	# 682	<i>Cl</i> 61 Cravens, G	SC 61.2.2.1 eorge	P 224 Mindspeed	L 10	# 905
Comment Type E In c) do not use "pac	Comment Status D ket". 1.4.198 defines a packet a	s a data frame	+ preamble + SFD.	Comment 7 PHY Lo	<i>Type</i> E Dop Aggregatior	Comment Status D n is called PMI Aggregation		
SuggestedRemedy Change "packet" to "	fragment"			Suggested Change	R <i>emedy</i> e text from "Phy	V Loop Aggregation" to "PMI A	ggregation".	
Proposed Response	Response Status O			Proposed F	Response	Response Status O		

C/ 61	SC 61.2.2.1	P 224	L 28	# 919	C/ 61	SC	61.2.2.2	P 224	L 40	# 906
Barrass, H	Hugh	Cisco Systems			Cravens,	George		Mindspeed		
Comment	Туре Т	Comment Status D			Comment	t Type	т	Comment Status D		
In Fig	ure 61-11 the seq	uence number is defined as 12	bit and 2 bi	ts are reserved. In order	Parar	neter "m	inAggByte	esPerPHY" is not defined, and t	behavior at	end of packet is not clear.
(and t	the two reserved b	bits get swallowed up).	sequence		Suggeste	dRemec	ly			
The n	umber of bits whi	ch must be buffered (for each Pl	MI) is equa	l to 64 000 (from	Chan (shall	ge text f be grea	rom: ter than m	inAaaBvtesPerPHY).		
61.2.2	2.4) plus an amou	nt to allow for speed difference (= max frag	size * speed ratio).	T -	J		33 , 44 4 7		
There	fore the total buffe spond to > 4k frag	er size > 256kbytes. Since the m ments. Sequence number must	in frag siz be > 13 bi	e is 64bytes, this would is.	10:					
Suggeste	dRemedy				(shall	be at le	ast minFra	agmentSize and no more than r	naxFragme	ntSize bytes unless end
Chan	ge Figure 61-11 to	show SeqNum (14 bits) and eli	minate Re	served (2 bits).	Proposed	Rec, me			e bytes).	
Proposed	Response	Response Status O			TTOposed	Respon	130			
					C/ 61	SC	61.2.2.2	P 224	L 40	# 524
C/ 61	SC 61.2.2.1	P 224	L 28	# 685	Zion Shoł	net		Infineon		
O'Mahony	v, Barry	Intel R&D			Comment	t Type	Е	Comment Status D		
Comment	Type E	Comment Status D			minA	ggBytes	PerPHY is	swrong		
In Fig	ure 61-11, the ter	m "packet" is used.			Suggeste	dRemea	ly			
Suggeste	dRemedy	ragmont"			Repla	ace minA	AggBytesF	erPHY with minFragmentSize		
Dranaaad					Proposed	Respor	ise	Response Status O		
Fioposeu	Response									
01.04	SC 01 0 0 0	Deed	1.40		C/ 61	SC	61.2.2.2	P 224	L 41	# 525
C/ 61 O'Mahony	SC 61.2.2.2	P 224 Intel R&D	L 40	# 693	Zion Shoł	net		Infineon		
Comment	Type F	Comment Status D			Comment	t Type	E	Comment Status D		
incon	sistant nomenclat	ure			There	e is no "E	-FM head	er"		
Suggeste	dRemedy				Suggeste		ly 1 hoodor"	in lines 41 and 42 with "Fragm	ontation be	odor"
Chan	ge "minAggBytesI	PerPHY" to "minFragmentSize"			Bronocco			Posponeo Statue O	Shanon He	
Proposed	Response	Response Status O			Proposed	Respon	150	Response Status U		

			P802.3ah D	Draft 1.3 Co	mmen	ts			
C/ 61 SC 61.2.2.2	P 224	L 41	# 694	C/ 61	SC	61.2.2.3	P 225	L 10	# 756
O'Mahony, Barry	Intel R&D			Squire, M	att		Hatteras Netwo	rks	
Comment Type E	Comment Status D			Comment	Туре	Е	Comment Status D		
Incrementing of sequer	ice number should mention that	is wraps aro	und at 13 bits	Shou	d menti	on that the	e comparisons of sequence nu	mbers use sp	lit horizon.
SuggestedRemedy				Suggeste	dReme	dy			
In c), Change "Increme	nt" to "Increment (modulo-2^12,	maxFragme	ntSequenceNumber)"	Apper	nd new	sentence	at paragraph end:	aalit harizaa a	alaulationa, whore y w if
Proposed Response	Response Status O			a) x < b) y <	y <= x+ = x-(ma	<pre>uence nun (maxSequence ixSequence</pre>	uenceNumber/2), or eeNumber/2)	spiit nonzon c	alculations, where x <y if<="" td=""></y>
C/ 61 SC 61.2.2.2 O'Mahony, Barry	P 224 Intel R&D	L 42	# 695	Proposed	Respor	nse	Response Status O		
Comment Type E incorrect nomenclature	Comment Status D			C/ 61	SC	61.2.2.3	P 225	L 13	# 757
SuggestedRemedy In d0, change "packet"	to "fragment"			Comment	Type	Е	Comment Status D		
Proposed Response	Response Status O			Use t	ne varia	bles just c	defined in the previous section	in the algorith	ms.
				Suggeste	dReme	dy		0	ukadi. Daslara
C/ 61 SC 61.2.2.3	P 224	L 53	# 686	Repla "expe	cted se	t sequenc quence nu	imber" with "expectedFragment	sequenceNur	mber."
O'Mahony, Barry	Intel R&D			Proposed	Respor	nse	Response Status 0		
Comment Type E term "loop" should be c	Comment Status D hanged for sake of consistancy.			CI 61	50	61 2 2 3	P 225	/ 1/	# 750
SuggestedRemedy				Squire, M	att	01.2.2.5	Hatteras Netwo	rks	# 138
change "per-loop" to "p	er-PMI"			Comment	Type	т	Comment Status D		
Proposed Response	Response Status O			Distril partic 61.2.2	outing thular, ste 2.5." Th	ne algorith ep (b) says nat would d	m from the error cases makes s "wait for that condition or follo of course make the text more a	it difficult to u w the error ha kin to what wa	nderstand. In Indling rules in as in Draft 1.2. I'm not
C/ 61 SC 61.2.2.3 O'Mahony, Barry	<i>P</i> 225 Intel R&D	L 1	# 687	sure i difficu the ca	f the re- Ilt to foll ase for r	writes wer ow. For e nany of th	e done by group decision, but xample, it also makes it look li e error conditions. And its not	I find the sepa ke (c) always t clear how the	follows (b), but thats not timeout (p226 line25)
Comment Type E	Comment Status D			intera	cts with	the other	conditions (i.e. what error cond	ditions get pric	prity, etc.).
Minor re-wording				Suggeste	dReme	dy			
SuggestedRemedy suggest changing "bring	g-up" tp "start-up"			Merge of the algori	e the eri errors i thm.	ror condition in the latte	ons back into the algorithm. W r section, but we should at leas	/e can still hav st catch/enum	e the detailed handling erate them in the main
Proposed Response	Response Status O			Proposed	Respor	nse	Response Status O		

TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause Page 93 of 169 RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn C/ 61 SC 61.2.2.3

C/ 61 SC 61.2.2.3	P 225	L 17	# 688	C/ 61 SC	61.2.2.3	P 225	L 43	# 759
O'Mahony, Barry	Intel R&D			Squire, Matt		Hatteras N	letworks	
Comment Type E	Comment Status D			Comment Type	т	Comment Status D		
In c.), do not use "pack	et buffer"			The restriction	ns listed h	ere (with additions from E	Barry&Hugh) are	e one way to guarantee the
SuggestedRemedy				one knows th	at the diffe	erential latency is very sm	all, then a wider	r variability in fragment
Change to "fragment be	uffer"			sizes is possi	ible withou	t sequence number wrap	-around. So the	e restrictions here can be
Proposed Response	Response Status 0			examplary, no	ot absolute	9.		
				SuggestedRemed	dy			
CI 61 00 61 0 0 2	D 335	/ 21	# 000	Replace line 4	43 with:	quarantee that the 14-bit	sequence num	her snace is adequate to
Barrass Hugh	r ZZJ Cisco Systems		# 920	prevent wrap-	-around co	onditions. One method to	achieve guaran	ntee this is to use the
				following rest	rictions in	the transmit algorithm:		
Comment Type I	comment Status D	ara a rapaat a	of 61 2 2 1 (whore they	However. oth	er method	s to guarantee sequence	number space a	adequacy are also
belong). The only inform	mation which is relevant for the	receive functi	ion is the buffer	possible."		J		,
requirement - which ca	n be 2^16 bits if the comments	against 61.2.2	2.4 are accepted.	Additionally r	remove the	e min/max fragment size	checks in the re	ceive algorithm as the
SuggestedRemedy				receiver does	sn't really o	are, its the transmitter th	at has to use the	em (allows more variability
Change final paragraph	n to:			in xmit).				
Subclause 61.2.2.4 res requirement for a recei	tricts the transmit function such	h that the max	timum buffer	Proposed Respor	nse	Response Status O		
Proposed Response	Response Status 0					D 005	1.0	# 766
				(/ 61)	61223	P // 3	/ n	# //22
Troposed Response				Squire, Matt	61.2.2.3	P 223 Hatteras N	L o letworks	# 755
C/ 61 SC 61.2.2.3	P 225	L 22	# 909	Squire, Matt Comment Type	61.2.2.3 E	P 223 Hatteras N Comment Status D	L o letworks	# [<u>/35</u>
Cl 61 SC 61.2.2.3 Cravens, George	P 225 Mindspeed	L 22	# <mark>909</mark>	Squire, Matt Comment Type Replace the r and us to have	E E repeated u	Hatteras N Comment Status D se of "64,000 bit times" v	/ith a constant.	# [733
C/ 61 SC 61.2.2.3 Cravens, George Comment Type T	P 225 Mindspeed Comment Status D	L 22	# <mark>909</mark>	Cron Sc Squire, Matt Comment Type Replace the r and us to hav	E repeated u ve to find a	Hatteras N Comment Status D se of "64,000 bit times" v Il occurences.	L b letworks vith a constant.	# [<u>755</u>]
Cl 61 SC 61.2.2.3 Cravens, George Comment Type T Delete comment about	P 225 Mindspeed Comment Status D buffer size implementations. S	L 22 Suggesting that	# 909	Cron Sc Squire, Matt Comment Type Replace the r and us to hav SuggestedRemed Replace 64.0	E repeated u ve to find a dy	Hatteras N Comment Status D se of "64,000 bit times" v Il occurences.	L b letworks vith a constant.	# [<u>r33</u>] I'd hate for it to change
Cl 61 SC 61.2.2.3 Cravens, George Comment Type T Delete comment about could support differenti unnecessary and poter	P 225 Mindspeed Comment Status D buffer size implementations. S al latencies that are out of spec tially misleading.	L 22 Suggesting that c (greater than	# 909	Squire, Matt Comment Type Replace the r and us to hav SuggestedRemed Replace 64,0 section.	E repeated u ve to find a dy 00 bit time	Hatteras N Comment Status D Ise of "64,000 bit times" v Il occurences.	L b letworks vith a constant. lay, and define t	# [<u>735</u> I'd hate for it to change his constant in a later
Cl 61 SC 61.2.2.3 Cravens, George Comment Type T Delete comment about could support differenti unnecessary and poter (An implementation cou	P 225 Mindspeed Comment Status D buffer size implementations. S al latencies that are out of spee ntially misleading. uld support any size buffers as	L 22 Suggesting that c (greater than long as the m	# 909 at an implementation n 64,000 bit times) is nax differential latency is	Squire, Matt Comment Type Replace the r and us to hav SuggestedRemed Replace 64,0 section. Proposed Respor	E repeated u ve to find a dy 00 bit time	Hatteras N Comment Status D se of "64,000 bit times" v Il occurences. es with maxDifferentialDe Response Status O	L 6 letworks /ith a constant. lay, and define t	* [<u>735</u>] I'd hate for it to change his constant in a later
Cl 61 SC 61.2.2.3 Cravens, George Comment Type T Delete comment about could support differenti unnecessary and poter (An implementation con supported.	P 225 Mindspeed Comment Status D buffer size implementations. S al latencies that are out of spec ntially misleading. uld support any size buffers as	L 22 Suggesting tha c (greater than long as the m	# 909 at an implementation n 64,000 bit times) is nax differential latency is	Squire, Matt Comment Type Replace the r and us to hav SuggestedRemed Replace 64,0 section. Proposed Respor	E repeated u ve to find a dy 00 bit time	Hatteras N Comment Status D se of "64,000 bit times" v ill occurences. es with maxDifferentialDe Response Status O	L b letworks vith a constant. lay, and define t	* [<u>r33</u>] I'd hate for it to change his constant in a later
Cl 61 SC 61.2.2.3 Cravens, George Comment Type T Delete comment about could support differenti unnecessary and poter (An implementation con supported. SuggestedRemedy	P 225 Mindspeed Comment Status D buffer size implementations. S al latencies that are out of spea titially misleading. uld support any size buffers as	L 22 Suggesting tha c (greater than long as the m	# 909 at an implementation h 64,000 bit times) is hax differential latency is	Squire, Matt Comment Type Replace the r and us to hav SuggestedRemed Replace 64,0 section. Proposed Respor	E repeated u ve to find a dy 00 bit time	Hatteras N Comment Status D Ise of "64,000 bit times" v Il occurences. es with maxDifferentialDe Response Status O	L 6 letworks with a constant. lay, and define t	# [<u>735</u>] I'd hate for it to change his constant in a later
Cl 61 SC 61.2.2.3 Cravens, George Comment Type T Delete comment about could support differenti unnecessary and poter (An implementation con supported. SuggestedRemedy Replace text with (delet	P 225 Mindspeed Comment Status D buffer size implementations. S al latencies that are out of spee ntially misleading. uld support any size buffers as te portion in parenthesis):	L 22 Suggesting tha c (greater than long as the m	# 909 at an implementation h 64,000 bit times) is hax differential latency is	C/ 61 SC Squire, Matt Comment Type Replace the r and us to hav SuggestedRemed Replace 64,0 section. Proposed Respor	E repeated u ve to find a dy 00 bit time nse 61.2.2.3	Hatteras N Comment Status D Ise of "64,000 bit times" v Ill occurences. es with maxDifferentialDe Response Status O P225	L 6 letworks vith a constant. lay, and define t	# [<u>r35</u>] I'd hate for it to change his constant in a later # [689]
Cl 61 SC 61.2.2.3 Cravens, George Comment Type T Delete comment about could support differenti unnecessary and poter (An implementation con supported. SuggestedRemedy Replace text with (delet The PMD control of agg	P 225 Mindspeed Comment Status D buffer size implementations. S al latencies that are out of spec ntially misleading. uld support any size buffers as te portion in parenthesis): gregated links shall ensure that	L 22 Suggesting tha c (greater than long as the m	# 909 at an implementation 64,000 bit times) is hax differential latency is	Cl 61 SC Squire, Matt Comment Type Replace the r and us to hav SuggestedRemed Replace 64,0 section. Proposed Respor	E repeated u ve to find a dy 00 bit time nse 61.2.2.3	Hatteras N Comment Status D ise of "64,000 bit times" v ill occurences. es with maxDifferentialDe Response Status O P 225 Intel R&D	L 6 letworks vith a constant. lay, and define t	# [<u>r33</u>] I'd hate for it to change his constant in a later # [<u>689</u>]
Cl 61 SC 61.2.2.3 Cravens, George Comment Type T Delete comment about could support differenti unnecessary and poter (An implementation con supported. SuggestedRemedy Replace text with (delet The PMD control of age between any two aggre	P 225 Mindspeed Comment Status D buffer size implementations. S al latencies that are out of spee ntially misleading. uld support any size buffers as te portion in parenthesis): gregated links shall ensure that gated links correponds to no m	L 22 Suggesting tha c (greater than long as the m t the maximum nore than 64,0	# 909 at an implementation n 64,000 bit times) is nax differential latency is n latency difference 100 bit times.	Cl 61 SC Squire, Matt Comment Type Replace the r and us to hav SuggestedRemed Replace 64,0 section. Proposed Respor	E repeated u ve to find a dy 00 bit time nse 61.2.2.3 E	Hatteras N Comment Status D ise of "64,000 bit times" v Ill occurences. es with maxDifferentialDe Response Status O P225 Intel R&D Comment Status D	L 6 letworks vith a constant. lay, and define t	# [<u>r33</u>] I'd hate for it to change his constant in a later # [689]
Cl 61 SC 61.2.2.3 Cravens, George Comment Type T Delete comment about could support differenti unnecessary and poter (An implementation con supported. SuggestedRemedy Replace text with (dele The PMD control of age between any two aggre Proposed Response	P 225 Mindspeed Comment Status D buffer size implementations. S al latencies that are out of spec tially misleading. uld support any size buffers as te portion in parenthesis): gregated links shall ensure that gated links correponds to no m Response Status O	L 22 Suggesting that c (greater than long as the m t the maximum nore than 64,0	# 909 at an implementation h 64,000 bit times) is hax differential latency is n latency difference 00 bit times.	Cl 61 SC Squire, Matt Comment Type Replace the r and us to hav SuggestedRemed Replace 64,0 section. Proposed Respor	E repeated u ve to find a dy 00 bit time nse 61.2.2.3 E a "bit time	Hatteras N Comment Status D Ise of "64,000 bit times" v Ill occurences. es with maxDifferentialDe Response Status O P225 Intel R&D Comment Status D s" is here.	L 6 letworks vith a constant. lay, and define t	 # [<u>r33</u>] I'd hate for it to change his constant in a later # 689
Cl 61 SC 61.2.2.3 Cravens, George Comment Type T Delete comment about could support differenti unnecessary and poter (An implementation con supported. SuggestedRemedy Replace text with (dele The PMD control of agg between any two aggre Proposed Response	P 225 Mindspeed Comment Status D buffer size implementations. S al latencies that are out of spec ntially misleading. uld support any size buffers as te portion in parenthesis): gregated links shall ensure that gated links correponds to no m Response Status O	L 22 Suggesting that c (greater than long as the m t the maximum nore than 64,0	# 909 at an implementation h 64,000 bit times) is hax differential latency is n latency difference 100 bit times.	Cl 61 SC Squire, Matt Comment Type Replace the r and us to hav SuggestedRemed Replace 64,0 section. Proposed Respor Cl 61 SC O'Mahony, Barry Comment Type Unclear what	E repeated u ve to find a dy 00 bit time nse 61.2.2.3 E a "bit time	Hatteras N Comment Status D Ise of "64,000 bit times" v Ill occurences. As with maxDifferentialDe Response Status O P225 Intel R&D Comment Status D s" is here.	L 6 letworks vith a constant. lay, and define t	<pre># [<u>r33</u>] I'd hate for it to change this constant in a later # [689]</pre>
Cl 61 SC 61.2.2.3 Cravens, George Comment Type T Delete comment about could support differenti unnecessary and poter (An implementation con supported. SuggestedRemedy Replace text with (delet The PMD control of agg between any two aggre Proposed Response	P 225 Mindspeed Comment Status D buffer size implementations. S al latencies that are out of spee ntially misleading. uld support any size buffers as te portion in parenthesis): gregated links shall ensure that egated links correponds to no m Response Status O	L 22 Suggesting that c (greater than long as the m t the maximum nore than 64,0	# 909 at an implementation 64,000 bit times) is hax differential latency is n latency difference 00 bit times.	Cl 61 SC Squire, Matt Comment Type Replace the r and us to hav SuggestedRemed Replace 64,0 section. Proposed Respor Cl 61 SC O'Mahony, Barry Comment Type Unclear what SuggestedRemed Add text to er	E repeated u ve to find a dy 00 bit time nse 61.2.2.3 E a "bit time dy nd of sente	Hatteras N Comment Status D ise of "64,000 bit times" v ill occurences. es with maxDifferentialDe Response Status O P 225 Intel R&D Comment Status D s" is here. ence: ", at the bit rate of the	L 6 letworks vith a constant. lay, and define t L 6	# [<u>735</u>] I'd hate for it to change his constant in a later # [<u>689</u>] ated with that queue."
Cl 61 SC 61.2.2.3 Cravens, George Comment Type T Delete comment about could support differenti unnecessary and poter (An implementation con supported. SuggestedRemedy Replace text with (delet The PMD control of agg between any two aggre Proposed Response	P 225 Mindspeed Comment Status D buffer size implementations. S al latencies that are out of spee ntially misleading. uld support any size buffers as te portion in parenthesis): gregated links shall ensure that gated links correponds to no m Response Status O	<i>L</i> 22 Suggesting that c (greater than long as the m t the maximum hore than 64,0	# 909 at an implementation n 64,000 bit times) is nax differential latency is n latency difference 100 bit times.	Cl 61 SC Squire, Matt Comment Type Replace the r and us to hav SuggestedRemed Replace 64,0 section. Proposed Respor	E repeated u ve to find a dy 00 bit time nse 61.2.2.3 E a "bit time dy nd of sente nse	Hatteras N Comment Status D ise of "64,000 bit times" v ill occurences. es with maxDifferentialDe Response Status O P225 Intel R&D Comment Status D s" is here. ence: ", at the bit rate of th Response Status O	L 6 letworks vith a constant. lay, and define t L 6	 # [<u>r33</u>] I'd hate for it to change this constant in a later # [<u>689</u>] ated with that queue."

C/ 61	SC 61.2.2.3	P 225	L 6	# <u>528</u>	C/ 61	SC	61.2.2.4	P 225	L 29	# 690
Zion Shohet		Infineon			O'Mahony	, Barry		Intel R&D		
Comment Ty 64000 b different	vpe TR it time differer ial delay.	Comment Status D ntial delay is too big. Reaso	nable assumptior	s can lead to a 2KByte	Comment The t	<i>Type</i> ansmit f	TR function re	Comment Status D estrictions in 61.2.2.4 are insu	fficient.	
SuggestedR Replace	emedy 64000 to 150	100 bit time.			The f	rst restri	of differe	at differential latency be no m	ore than 64	1,000 "bit times". A differential latency of N
Proposed Re	esponse	Response Status O			bit tin acros betwe	nes impli s the oth een the t	es that N ner". This wo links, I	bits can be sent across one F latency is made of a two com R, and the difference in propa	PMI in by the ponents: the gation delay	e time a single bit makes it he ratio of bit rates y between the links (which,
C/ 61 Barrass, Hug	SC 61.2.2.4 gh	P 224 Cisco Syst	L 45 ems	# 927	for the delay	e purpos , etc.).	es of this	discussion, may include diffe	rences in qu	ueuing and interleaving
Comment Ty Add ano	/pe T ther restriction	Comment Status D			With latend times	a "bit tim cy is ther t.	ne" t being n equal to	defined as the time for the hi (R-1)+D, where D is the prop	gher-speed agation dela	l link, the differential ay measured in units of bit
SuggestedR insert a	<i>emedy</i> line between a	a) and b)			The f and la restri	rst restri arge valu	iction in th les of R, s	ne text means R-1+D=<64,000 sequence number wrapping is prevent this). Howeve possible. S	er, for small values of D, So we need additional
The high	nest speed rat	io between any two PMIs s	hall be 8.		losti					
Proposed Re	esponse	Response Status O			in the this for maxir where fragm To av	example or nonze num of N e one slo ent, is a oid sequ	e snown i ro values N aggrega w link, wi ggregated ience num	n squire_copper_1_0902, R⇒ of D. For maximum fragment tted PMI's, and a maximum se ith a bit period of R*t and a pr d with N-1 fast links with bit pe nber wrapping, we then need:	and D=0. size M, mirequence M, mirequence number op. delay of period t, send	We need to generalize nimum fragment size m, a mber S, the worst-case is f D*t, sending an M-sized ling m-sized fragments.
					M*R*	:*8+D*t ∢	< (S/(N-1)))*m*t*8, or		
					[1] N	*R*8 + [O < (S/(N-	1))*m*8		
					In ad size o	dition, I t of the PN	pelieve the II receive	e original motivation for the 64 buffers to this number. This I	,000 bit tim eads to the	e number was to limit the requirement:
					[2] N	*R*8 + [0 < 64,000	Э.		
					In [1] the si comp	S is equiplit horize atible wi	ual to 204 on discuss th the enc	8 even though the sequence r sed in 61.2.2.5. Also we mus capsulation method. This give	number is 1 t increase m es:	2 bits, in order to maintain n to 64, to make it
					[1a] N	1*R*8 +	D ~< 32K.			
					This I	nay be r	ewritten a	IS:		
					[Diffe	rential La	atency] +F	R*(8M-1) ~<32K		
					Suggeste	dRemea	ly			
					Repla		on with th	IS TEXI:	*****	

C/ 61 SC 61.2.2.4

C/ 61

SC 61.2.2.4

There are factors that limit the freedom of the transmission algorithm specified in Subclause 61.2.2.2.

One factor is the differential latency between multiple PMIs in an aggregated group.

Latency is defined between the a-interface of the C.O.-located PHY and the b-interface of the CPE PHY, and vice versa. Differential latency, D, is the difference in latency between the highest and lowest speed links in an aggregated group, as measured in units of bit times of the highest speed link.

Larger differential latencies imply greater variance in bit delivery times across aggregated PMIs, which in turn require larger sequence number ranges.

A second factor is the size of the fragments being transmitted across the PMIs. Very small fragments require larger sequence number ranges as there can be more fragments within the same number of bit times.

The restrictions for the transmission algorithm in Section 61.2.2.2 are:

a.) [Differential latency] + R*8*maxFragmentSize can be no more than 32,000.

b.) Fragments cannot be less than 64 Bytes (minFragmentSize).

These restrictions allow the use of a 12-bit sequence number space, where sequence numbers of outstanding fragements differ by no more than 2^11.

Control over differential latency is achieved by adjusting the bit rate, error correction and interleaving functions in the PMA/PMD of each link. Note that the burst noise protection offered by the error correction and interleaving functions is directly proportional to the latency, therefore it is logical that multiple aggregated links in the same environment should be optimized to have similar latencies.

Also, replace last paragraph of 61.2.2.3 with:

The PMI Aggregation Transmit Function Restrictions specified in Subclause 61.2.2.4 ensure that per-PMI buffers of 64,000 bits are of sufficient size (implementers may choose to provide buffers of up to 2^16 bits, in order to provide extra margin).

Proposed Response Response Status **O**

Barrass, Hugh	Ciso	o Systems		
Comment Type T The differential la i.e. the number of fragment to be tr	Comment Statu Itency is most useful if it t f bits transferred on the fi apsferred on the slower li	s D takes into acc aster link in the nk	count the ma he time it tak	aximum fragment size kes for a max length
This will bound th	ne buffer size more efficie	ently.		
SuggestedRemedy Change "a single	bit" to "a single max size	e fragment"		
Proposed Response	Response Status	3 O		
C/ 61 SC 61. Barrass, Hugh	2.2.4 P Cisc	225 co Systems	L 38	# 921
Comment Type T Some of the info paragraph.	Comment Statu mation removed from 61	s D .2.2.3 is usef	ul and can b	e added to this
SuggestedRemedy				
Add the following	text after the end of the	paragraph:		
Add the following The PMD control any two aggrega interleaving funct offered by the en latency, therefore should be optimit	text after the end of the of aggregated links shall ed links. This is achieved ions in the PMA/PMD of or correction and interlea it is logical that multiple zed to have similar latence	paragraph: control the n d by adjusting each link. No wing function aggregated l ies.	naximum lat g the bit rate, te that the b is is directly inks in the s	ency difference betw , error correction and urst noise protection proportional to the ame environment

P 225

L 36

923

C/ 61	SC 61.2.2.4	P 225	L 42	#	922	
Barrass, Hu	gh	Cisco Systems				

Comment Type T Comment Status D

Two factors are given which limit the transmission algorithm. The third one is speed ratio.

SuggestedRemedy

Add a paragraph:

The third factor is the speed ratio. This is defined as the ratio of the bit rate of the faster link divided by the slower link.

Proposed Response Response Status **O**

 TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause
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 RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 C/ 61
 SC 61.2.2.4

C/ 61 SC 61.2.2.4	P 225	L 44	# 907	C/ 61	SC 61.2.2.4	P 225	L 47	# 908
Cravens, George	Mindspeed			Cravens,	George	Mindspeed		
Comment Type T	Comment Status D			Comment	Туре Т	Comment Status D		
The maximum different since G.SHDSL does n latency only serves to i Aggregation. (64,000 b	tial latency for 2Base-TL cannot not use interleaving. A large val ncrease the cost of a 2Base-TL pit times for 2Base-TL is 31 ms	be as large a ue for the ma PHY that supec.)	as that for 10Pass-TL ximum differential oports PMI	minFr Other minFr strip it	agmentSize does wise, fragments c agmentSize, and coff.	not apply when the fragment of containing the end of packet wo the receiver would have to det	contains the l ould have to b ermine the si	End of Packet. be padded to ize of the padding and
To maintain the readab latency with stated value	olity of the standard, define a pa ues for both 10Pass-TL and 2Ba	rameter for th se-TL, and re	e maximum differential eplace the value	(But n <i>Suggeste</i>	naxFragmentSize dRemedv	always applies.)		
(64,000) with the paran	neter name (maxDiffLatency).			Chan	ge line 47 (restrict	tion B) to:		
SuggestedRemedy	to be the most increase difference that	later and batter		F		, 	(O ¹)	the former of sectors
aggregated group.	to be: the maximum differentia	latency betw	een any two PMIS In an	the er	id of packet.	ess than 32 Bytes (min-ragme	ntSize) unies	is the fragment contains
Define the value of max	xDiffLatency to be: 64,000 for 1	0Pass-TL an	d 8,192 for 2Base-TL.	Proposed	Response	Response Status O		
Replace all instances of 61.2.2.4)".	of 64,000 in clause 61 (4 total) v	vith maxDiffLa	atency, and add "(see	C/ 61	SC 61.2.2.4	P 225	L 47	# 913
Proposed Response	Response Status O			Cravens,	George	Mindspeed		
				Comment	Type TR	Comment Status D		
C/ 61 SC 61.2.2.4 Barrass, Hugh	P 225 Cisco Systems	L 44	# 928	minFr 64B/6 smalle "Start	agmentSize cann 5B encapsulation er byte fragment, ' character ("S")	ot be smaller than 62 bytes (0) to signal two End of Frames in a codeword could contain the I followed by an entire frame. T	(3E) since th n one codewo ast byte of or he encapsula	ere is not way for the ord block. With a 62 or ne frame followed by a
Comment Type E Prefer "shall" and "shal	Comment Status D			one E End o	nd of Frame and f Frames.	zero or one Start of Frame in a	single code	word block, but not two
SuggestedRemedy Replace "can" in line a)) with "shall" s b) and c) with "shall pot"			Also, gains	since a valid Ethe little.	ernet Frame must be at least 64	1 bytes, send	ling smaller fragments
Proposed Response	Response Status O			Suggester Chang Fragn the er	dRemedy ge line 47 (restrict nents cannot be le id of packet.	tion B) to: ess than 64 Bytes (minFragme	ntSize), unle	ss the fragment contains
C/ 61 SC 61.2.2.4	P 225	L 46	# 924	Proposed	Response	Response Status 0		
Barrass, Hugh	Cisco Systems			1	,	,		
Comment Type T The minimum fragment encapsulation.	Comment Status D t size needs to be 64 bytes in o	rder to match	the 64/65 byte					
SuggestedRemedy Change 32 bytes to 64	bytes.							
Proposed Response	Response Status O							

C/ 61 SC 61.2.2.4 Barrass, Hugh	P 225 Cisco Systems	L 47	# 925	C/ 61 SC 61.2.2.4 P2 Barrass, Hugh Cisco	2 25 <i>L</i> 49 # 926
Comment Type T The definition of max fra	Comment Status D agment size is too restrictive.			Comment Type T Comment Status The sequence number must change to 14	D bits
SuggestedRemedy Change 128 bytes to 51	12 bytes.			SuggestedRemedy Change 12 bits to 14 bits.	
Proposed Response	Response Status O			Proposed Response Response Status	0
C/ 61 SC 61.2.2.4 Zion Shohet	P 225 Infineon	L 47	# 526	C/ 61 SC 61.2.2.5 P2 Squire, Matt Hatte	226 L # 760
Comment Type T 32 bytes for minFragme	Comment Status D entsize will not work with the 64/	65Byte encaps	sulation	Comment Type T Comment Status Potential undetected problems:	D
SuggestedRemedy Replace 32 with 64.				 unexpected start of packet current buffered packet > maxFrameSize but its not clear thats the same thing). 	(we talk about buffere overflow in line 7 p 226,
Proposed Response	Response Status O			Potential incorrect solutions - when a PMA buffer overflows, you have to	o flush all PMA buffers and re-sync - it generally
C/ 61 SC 61.2.2.4 Zion Shohet	P 225 Infineon	L 48	# 527	the laws which make the sequence number	rs not get screwed up).
Comment Type T 128byte for maxLongFra	Comment Status D agment is too little. This reduce	s effiency.		Suggestearcemedy See earlier comment where I suggested me include the above error cases as well.	erging the error cases into the algorithm. Now
SuggestedRemedy Replace 128 with 256.				Proposed Response Response Status	0
Proposed Response	Response Status O			C/ 61 SC 61.2.2.5 P2 O'Mahony, Barry Intel	2 26 L1 # <mark>691 </mark> R&D
C/ 61 SC 61.2.2.4	P 225	L 48	# 914	Comment Type E Comment Status	
Cravens, George Comment Type T	Mindspeed Comment Status D			SuggestedRemedy	
Since the minFragment encapsulation (see prev sufficient range of fragm aggregate.	Size must be 63 bytes or greate vious comment), change the ma nent sizes are available to supp	er to keep from axFragmentSiz ort different rat	breaking the e to 256 so that a e PMIs within an	change "per PMA" to "per-PMA" Also line Proposed Response Response Status	3; and in line 21 change "PMA" to "per-PMA" O
SuggestedRemedy Change line 48 (restricti Fragments cannot be m	ion C) to: hore than 256 Bytes (maxFragm	entSize).			
Proposed Response	Response Status 0				

TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn Page 98 of 169

C/ 61 SC 61.2.2.5

			P802.3ah [Draft 1.3 Comments				
C/ 61 SC 61.2.2.5 O'Mahony, Barry	P 226 Intel R&D	L 18	# 692	C/ 61 SC 61.2 O'Mahony, Barry	2.2.6	P 226 Intel R&D	L 42	# 696
Comment Type E sequence number only	Comment Status D y 12 bits; wraps around at 2^12	2		Comment Type E "The PAF interfac	Comment es with the PHYs:	Status D seems incorrec	t, as the PAF is	part of the PHY.
SuggestedRemedy Change "+ 2^11" to +	2^11, modulo-maxFragmentSe	equenceNumbe	r as defined in 61.2.2.2"	SuggestedRemedy Change to "The P	AF interfaces to the	ne individual PM	Ds, PMAs, and ⁻	TPS-TCs"
Proposed Response	Response Status O			Proposed Response	Response	Status O		
C/ 61 SC 61.2.2.5 Marris, Arthur	P 226 Cadence	L 38	# 206	C/ 61 SC 61.2 Squire, Matt	2.2.6.2	P 227 Hatteras Netv	L 17 vorks	# <mark>761</mark>
The contents of the ga and to recognize such followed by 64 bytes of means there will be no system.	arbage frame should be specifi a frames during system debug. of 0x00. Having all zeroes in the o danger of these addresses m	ed to make it ea I suggest a val e source and de atching other M	asier to implement this d preamble and SFD stination address fields IAC addresses in the	The errors here do something that did fragment (seems N? Also, some en SuggestedRemedy	comment on't make sense to dn't fit into the exp the same)? When rror cases seem to	o me. The bad f ected sequence you lose N frag be missed (see	fragment definition. How is that dif gments, how is the suggestion below	on says we received ferent than lost nat counted - as one or ow).
SuggestedRemedy Add the following para followed by the SFD b	agraph "The garbage frame sha byte and 64 bytes of zero (0x00	all consist of 7 b)."	ytes of preamble,	I would have thou - rxError - reassemblies ab	ght the error signa	ls would have b	een	
Proposed Response	Response Status O			 reassembly over sequence number pma buffer overf min/max fragme 	rflows er reset events (do flows nt errors	on't really know l	how many fragm	ents you've lost)
C/ 61 SC 61.2.2.5 Marris, Arthur	P 226 Cadence	L 4	# 205	Proposed Response	Response	Status O		
Comment Type T	Comment Status D	otoot" I rooom		C/ 61 SC 61 2	263	P 227	1 32	# 762
for the MII interface ar	nd "RxErr" for the gamma inter	face.	nend using KA_EK	Squire, Matt		Hatteras Netv	vorks	102
SuggestedRemedy				Comment Type T	Commen	Status D		
On line 4 change RxE On lines 32 and 35 ch	rror to RxErr ange RxError to RX_ER			Why is the PMD A determines an init	Available register r tial value, but man	ead-only? Certa agement can re	ainly physical int strict it further.	erconnectivity Maybe you mean read-
Proposed Response	Response Status O			SuggestedRemedy PMD Avail should	not be read-only	on LT.	S GOTTIERI.	

Proposed Response Response Status **0**

C/ 61	SC 61.2.2.6.	3 P 227	L 33	# 763	C/ 61	SC 61.2.2.6.	3 P 227	L 47	# 910
Squire, M	att	Hatteras Netwo	orks		Cravens,	, George	Mindspeed		
Comment	Type E	Comment Status D			Commer	nt Type E	Comment Status D		
Why i PMDs	s bit0 set if the d s get mapped to t	evice doesn't support aggrega the first PMI?	tion? Wouldn'	t that mean that all bits	Spel	I out "OC" and inc	lude a reference the first time i	t is used.	
Suaaeste	dRemedv				Suggest	edRemedy			
Pleas	e clarify why or c	correct, because it doesn't seer	n riaht.		Chai Origi	nge the text as foll inal:	OWS:		
Proposed	Response	Response Status 0	5		(th	rough the OC).			
					New (th	: rough the Operation	on Channel (OC) see 63.1.4.3)	ı.	
C/ 61	SC 61.2.2.6.	3 P 227	L 41	# 764	Propose	d Response	Response Status O		
Squire, M	att	Hatteras Netwo	orks		1100030	u nesponse			
Comment	Туре Е	Comment Status D							
l'm co	onfused on the op	peration described here. What	does "Links s	hall not be enabled until	C/ 61	SC 61.2.2.6.3	3 P 227	L 53	# 766
to one	and only one M	III." First. what's a link? a PMI	? the PMD? E	inabled to what degree?	Squire, N	Aatt	Hatteras Netwo	orks	
i.e. is	the EoC working	? If not, how is the NT access	sed?		Commer	nt Type E	Comment Status D		
Suggeste	dRemedy				This a bit	write operation is	confusing. The LT asserts wri	te_PMD_Agg the bit_and p	regation_reg, then sends
l'm gu	lessing the para	graph means the following, so	I suggest this t	ext:	"PMI	D_Aggregation_re	gister in the bit location corres	ponding to the	PMA/PMD from which
" For N	T devices the P	MD Available register may on	tionally be writ	able by the LT. The	the r	equest was receiv	ed." That confuses me. Doe	sn't each PME) on the NT have a
reset	state of the regis	ster reflects the capabilities of t	he device. The	e management entity on	regis	ster? why does it	matter which PIVID on the LT s	sent it? Can't	there be conflicts?
the L	(through clause	45 access) may clear bits wh	ich are set to li	mit the mapping	Suggeste	edRemedy			Thehevier Veletter
one a	nd only one PMI	D. A PMD is not active until it h	not in use for o has at least one	e PMI mapped to it.	bette cohe	er suggestions, but erently.	t I don't understand the behavi	or well enoug	h to write it up more
Proposed	Response	Response Status O			Propose	d Response	Response Status O		
C/ 61	SC 61.2.2.6.	3 P 227	L 44	# 765	C/ 61	SC 61.2.3.1	P 230	L 1	# 697
Squire, M	att	Hatteras Netwo	orks		O'Mahon	iy, Barry	Intel R&D		
Comment	Type E	Comment Status D			Commer	nt Type E	Comment Status D		
Kill th	e entire paragrap	oh but the last sentence as it se	eems to compl	etely overlap the	Re-v	vord first two parag	graphs		
previo PMD	ous two paragrap	hs, and in some cases contrac	dicts them (i.e.	r/w-ability of LT	Suggeste	edRemedy			
Suggosto	eyist	or <i>j</i> .			Repl	lace with:			
Suggeste	omment				エトゥ	a intorface is anot	ified by incorporating addition !		subsubsoctions of ITLLT
Proposed	Response	Response Status O			Reco addit	ommendation G9 tions:	93.1 (Annex H) by reference, v	with the follow	ing exceptions and
					The	TX Err signal is no	ot present.		
							•		

Proposed Response Response Status **O**

SC 61.2.3.1

C/ 61 SC 61.2.	3.1 P 230	L 10	# 911	C/ 61	SC 61.2.3.2	P 230	L 32	# 577
Cravens, George	Mindspeed			Tom Mathe	у	Independent		
Comment Type E	Comment Status D			Comment	Type E	Comment Status D		
The PAF sends wh	ole fragments across the gamma i	nterface (whic	h may be whole frames	Use of	text OAM confu	ses the reader as OAM is co	mpletely defined	d by clause 57.
If both Start and Er "frame"	id of packet are set). Change the	wording to sub	stitute "fragment" for	Suggested	Remedy			
SuggestedRemedy				Try to f	ind an alternativ	e term and use everywhere a	appropriate.	
Modify the text to the The PAF shall asso transmission, and o	ne following (changes are in Bold): ert Tx_Avble when it has a whole d de-assert Tx_Avble when there are	lata fragment a e no data fragn	available for nents to transmit.	Proposed F	Response	Response Status O		
Tx_Avble must nev	er be de-asserted during the trans	mission of a d	ata fragment."	C/ 61	SC 61.2.3.2.2	2 P 231	L 5	# 699
Proposed Response	Response Status 0			O'Mahony,	Barry	Intel R&D		
				Comment	Гуре E	Comment Status D		
C/ 61 SC 61.2.	3.1 <i>P</i> 230	L 6	# 576	"PTM E interfac	Entity" confusing ces to the PAF a	(may be confused with PTN cross te gamma interface	1-TC). Also, 61.	2.3.3 states the TC
I om Matney	Independent			Suggested	Remedy			
Comment Type T	Comment Status D	-1		Replac	e all instances o	of "PTM Entity" with "PAF" in	table	
have an internal er aFramesLostDueT deliberately corrup	snall never assert the TX_Err sign ror, as reflected via MIB variable 3 oIntMACXmitError, and the MAC c the frame. The best place to do t	al." seems inc 0.3.1.1.12 an request tha his is in the P0	orrect as the MAC can it the physical layer CS.	Proposed I	Response	Response Status O		
SuggestedRemedy				C/ 61	SC 61.2.3.3	P 232	L 44	# 700
Have the PAF laye	r pass the MII signal Tx_Err to the	PCS layer.		O'Mahony,	Barry	Intel R&D		
Proposed Response	Response Status O			Comment T "packe	<i>Type</i> E ts" is incorrect te	Comment Status D		
C/ 61 SC 61.2.	3.2 <i>P</i> 230	L 27	# 698	Suggested change	Remedy to "fragment"			
O'Manony, Barry	Intel R&D			Proposed I	Response	Response Status 0		
Comment Type E VTU-O and VTU-R	Comment Status D only seem appropriate for 10PAS	S-T						
SuggestedRemedy				C/ 61	SC 61.2.3.3	P 232	L 47	# 529
Agree on terms for	C.O. equipment and CPE that car	n be used glob	ally.	Zion Shohe	t	Infineon		
Proposed Response	Response Status O			Comment T Add cle	<i>Type</i> E earer description	Comment Status D of TC functionality		
				Suggested	Remedy			
				Modify gamma sends	line 47 to read: a-interface, calcu codewords"	"In the transmit direction, the lates and adds 32-CRC, per	e TC receives da forms 64/65Byt	ata frames from PAF via e encapsulation, and
				Proposed I	Response	Response Status 0		

C/ 61 SC 61.2.3.3	P 233	L 3	# 701	C/ 61 SC 61.2.3 O'Mahony Barry	.3.1 P 234	<i>L</i> 11	# 702
Comment Type E Label "Tx_PTM" confu	Comment Status D			Comment Type E Missing combination	Comment Status D n for all idle (start new frame)		
SuggestedRemedy Chane to something el	lse; such as "Tx_encap"			SuggestedRemedy Add text:			
Proposed Response	Response Status O			e) all idle (start ner precede up to 62 da	w frame): a number of Idle octets ata octets of the next TC frame.	and a single Sta	art of Frame octet
C/ 61 SC 61.2.3.3. Barrass, Hugh	1 P 233 Cisco System	L 48 s	# 933	Proposed Response	Response Status O		
Comment Type T The encapsulation fun	Comment Status D ction needs a scrambler.			C/ 61 SC 61.2.3 O'Mahony, Barry	.3.1 P 234 Intel R&D	L 14	# 703
The scrambler defined	for 10G could be co-opted fo	r this function.		Comment Type E inconsistant labellin	Comment Status D		
SuggestedRemedy Insert the contents of c first subclause of 61.2.	document barrass_cmnts_1_0 .3.3 (before the current 61.2.3	0303.pdf (61_2.3 .3.1).	3.3_Scram.fm) as the	SuggestedRemedy Change word "gami	- ma" to the lower-case greek alpha	abet character.	
Proposed Response	Response Status O			Proposed Response	Response Status O		
C/ 61 SC 61.2.3.3. Cravens, George	1 P 234 Mindspeed	L 10	# 915	C/ 61 SC 61.2.3 Zion Shohet	.3.1 <i>P</i> 234 Infineon	L 25	# <mark>531</mark>
Comment Type E There are five cases to with the examples sho	Comment Status D o consider, all shown in Table wn in the table to improve rea	61-9. The text dability.	description should align	Comment Type E Table 61-9 includes	Comment Status D errors.		
SuggestedRemedy				SuggestedRemedy	1 to (2) (instead of 0 to (2))		
Add a case (add new t	ext):			in lines 36 and 40, r	modify: $k=1$ to 62 (instead of 0 to 63)	62)	
 e) start of frame (while preceeded by zero or r 	e idle): up to 63 bytes of data more Idle octets, and a single	belong to the s Start of Frame	ame TC frame, octet.	in line 34, change D in line 36, replace fi add a note to the ta add a row in table 6	164 to C64 rst Z with C64 ble: "S may immediately follow C6 1-9 describing this note as follows	64 or D, when n s: F0, C0, S, D0	o idles".), D1,,D61
Also, modify Table 61- (couldn't get the table	 9 to align with the text descrip to paste into this form). 	tion as shown i	n separate contribution	Proposed Response	Response Status O		,
Proposed Response	Response Status 0						

C/ 61	SC 61.2.3.3.1	P 234	L 34	# 930	C/ 61	SC 61.2.3.3.1	P 234	L 44	# 931
Barrass, H	Hugh	Cisco Systems	6		Barrass,	Hugh	Cisco Systems		
Comment	t Type E	Comment Status D			Commen	t Type T	Comment Status D		
Fix co	odeword typos				Table	e 61-9 would benefit fr	om 2 more rows which illus	strate the case	s when k=0 (a frame
Suggeste	dRemedy				the n	ext codeword) and i=() (a frame starts on the firs	t data octet of	a 65 byte codeword, so
Table	e 61-9, row 4, colur	nn 4, change D64 to C64			the s	tart of frame marker is	s the last byte o fth eprevio	us codeword).	
I able	e 61-9, row 5, colur	nn 4, change \angle to C64			Suggeste	edRemedy			
Proposed	l Response	Response Status O			Add 2	2 rows to Table 61-9:			
CI 61	SC 61 2 3 3 1	P 234	/ 3/	# 012	First	row:			
Cravens,	George	Mindspeed	L J 4	# 31Z	End	of frame last data by	te F0 C0 Z Z		
Comment	t Type T	Comment Status D			K=0	was D63 of previous codewo	rd		
Table	e 61-9: The line for	r "all idle" must not contain ar	ny data bytes bef	fore the first "S"					
chara	cter. If the byte for	llowing the Sync Byte is data	, then the sync b	oyte MUST signal "all	S	and rows			
data"	(otherwise the byt	e following the sync byte is in	nterpreted as eith	ner Z, S, or Ck).	3600	ind tow.			
Suggeste	dRemedy				Start	of frame first data by	te F0 C64 Z S		
Chan	ge the byte followi	ng the sync byte in the "all id	le" example to "2		k=0	will be D0 of			
Proposed	l Response	Response Status O							
					Proposed	d Response 🛛 R	Response Status O		
C/ 61	SC 61.2.3.3.1	P 234	L 34	# 704					
O'Mahony	y, Barry	Intel R&D			C/ 61	SC 61.2.3.3.1	P 234	L 5	# 929
Comment	t Type E	Comment Status D			Barrass,	Hugh	Cisco Systems		
typos	In Table 61-9				Commen	t Type E	Comment Status D		
Suggeste	dRemedy	"Do ()			The r	number of data octets	per 65 byte codeword nee	ds adjusting.	
In "all	l idle" row, change	"D64 to "C64"			Suggeste	edRemedy			
In "sta	art of frame while i	dle" row, change first occurre	ence of "Z" to "Ce	64"	Line	5, change 63 to 62			
Proposed	l Response	Response Status 0			Line	7, change 62 to 61			
					Table	e 61-9, row 3, column	2, change 63 to 62		
					Table	e 61-9, row 5, column	2, change 62 to 61		4 1.
					Table Table	e 61-9, row 6, column e 61-10 row 4 column	2, change 62 to 61 and change 01-3F to 00-3F	ange 62-k to 6	1-К
					Table				

Proposed Response Response Status **0**

C/ 61 Zion Shoh	SC 61.2.3.3.2 et	P 235 Infineon	L 1	# 532	C/ 61 Tom Math	SC 61.2.3.3.3 ey	P 235 Independent	L 21	# 578
Comment missin	<i>Type</i> T ng characters in ta	Comment Status D ble 61-10			Comment Initial payloa	<i>Type</i> T value and other re ad frame" includes	Comment Status D quirements are not described . Such as: is the sync byte	d. Also please and byte count	clarify just what "entire t on last piece part of
add a hex), add a <i>Proposed</i>	new row to the tal new row to the tal <i>Response</i>	ble: Frame type: All idle, or Sta ble: Frame type: Immediate Sta Response Status O	nt while Idle; Int of frame; '	Value: C64=64 (40 Value: C0=0	the pa Suggested Add te count Proposed	iyload frame dRemedy ext to describe initi included or not inc Response	al value and any other requir lude in CRC calculation. <i>Response Status</i> 0	rements such a	as sync byte and byte
<i>CI</i> 61 Barrass, H	SC 61.2.3.3.2 ługh	P 235 Cisco Systems	L 10	# <mark>932</mark>	C/ 61 Zion Shoh	SC 61.2.3.3.3 et	P 235	L 21	# <mark>530</mark>
Comment Table	<i>Type</i> T 61-10, another ro	Comment Status D w is needed to define C64			Comment This p	<i>Type</i> E aragraph should a	Comment Status D ppear earlier in the text, for p	oroper underst	anding of the text
Suggested Insert	dRemedy a row defining C6	4:			Suggested Move	IRemedy paragraph 61.2.3.	3.3 before 61.2.3.3.1 TC End	capsulation and	d Coding
Idle or from le	r start C64 40 dle frames	(16) 			Proposed	Response	Response Status O		
Proposed	Response	Response Status O							
Cl 61 O'Mahony	SC 61.2.3.3.2 , Barry	P 235 Intel R&D	L 6	# 7 <u>05</u>					
Comment Chang	<i>Type</i> T ging value of Z to (Comment Status D 00 improves error-detecting cap	babilities of C	CRC.					

TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause

For 2BASE-T where R-S encoding is not used, increasing Hamming distance of characters may improve error-detecting capabilities. 'can do Hamming distance of 2 by just using even parity bit.

SuggestedRemedy

In Table 61-10, set Z=0. Set Cn equal to values with even parity bit in d7 (starting with C0 = 0x81). Set S to next value after C's (0xC0).

RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

Proposed Response Response Status **O**

Cl 61 O'Mahony	SC 61.2.3.3. 3 y, Barry	3 P 235 Intel R&D	L 39	# 706	C/ 61 Zion Shol	SC 61.2.3.3. net	5 P 235 Infineon	L 52	# 533
Comment Impro usual	<i>t Type</i> T ove error-detecting Ily done.	Comment Status D g capabilities of CRC by initiali	zing the shift r	egister to ones, as is	Comment wrong	<i>t Type</i> E g condition for Rx	Comment Status D _Err assertion.		
S <i>uggeste</i> Add t	edRemedy text after the equa	tion:			Suggeste Chan AND	ge "If Synchroniz SynchError = true	ed=true or SynchError = true e then"	then" to " If	Synchronized=true
Mathe attacl	ematically, the CR hed header) is def	C value corresponding to a gi ined by the following procedur	ven payload fr e:	ame (including any	Proposed	l Response	Response Status O		
a) Th b) Th of de	e first 32 bits of th e n bits of the pay gree n–1.	e payload are complemented. load are then considered to be	e the coefficier	nts of a polynomial M(x)	<i>Cl</i> 61 Tom Math	SC 61.2.3.3. ney	5 P 235 Independent	L 53	# 579
(The Ether c) M(: rema d) Th e) Th After	first bit of the PAF rnet FCS correspo x) is multiplied by inder R(x) of degru- e coefficients of R le bit sequence is last paragraph in	Header corresponds to the xi nds to the x0 term.) x32 and divided by G(x), the C e = 31. (x) are considered to be a 32- complemented and the result subclause, add this text:	n–1) term and CRC polynomia bit sequence. is the CRC.	the last bit of the	Commen If the block In Cla false Suggeste As ab	t Type T link is down, sho the transfer of da ause 49 for the ot holds the Figure <i>dRemedy</i> pove.	Comment Status D wn by Synchronized = false, t ata to the next higher layer. T her physical layer which uses 49-15 state diagram in an init	the follow the lea 'hus not drive ei block coding, s ialization state v	ad of 10BASE-T and ther RX_DV or Rx_Err. ignal block sync when when sync is lost.
At th when	receiver, a payloa divided by G(x).	d received without error will re	sult in the rem	ainder 0x1C2D19ED	Proposed	l Response	Response Status O		
Proposed	l Response	Response Status 0			C/ 61 O'Mahony	SC 61.2.3.3. y, Barry	5 <i>P</i> 236 Intel R&D	L 9	# 709
C/ 61 Barrass, I	SC 61.2.3.3. 4 Hugh	P 235 Cisco Systems	L 40	# 934	Commen reform	<i>t Type</i> E matting needed	Comment Status D		
Comment The s restrie	<i>t Type</i> T sync detection (an cts implementation	Comment Status D d also receive control) function ns unnecessarily.	n is needlessly	complicated and	Suggeste repla Proposed	dRemedy ce "<=" with corre I Response	ect assignment symbol Response Status O		
The s lock a	state machine sho and should also al	uld mandate sufficient protect low freewheel in the case of a	on to minimize damaged syne	e the probability of false c.					
Suggeste Repla	edRemedy ace subclauses 61	.2.3.3.4 and 61.2.3.3.5 with th	e contents of	document	C/ 61 O'Mahony	SC 61.2.3.3. y, Barry	5 P 236 Intel R&D	L 9	# <u>707</u>
Proposed	l Response	Response Status O			reforr Suggeste	natting needed			
					repla	ce "<=" with corre	ect assignment symbol		
					Proposed	l Response	Response Status O		

C/ 61 SC 61.2.3.3.0 O'Mahony, Barry	6 P 238 Intel R&D	L 11	# 708	C/ 61 SC 61.3.8.7 P 250 L 47 # 712 O'Mahony, Barry Intel R&D
Comment Type E reformatting needed.	Comment Status D			Comment Type E Comment Status D correct editor's note
SuggestedRemedy In 4 places, replace "<	=" with correct assignment sym	bol		SuggestedRemedy Change "PTM" to "64B/65B"
Proposed Response	Response Status O			Proposed Response Response Status O
C/ 61 SC 61.2.3.3.0 Tom Mathey	6 P 238 Independent	L 32	# 580	C/ 61 SC 61.3.8.7 P 251 L 1 # 713 O'Mahony, Barry Intel R&D
Comment Type T I believe that the two m	Comment Status D nanagement signals are not list	ed in clause 45.		Comment Type T Comment Status D Tables 61-36 and 61-37 no longer needed (2PAS-TL leftover)
SuggestedRemedy Add tc_loss_of_sync a	nd tc_crc_error to clause 45.			SuggestedRemedy Delete them
Proposed Response	Response Status O			Proposed Response Response Status O
C/ 61 SC 61.3.8.7 O'Mahony, Barry	P 247 Intel R&D	L 53	# 710	C/ 61 SC Figure 61-4 P 217 L 1 # 573 Tom Mathey Independent
Comment Type E	Comment Status D			Comment Type T Comment Status D
This editor's note is in SuggestedRemedy delete it.	Response Status	er needd, anywa	ay.	This figure shows one MDIO/MDC for all of the up to 32 MACs, with each MAC connected via a 100BASE MII. However, each and every MII includes a MDIO/MDC per clause 22. And this MII attachment can be via a physical connector. Thus multiple MDIO/MDC is may all try to access the shared resource at the same time. The concept of MDIO/MDC being separate from the "MII" only exists in P802.3ae.
Froposed Response				SuggestedRemedy
C/ 61 SC 61.3.8.7 O'Mahony, Barry	P 250 Intel R&D	L 4	# 711	Harmonize and provide text to describe how multiple MDIO/MDCis will work. It is NOT acceptable to 1) assign a master via a given MII as that cable may not be connected. 2) place the burden on the end user
Comment Type E Table 61-34 no longer	Comment Status D needed (leftover from 2PASS-	۲L)		Proposed Response Response Status O
SuggestedRemedy Delete it.				
Proposed Response	Response Status O			

C/ 61 SC Figure	61-9 P 223	L 14	# 575	C/ 61	SC Table 61	-14 P 24	1 <i>L</i> 14	# <u>501</u>
Tom Mathey	Independent			Beck, Mich	ael	Alcatel		
Comment Type T Incorrect action in sta transferred to mac, si	Comment Status D te SEND_FRAME_TO_MAC_1. gnal crs_rs is set to FALSE.	At present, w	hen a frame is being	Comment T Manda specifie	<i>Type</i> TR tory specification and for 2BASE-T	<i>Comment Status</i> ns for G.991.2 are out: L.	D side the scope of ou	r PAR. No toneset is
SuggestedRemedy Action in state SEND state can be merged _2.	_FRAME_TO_MAC_1 should be with state SEND_FRAME_TO_I	e to set crs_rx MAC_2 and title	to TRUE, then this e changed to drop the	Suggested Remov Proposed F	Remedy e data rows 1 a Response	nd 3. Replace TBD in Response Status	data row 2 by A4. O	
C/ 61 SC Table 6	1-1 P 218	L 31	# 572	<i>Cl</i> 62 Venugopal,	SC 62.2.3 Padmabala	P 28 InterOț	1 <i>L</i> 48 berability Labora	# 622
Tom Mathey Comment Type T Register assignment 2.3.x. Similar problem SuggestedRemedy Not quite sure what w	Independent Comment Status D is totally bogus. Register 1.3.x i n elsewhere. vas intended as clause 45 is also	s already assiç o vague.	ned by 802.3ae, as is	Comment T Refere Suggested Change Proposed F	<i>Type</i> E nce to wrong ta R <i>emedy</i> e Table 62-11 to Response	Comment Status ble. The interpretations o Table 62-2 Response Status	D s are shown in Table O	9 62-2
Proposed Response	Response Status O			<i>Cl</i> 62 Venugopal,	SC 62.2.3 Padmabala	P 28 InterOp	2 L 39 berability Labora	# 624
C/ 61 SC Table 6 Beck, Michael Comment Type TR	1-12 P 240 Alcatel Comment Status D	L 37	# 500	Comment T Table 6 U inter	Type E 62-2: face of MCM-VI	Comment Status DSL is interpreted as M	D 1DI in EFM.	
2BASE-TL will not us and G.992.2 are outs	e tones in 4312.5kHz family. Ma ide the scope of our PAR. No to	ndatory specif neset is specif	cations for G.992.1 ied for 10PASS-T.	There a	are two U interfa	aces, U2 and U1 in MC	CM-VDSL.	
SuggestedRemedy Remove data rows 1-	4 In data row 5, replace TBD by	/ "B43"		The tab splitter	ble must clearly is present and	specify that U1 interfa U2 interface of MCM-	ce of MCM-VDSL is VDSL is the MDI is s	the MDI interface if splitter is absent.
Proposed Response	Response Status O			Suggested Modify	Remedy fourth row to cl	arify two U interfaces		
				U1- inte U2 - int there is	erface of MCM terface of MCM s no distinction	- VDSL will be interpre -VDSL will be interpret between U2 or U1 inter	ted as MDI if splitter ed as MDI if splitter rface	is present is absent. In this case
				Proposed F	Response	Response Status	0	

C/ 62	SC 62.2.4.5	P 283	L 5	# 623	C/ 62 Zion Shok	SC 62.3.2.2	P 284	L 47	# 511										
venugopai, P	aumabala	InterOperabili	ly Labora		ZION Shor	iet	mineon												
Comment Type T Comment Status D Sub-clause 62.2.3 point b states, "10PASST PMA does not support the "fast path"". When comment #47 on Draft 1.2 was accepted the text in sub-clause 62.2.4.5 was replaced with the current text in draft 1.3. By directly referring to MCM-VDSL section 9.3.5, the frame description will now have fast path included in it, as MCM -VDSL frame has both fast and slow path data.					Comment Type E Comment Status D Mistype in the description field of last 3 rows of table 62-3. SuggestedRemedy Change the description field of last 3 rows to include "octet" instead of "word". Proposed Response Response Status O														
										Where as in Figure 62-1 fast path is absent But by referring to MCM-V/DSL 0.3.5 the									
										frame description will now refer to a figure which has fast path data in the frame description. The text in draft 1.2 for this section had framing description for EFM without the fast path. The frame structure for EFM must be clearly defined without fast path if fast path is not allowed.					C/ 62 Zion Shoh	SC 62.3.2.2.2	P 285 Infineon	L 33	# 512
Comment Type E Comment Status D Note "a" to be modified. Note "b" is redundant																			
SuggestedRemedy					Suggeste	dRemedv													
There are 3 possible ways to resolve this 1) Add appropriate text in sub-clause 62.2.4.5 which clarifies that the fast path data in the frame description in reference 9.3.5 is not applicable for EFM.					In note "a" replace "path" with "PMA". Delete note "b". Proposed Response Response Status O														
										2) Reintro	oduce text from dra	aft 1.2 sub-clause 62.2.5			C/ 62	SC 623223	P 285	/ 39	# 629
 Since sub-clause 62.2.3 point b is not a "shall not" or " should not", does this mean that fast path may exsist. If so, introduce reference to fast path in appropriate sub-clauses 					Venugopal, Padmabala InterOperability Labora														
Proposed Response Response Status O					Comment Type E Comment Status D Reference to wrong table: Table 62-5 has Control-2 Octect Descrption														
Cl 62 Zion Shahat	SC 62.3.1	P 283	L 24	# 510	Suggester Chan	<i>dRemedy</i> ge Table 62-8 to T	able 62-5												
Zion Shohet					Proposed Response Response Status O														
Comment Typ mistype o	pe E C of title. Should be:	Comment Status D PMA Functional Block D	iagram																
SuggestedRemedy					C/ 62 Zion Shoł	SC 62.3.2.2.3	P 286 Infineon	L 7	# 513										
Change lille to read. PIMA Functional block Diagram					Comment		Comment Status D												
Proposed Re	esponse Re	esponse Status O			in line	e 7 and 17 need to	define TBD, and rephrase	the description											
					Suggester The d	SuggestedRemedy The description field of IB-6 (line 7) and IB10/IB11 (line 17) should be "Rese change "TBD" to "abnormal state"			e "Reserved"; and										
					Dranaa														
					Proposed	Response	Response Status U												
C/ 62 SC 62.3.2.2.4 Venugopal, Padmabala	4 P 285 InterOperabilit	L 34 v Labora	# 628	C/ 62 SC 62.3.2. Venugopal. Padmabala	2.5 P 285 InterOperabilit	L 54 ty Labora	# 627												
--	---	--------------------------------	------------------------	---	---	--------------------------	-----------------------												
Comment Type E Table 62-6: The descrp	Comment Status D biton has a typo: It should be	'Frame header	CRC check"	Comment Type E character '=' is missi	Comment Status D ng : Bits m8, m15,m16,m23 = 0														
SuggestedRemedy Change description "Fr	ame header RC check " to " I	Frame header (CRC check"	SuggestedRemedy Change the expressi	on as m8, m15, m16, m23 = 0														
Proposed Response	Response Status O			Proposed Response	Response Status O														
Cl 62 SC 62.3.2.2.4 Venugopal, Padmabala	4 P 285 InterOperabilit	<i>L</i> 45 y Labora	# 625	C/ 62 SC 62.3.2. Barrass, Hugh	2.8 P 287 Cisco Systems	L 30	# 935												
Comment Type E To be consistent refere sentence similar to sub	Comment Status D ence to Table 62-6 must be ac b-clause 62.3.2.2.3	lded in the text	at the end of first	Comment Type T The description of th length codeword, this	Comment Status D e RS is for generic codeword leases could be simplified.	ngths. Given tha	at EFM uses a fixed												
SuggestedRemedy At the end of first sente	ence add, " The control-3 octe	ect description is	s shown is Table 62-6"	SuggestedRemedy Add a sentence at th	e end of the paragraph:														
Proposed Response	Response Status O			For this application, t (K) is always 181.	he codeword length (N) is alway	ys 200 and the	number of data octets												
C/ 62 SC 62.3.2.2.5 Venugopal, Padmabala	5 P 285 InterOperabilit	L 50 y Labora	# 626	Proposed Response	Response Status 0														
Comment Type T The use of division syn "The CRC bits CRC_1 polynomial: "	Comment Status D hbol is incorrect. The sentenc to CRC_4 are computed as a	e reads as remainder of r	nultiplying the	Cl 62 SC 62.3.2. Venugopal, Padmabala Comment Type E In the expression (3-	2.8 P 287 InterOperabilit Comment Status D -p+16, 3+P),	L 35 ty Labora	# <mark>630</mark>												
CRC_1 is not divided b SuggestedRemedy Division symbol must b	y CRC_4. we replace by the word "to" an	d the sentence	must be changed to	1) the same variable creates a confussion	P is refered with both p and P. if p and P are two different vari	Use single con ables	sistent format. It												
"The CRC bits CRC_1 polynomial: " Proposed Response	to CRC_4 are computed as a Response Status 0	remainder of r	nultiplying the	2) The variable 'P' is SuggestedRemedy 1) Change the expre	ssion to (3+P+16, 3+P)														
				2) also add reference Proposed Response	e to varibale P. 'P' is the number Response Status O	r of payload byte	es.												

P802.3ah Draft	1.3	Comments
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C/ 62	SC 62.3.2.2.9	P 288	L 34	# 514	C/ 62	SC 62.3.2.2.9	P 289	L 7	# 631
	ət 				venugopa	al, Padmabala		Labora	
Comment	<i>lype</i> E	Comment Status D			Comment	1 / ype E Co	omment Status D	n symbol 64	orogrammable
Currented		ssing.			Table	02-7. The notes sectio		1 Symbol 04,	programmable.
Chang	Remedy e lines 34-35 to r	ead: The incoming codeword	l of 200 octets i	s divided into	But th divide	e text on page 288, line by symbol must not be	e 47 clearly states that M e used	I can take val	ues from 0 to 64. The
or 100	. The octets withi	n the Interleaver blocks are n	umbered from	j=0 to $j=1-1$.	Suggeste	dRemedy			
Proposed I	Response	Response Status O			Chang " M =	ge the notes to {0,1,,64}, Programma	able"		
					Proposed	Response Res	sponse Status O		
C/ 62	SC 62.3.2.2.9	P 288	L 46	# 515					
Zion Shohe	et	Infineon			CI 62	SC 62.3.2.2.9	P 289	L 8	# 936
Comment	Type E	Comment Status D			Barrass, H	Hugh	Cisco Systems		
Add he	ere a description	for M=0. remove the descript	ion from note "a	a", on line 51.	Comment	Туре Т Сс	omment Status D		
Suggested	Remedy				Table	62-7 has a typo in the	"Error Correction" row (re	ow 4).	
On line Delete	the last sentence	ence: "Setting M=0 cancels t e of note "a", on line 51.	he Interleaver".		The te	erm (t * I/S) has been w	vritten (t * I/N).		
Proposed I	Response	Response Status 0			Since	I and S are constants	(= 25 and 200 respective	elv). this term	evaluates to 1.
					Suggester	dRemedy	(,,	
C/ 62 Zion Shohe	SC 62.3.2.2.9	P 289 Infineon	L 5	# 516	Chan The n	ge the row 4, column 2 lote in row 4 colum 3 is	to "E = (25 * M) + 1" no longer needed.		
Comment	Type E	Comment Status D			Proposed	Response Res	sponse Status O		
Add th		1011.			01.00		Daga	1.4	"
Suggested Modify	Remedy the "Value" colu	mn of table 62-7, first row, to	read: I=25, 50,	or 100 octets.	C/ 62 Venugopa	SC 62.3.2.2.9 al, Padmabala	P 290 InterOperability	L 1 Labora	# 632
Proposed I	Response	Response Status O			<i>Comment</i> Fill in	<i>Type</i> E Co the Figure x with actua	omment Status D Il figure number		
<i>CI</i> 62 Barrass, H	SC 62.3.2.2.9 ugh	P 289 Cisco Systems	L 6	# 937	Suggester First s 62-4"	dRemedy sentence must be repla	aced with, " The structure	of the interle	aver is shown in Figure
Comment The us	<i>Type</i> T se of "I" as a varia	Comment Status D able in Table 62-7 is redunda	nt since I is fixe	ed at 25.	Proposed	Response Res	sponse Status O		
Suggested Replac	Remedy ce all instances o	f I in Table 62-7 with 25 (eval	uating equatior	ns as necessary).					
Proposed I	Response	Response Status O							

TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn Page 110 of 169

C/ 62 SC 62.3.2.2.9

C/ 62 SC 62.4.1 Venugopal, Padmabala	P 290 InterOperability I	L 43 _abora	# 633	C/ 62 Beck, Mich	SC 62.4.4.2. ael	2 P 292 Alcatel	L 6	# 498
Comment Type E Comme Table 62-2 gives the interpretation	nt Status D for MCM-VDSL tern	ns for EFM.		Comment T N_SC,I	<i>Type</i> TR min is TBD. A m	Comment Status D ninimum of 2048 carriers is	required to achie	ve the bit rate objective.
A consistent format must be used interface" is used. Instead MDI mu PMA is used through out clause 6	throughout clasue 6. Ist be used to be cor 2.	2. For example nsistent, as in t	in line 43 term "U2 he case of PMS-TC,	Suggested -specify -chang	Remedy / N_SC,min = 2 e text on line 8 t	048 to read "n can take the valu	es 3 and 4"	
SuggestedRemedy Change any reference with MCM-	/DSL terms to EFM	terms		Proposed F	Response	Response Status O		
page 290: line 43, 52 (U2 interfac page 293: The text which replaces 294 line 40, the terms VTU-O and 10PASST-R Page 300: lines 53 and 54 Page 306: sub-clause 62.5.4 Proposed Response Respons	e / MDI) section 8.2.4 of MC VTU-R are used wh e Status 0	M-VDSL: page ich refers to 10	e 293 line 7 till page IPASST-O and	Cl 62 Venugopal, Comment 7 Section	SC 62.4.4.2. Padmabala Type E 1 62.8 does not	2 P 293 InterOperab <i>Comment Status</i> D exsist. Appropriate content	<i>L</i> 16 ility Labora is in clause 62A	# <mark>635</mark>
, ,				Change	e the following r	eference to section 62.8		
Cl 62 SC 62.4.4.2.2 Venugopal, Padmabala Comment Type E Comme Typo: reference to wrong Figure n	P 292 InterOperability I <i>nt Status</i> D umber	L 16 _abora	# 634	page 2 page 2 page 2 page 2 page 2 page 2	93; line 16: cha 93; line 21: cha 93; line 31: cha 93; line 48: cha 94; line 47: cha	nge 62.8.1.2 to 62A.3.3.2 nge 62.8.1.2 to 62A.3.3.2 nge 62.8.1.2.1 to 62A.3.3.2 nge 62.8.1.2 to 62A.3.3.2 nge 62.8.1.2 to 62A.3.5		
SuggestedRemedy Change Figure 62-8 to 62-6				Proposed F	Response	Response Status 0		
Proposed Response Respons	e Status O			<i>Cl</i> 62 Venugopal,	SC 62.4.4.2. Padmabala	2 P 293 InterOperab	L 47 vility Labora	# 636
C/ 62 SC 62.4.4.2.2 Beck, Michael	P 292 Alcatel	L 44	# 499	Comment T Typo e	<i>Type</i> E rror in Table nu	Comment Status D		
Comment Type TR Comme Editor's note must be removed or	nt Status D replaced by text furth	ner restricting t	he range of cyclic	Suggested Change	Remedy e Table 62-11 to	o Table 62-9		
SuggestedRemedy Replace Editor's note with followin "The CE length is specified by the mandatory. Support for other value	g text: value of parameter i es of m is out of scop	m. In 10PASS- be."	T, the value m=20 is	Proposed F	Response	Response Status O		
Proposed Response Response	e Status O							

CI 62	SC 62.4.4.8	P 296	L 54	# 964	C/ 62	SC 62.5.2.1	P 300	L 3	# 517
Simon, Sc	cott	Cisco System	s, Inc.		Zion Shohe	et _	Infineon		
Comment	<i>Type</i> E	Comment Status D		adatam, ta anarata in	Comment	Type E	Comment Status D		
Annex	x C support is mai x C mode.	Tatory for EFW compliance,	out it is not ma	idatory to operate in	Iviake i		1.4		
Suggeste	dRemedy				Suggested	Remedy	nlitting Deference 1.9 costic	~ 6 2 1	
Chang	ge text to:				Replac Delete	the whole tex figure 62-9, on	t, from line 5 to line 49, with " page 301.	Stet".	
Stet.	10PASS-T PHYs	shall support operation as d	escribed in An	nex C.	Proposed I	Response	Response Status 0		
Proposed	Response	Response Status O			,	,	,		
					C/ 62	SC 62.5.2.2	P 300	L 50	# 518
C/ 62	SC 62.4.5.1	P 297	L 15	# 637	Zion Shohe	et	Infineon		
Venugopa	al, Padmabala	InterOperabili	ty Labora		Comment	Туре Е	Comment Status D		
Comment	<i>Type</i> E	Comment Status D			Make r	reference to T1E	1.4		
Туро					Suggested	Remedy			
Suggester	arcemeay ne Table 62-15 to	Table 62-10			Modify	the title to read	: "Coding and Modulation, Re	eference 1-2, se	ction 6.2.2 Stot, with the exception
Proposed	Response	Response Status O			that on Delete	ly Base-Band S figure 62-10.	pectral shaping (BSS) is use	d"	
					Proposed I	Response	Response Status 0		
C/ 62 Venugopa	SC 62.5.1.1 II, Padmabala	P 299 InterOperabili	L 21 ty Labora	# 638	<u></u>	CC CD E D D		1.05	# 000
Comment	Type E	Comment Status D			U 62	SC 62.3.2.2	P 301 InterOperabil	L ZO	# [639
Figure also n	e 62-8: To be cons name the PMS-TC	sistent, with reference to Fig layer as PMS-TC/PMA and	ure 62-5 in pag U2-interface a	e 290, figure 62-8 must s U2-interface/MDI	Comment	Type E	Comment Status D	ity Labora	
Suggeste	dRemedy				"(BSS)	." must be part	of previous sentence in page	300 line 54.	
In figu	ıre 62-8, change F	PMS-TC as PMS-TC/PMA ar	nd U2-interface	as U2-interface/MDI	Suggested	Remedy			
Proposed	Response	Response Status 0			Move "	'(BSS)" to line 5	4 in page 300 before full-stop	D.	
					Proposed I	Response	Response Status O		
C/ 62 Zion Shoh	SC 62.5.1.2	P 299 Infineon	L 50	# 522					
Comment add a	<i>Type</i> E ref. to annex 62A	<i>Comment Status</i> D for other band plans							
Sugaeste	dRemedy								
add a	sentence: "other	band plans are described in	62A.						
Proposed	Response	Response Status O							

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

C/ 62 SC 62.5.2.2	P 301	L 33	# 640	C/ 62 SC 62.5.	4.2 P 308	L 22	# 521
Venugopal, Padmabala	InterOperabilit	y Labora		Zion Shohet	Infineon		
Comment Type E	Comment Status D			Comment Type E	Comment Status D		
Figure 62-10: In right si	ide the text "Trans Sign" is ind	complete.		mistype. 1.8 shoul	d be changed to 4.0		
SuggestedRemedy				SuggestedRemedy			
Change "Trans Sign" to	o " Transmit Signal"			Change the two fre	equency columns on page 308	8, line 22, to be "0.2	225-4.0" instead of
Proposed Response	Response Status 0			"0.225-1.8".			
, ,	,			Proposed Response	Response Status O		
C/ 62 SC 62.5.4.1.4	4.1 <i>P</i> 307 Cisco System	L 13	# 938	C/ 62 SC 62.5.	4.2.2.2 P 303	L 54	# 641
	Comment Status B	-		Venugopal, Padmabala	a InterOpera	ability Labora	
If PSDref, kl and LOSS defined in Annex 62A	S_CORR are regionally specifi	ic then they sho	ould be added to profiles	<i>Comment Type</i> E Refer to variable a	Comment Status D	ot by a	
SuggestedRemedy				SuggestedRemedy			
Add a sentence at the	end of the paragraph:			replace 'a' by symb	ool alpha, in line 54 page 303 a	and in line 13 page	304.
Refer to Annex 62A for characteristics.	r profile definitions including re	egional varianco	e of power back-off	Proposed Response	Response Status 0		
The editor of Annex 62	A needs to add the appropria	te text for this a	also.	C/ 62 SC 62.5.	4.2.2.2 P 304	L 10	# 519
Proposed Response	Response Status O			Zion Shohet	Infineon		
CL62 SC 62542	P 209	/ 1	# 520 -	Comment Type E various values of e	Comment Status D excess bw are supported.		
Zion Shohet	Infineon	L 1	π <u>520</u>	SuggestedRemedy			
Comment Type E replace "TBD" with "62.	Comment Status D A"			Change the senter are supported". Delete the note on	page 305, line 1.	ween 0.1 to 0.2 with	n granularity of 0.025
SuggestedRemedy Replace "TBD" with "62	2A".			Proposed Response	Response Status O		
Proposed Response	Response Status 0						

C/ 62 SC 62.5.5	P 309	L 22	# 939	C/ 62 SC 62.5.6.1	I P310	L 35	# 940
Barrass, Hugh	Cisco Systems			Barrass, Hugh	Cisco Systems	i	
Comment Type E Typo:	Comment Status D			Comment Type T As per editor's note	Comment Status D		
OCC is written OOC				State Power Down ar removed.	nd procedure Warm Start are un	necessary opti	mizations and can be
Replace OOC with OCC	C			SuggestedRemedy			
Proposed Response	Response Status O			Remove state Power	Down and procedure Warm Sta	art from Figure	62-14
				Remove Warm Start	timeout row (row 4) from Table	62-15	
Cl 62 SC 62.5.6 Venugopal, Padmabala	P 310 InterOperability I	L 21 Labora	# 642	Proposed Response	Response Status O		
Comment Type E Inconsistent terminology consistent with EFM ter SuggestedRemedy Change EFM-O and EE	Comment Status D y. EFM-O or EFM-R is not used minology, refer them as 10PAS	d anywhere els SS-T-O and 10	e in clause 62. To be PASS-T-R	Cl 62A SC 62A.3.3 Beck, Michael Comment Type E Band plans are missi	Alcatel Comment Status D ng.	L 54	# <mark>490</mark>
Proposed Response	Response Status O			SuggestedRemedy Add reference to G.9 band plans defined th	93.1 Annex A, Annex B and Anr here. This will make 62A.3.3.2 a	nex C, or provid nd 62A.3.3.3 o	le description of the boolete.
C/ 62 SC 62.5.6.1 Barrass, Hugh	P 310 Cisco Systems	L 34	# 944	Proposed Response	Response Status O		
Comment Type T As per editor's note	Comment Status D			C/ 62A SC 62A.3.3 Beck, Michael	Alcatel	L 47	# 494
State Idle and procedur	e Warm Resume have no place	e in Ethernet.		Comment Type E "placewise linear" she	Comment Status D ould be "piecewise linear"		
Remove state Idle and	procedure Warm Resume from	Figure 62-14		SuggestedRemedy Replace "placewise"	with "piecewise".		
Remove Warm Resume Proposed Response	e timeout row (row 4) from Tabl <i>Response Status</i> 0	e 62-15		Proposed Response	Response Status O		

P802.3ah D	raft 1.3	Comments
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C/ 62A S	SC 62A.3.3.5	P 405	L 47	# 495	C/ 62A	SC T	able 62A-1	P 405	L 1	# 489
Beck, Michael		Alcatel			Beck, Mich	nael		Alcatel		
Comment Typ	be T	Comment Status D			Comment	Туре	E	Comment Status D		
Definition BJ2 and B	of the frequen 3J3.	cy steps does not correspor	nd to the frequer	ncy steps used in tables	Plan A other v	is used vay roun	with ETSI id.	masks while Plan B is us	sed with T1E1 r	nasks. It should be the
SuggestedRer	medy				Suggested	lRemedy	/			
Calculate	frequency ste	ps according to definition in	text and update	tables BJ2 and BJ3.	In the	column l	abeled PS	D Mask, align the six dat	a cells referring	to TS1 101 270 with
Proposed Res	sponse	Response Status O			G.993. A. Add	l integer	numbers in	ne six data cells referring n ascending order to the	column labeleld	d Profile Number.
					Proposed I	Respons	se	Response Status 0		
Cl 62A S Venugopal, Pa	SC 62A.3.3.5 admabala	P 405 InterOperabilit	<i>L</i> 48 ty Labora	# 645		~~~~				"
Comment Typ	e E	Comment Status D			C/ 62A Beck, Mich	SC T nael	able 62C1	P 407 Alcatel	L 26	# 496
In-consiste Table BJ2	ent table numl 2, Table BJ3, 1	bers. Table 62C1 are inconsistent i	in clause 62A.		Comment	<i>Type</i>	E is wrong	Comment Status D		
SuggestedRer	medy						is wrong.			
Change ta	able numbers :	and make appropriate chang	ges in the text		Suggested Chang	<i>Remedy</i> e table r	/ number into	Table 62A-4.		
1) change 2) change 3) change	Table BJ2 to Table BJ3 to Table 62C1 t	Table 62A-2 in page 406 line Table 62A-3 in page 406 line o Table 62A-4 in page 407 li bapgo Table 8 12 to Table 62	e 1 e 15 ne 26 24 2		Proposed I	Respons	Se	Response Status O		
5) In page	e 405 line 48 c e 405 line 51 c	hange Table BJ2 to Table 62 hange Table BJ3 to Table 62	2A-2 2A-3		C/ 62A	SC T	able 62C1	P 407	L 26	# 497
Proposed Res	sponse	Response Status O			Beck, Mich	nael		Alcatel		
-1					Comment	Tvpe	т	Comment Status D		
C/ 62A S	SC 62A.3.4	P 405	L	# 965	The ta 9.3.3.6	ble lists	only the ra	dio frequency bands as s	specified in ETS	SI TS 101 270, subclause
Simon, Scott		Cisco System	s, Inc.		Suggested	Remedy	/			
Comment Type	e T ad rate profile	Comment Status D	e pretty useless	The modern will	Replac	ce the ta use 9.3.	ble by a ge 3.6.1. and	neric definition of RF ba	nds and referen Clause 15.	ices to ETSI TS 101 270
retain fine subset rate	e grained contr tes to simplify	ol of datarate via Clause 45. the creation of Clause 30 ob	Clause 62A sh jects and Claus	ould specify a few e 62B guidelines	Proposed I	Respons	se	Response Status O		
SuggestedRer	medy									
Change th	ne text to restr	ict downstream and upstrear	m rates to 25, 1	5, 10, 5, 3 Mbps.	C/ 62A	SC T	able BJ2	P 406	L 1	# 492
Add a tabl	le with clause	45 register settings for each	profile for PSD	mask and bandplan.	Beck, Mich	nael		Alcatel		
Proposed Response Response Status O					Comment Table	<i>Type</i> number	E is strange.	Comment Status D		
					Suggested Chang	<i>Remedy</i> e table r	/ number into	o Table 62A-2.		
					Proposed	Respons	se	Response Status 0		

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

Page 115 of 169 C/ 62A SC Table BJ2

C/ 62A SC Table BJ3 P 406 L 14 # [493] Beck, Michael Alcatel	C/ 63 SC 63.2.1 Squire, Matt	P 317 L 14 Hatteras Networks	# 789
Comment Type E Comment Status D Table number is strange.	Comment Type E Com What is "Equation (1)" ?	ment Status D	
SuggestedRemedy Change table number into Table 62A-3.	SuggestedRemedy Clarify Equation 1 reference. M	fultiple times throughout clause. Ec	quation (1) is in 63.3.2.1?
Proposed Response Response Status O	Proposed Response Respo	onse Status O	
C/ 63 SC P L # 793 Squire, Matt Hatteras Networks	C/ 63 SC 63.2.2 Squire, Matt	P 317 L 26 Hatteras Networks	# <mark>790</mark>
Comment Type T Comment Status D T1E1.4 has recently adopted higher constellations and altered bandplans for SHDSL operation in North America. Clause 63 (and 63A and 63B) should be allowed to take advantage of these adopted constellations and PSDs.	Comment Type TR Com One of the reasons SHDSL was not say it doesn't apply. SuggestedRemedy	ment Status D s selected was because it can be re	epeatered. We should
SuggestedRemedy Propose to give the editor the freedome to supply text in support of 32PAM constellations and of the new PSDs adopted in T1E1.4.	Eliminate the statements saying Proposed Response Respo	g signal regenerators don't apply (p onse Status O	317 line 27, p318 line42).
Proposed Response Response Status O	C/ 63 SC 63.2.2	P317 L28	# 792
	Squire, Matt	Hatteras Networks	
Cravens, George Mindspeed	Comment Type TR Com	ment Status D ction $(0, 3)$ is not required ($(0, 3)$	318 54) If thats the
Comment Type E Comment Status D Reword the second and third sentences of the paragraph to remove the two occurrences of	case, then PMI discovery must as an example) "shall be impler	be optional as well. However, PAF mented."	discovery (P227, L30
some". SuggestedRemedy	SuggestedRemedy	uld be optional. (Maybe this comm	unt should be made
Change the second and third sentences of the paragraph to the following:	against Clause 61 instead?).		lent should be made
PMI Aggregation Header). The framed data is then scrambled and sent to the PMD sublayer.	Proposed Response Respo	onse Status O	
Proposed Response Response Status O	C/ 63 SC 63.3.1(e)	P318 L 42	# 266
	Jackson, Stephen	Hatteras Networks	
	Comment Type E Com	ment Status D	
	This line writes out support of L not so keen on this, are you?	ayer 1 signal regeneration, as prov And I don't recall discussing it.	ided for in G991.2 I'm
	SuggestedRemedy Strike (e).		
	Proposed Response Respo	onse Status O	

TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn Page 116 of 169 C/ 63

SC 63.3.1(e)

C/ 63 SC 63.3.2.	1 P 319	L12	# 791	C/ 63B	SC	P 413	L	# 656
Squire, Matt	Hatteras Netv	vorks		Kimpe, Mar	с	Adtran		
Comment Type T	Comment Status D			Comment T	уре Т	Comment Status D		
SHDSL (as well as V	/DSL) have very granular rates	Codepoints for	r all rates in 64Kbps	Perform	nance guidel	ines should be included for 2Bas	e-TL	
something less gran	in G994.1. Should EFM restri ular (i.e. 256Kbps increments)?	ct the potential a	achieved data rates to	Suggested	Remedy			
SuggestedRemedy				Sugges	ted draft tex	t is included in the attached file k	timpe_annex6	33B
Restrict rates for SH	DSL (and VDSL) to multiples o	f 256Kbps.		Proposed F	esponse	Response Status 0		
Proposed Response	Response Status O							
, ,	,			CI 64	SC	Р	L	# 274
CI 63 SC 63 3 2	1 P 319	14	# 657	Glen Krame	er	Teknovus		
Kimpe, Marc	Adtran	L 4	" 051	Comment 7	ype E	Comment Status D		
Comment Type TR	Comment Status D			1) Inco Ex.tran	nsistent varia smitEnable v	able naming conventions /s transmit_in_progress vs TxAllo	owed	
Clause 63 should tak using the 32-TCPAM modifications to clau	ke advantage of the 32-TCPAN I mapping agreed by ITU for G. se 63 and annex 63A to include	constellation to shdsl.bis. This o that mode. No	offer higher data rates comment proposes text te that this comment	2) Varia Ex. Tra	ible names o nsmitPendin	lon't match: g (fig 64-8) vs transmit_pending	in text and in	Fig 64-11
does not address the data rate to 3072 kbr	e use of extended bandwidths.	instead, by restr	n to that currently	Suggested	Remedy			
defined in G.991.2 (F should be given licer be added to clause 6	Feb 2001). Three modifications use to add appropriate G.994.1 as well.	are necessary. codepoints. The	In addition, the editor ose codepoints should	make n (variabl with caj	ames consis e starts with pitals)	tent with existing 802.3 docume lower case, word separation is a	nt (see clasue ichieved by st	4 for example) arting consequent parts
SuggestedRemedy				transmi	tAllowed			
Suggested modificat kimpe_clause63_32t	ions to the draft are contained	n the appended		transmi transmi	tEnabled tPending			
Proposed Response	Response Status 0			transmi etc.	tInProgress			
				Proposed F	esponse	Response Status 0		
C/ 63A SC	P 411	L	# 655					
Kimpe, Marc	Adtran			CI 64	SC	Р	L	# 654
Comment Type T Profiles should be de	Comment Status D efined for 2Base-TL.			Maislos, Ari	el	Passave		
SuggestedRemedy				Comment 7 some d	<i>ype</i> E iagrams are	Comment Status D stil not using frame		
The attached file kim	pe_annex63A contains propos	ed draft text for	that annex.	Suggested	Remedy	0		
Proposed Response	Response Status O			allow e	ditor to contir	nue conversion to frame-format		
				Proposed F	esponse	Response Status O		

C/ 64 SC	Р	L	# 271	C/ 64 SC 64.1	P 322	L 16	# 203
Glen Kramer	Teknovus			Marris, Arthur	Cadence		
Comment Type E Typos:	Comment Status D			Comment Type E "at the leave" should	Comment Status D I read "at a branch"		
page 324 line 27: "Mu page 324 line 52: "insi page 333 line 32: "spe page 338 line 18: "on"	Itipoint MAC" is called "Multi-Po tanciated" should be "instantiate eci.ed" should be "specified" should be "one"	int MAC" eve ed"	rywhere else	SuggestedRemedy Replace the text "at	the leave" with "at a branch"		
SuggestedRemedy				Floposed Response			
See comment							
Proposed Response	Response Status O			Cl 64 SC 64.1 Brown, Benjamin	P 322 AMCC	L 16	# 108
C/ 64 SC 64	P 321	L1	# 175	Comment Type E This second sentend	Comment Status D ce should refer to multiple DTEs	i	
Brown, Benjamin Comment Type TR Clause 31 is full of refet	AMCC Comment Status D erences to additional MAC Con	trol functional	ity specified in Annexes	SuggestedRemedy Replace the latter ha trees are called Opti	alf of this sentence with "and the ical Network Units (ONU)."	DTEs connect	ed at the leaves of the
SuggestedRemedy Please reconcile the v	vork in 64 without breaking 31.			Proposed Response	Response Status O		
Proposed Response	Response Status O			C/ 64 SC 64.1 Brown, Benjamin	<i>Р</i> 322 АМСС	L 24	# 109
C/ 64 SC 64.1	P 322	L 11	# 106	Comment Type E spelling	Comment Status D		
Comment Type E	Comment Status D			SuggestedRemedy replace "def-fer" with	n "defer"		
This paragraph adds r SuggestedRemedy	nothing			Proposed Response	Response Status O		
Proposed Response	Response Status O			C/ 64 SC 64.1 Marris, Arthur	P 322 Cadence	L 25	# 204
				Comment Type T The word "should" is mandatory. Also the	Comment Status D inappropriate here as it implies word "defer" is spelt incorrectly	the behaviour o	described is not
				SuggestedRemedy Reword the sentence the grant arrives, the slot."	es to read "An ONU defers trans ONU then transmits frames at	smission until its wire speed duri	s grant arrives. When ng its assigned time
				Proposed Response	Response Status O		

C/ 64 SC 64.1 Brown, Benjamin	<i>Р</i> 322 АМСС	L 4	# 107	C/ 64 SC 64.1 Jaeyeon Song	P 323 Samsung	L 8	# 437
Comment Type E PON is introduced in t	Comment Status D the next sentence. Use P2MP I	nere.		Comment Type E LLID is a Logical Linl	<i>Comment Status</i> D ID, not a Link Layer ID.		
SuggestedRemedy Replace "the PON top	pology" with "a Point to Multi-Po	oint (P2MP) me	edium"	SuggestedRemedy correct the sentence.			
Proposed Response	Response Status O			Proposed Response	Response Status O		
C/ 64 SC 64.1 Brown, Benjamin	<i>Р</i> 323 АМСС	<i>L</i> 1	# 110	C/ 64 SC 64.1 Brown, Benjamin	P 323 AMCC	L 8	# 113
Comment Type E Master, bridge port, O	Comment Status D			Comment Type E I thought LLID was L	Comment Status D ogical Link ID		
Network interface, end	d stations, slave, ONU?			SuggestedRemedy Replace "Link Layer	ID" with "Logical Link ID"		
Why do we need to m SuggestedRemedy Choose 1 (I prefer OL	ultiple names? T & ONU) and stick with it.			Proposed Response	Response Status O		
Proposed Response	Response Status O			C/ 64 SC 64.1.1 Brown, Benjamin	<i>Р</i> 323 АМСС	L 24	# 112
C/ 64 SC 64.1 Brown, Benjamin	<i>Р</i> 323 АМСС	L 11	# 111	Comment Type E Bullet a) uses P2PE	Comment Status D before descibing what the acro	nym means	
Comment Type E This paragraph adds r	Comment Status D			Replace "P2PE" with	"Point to Point Emulation (P2	PE)"	
SuggestedRemedy Remove it				Proposea Response	Response Status O		
Proposed Response	Response Status O			C/ 64 SC 64.1.1 Hirth, Ryan	P 323 Terawave Co	L 25 mmunica	# 328
Cl 64 SC 64.1 Bemmel, Vincent	P 323 Alloptic	L 8	# 736	Comment Type T Capabilites vector an longer a goal or object	Comment Status D d vendor extentions were remo ctive.	oved from the dra	aft and thus are no
Comment Type E definition of LLID is wi	Comment Status D			<i>SuggestedRemedy</i> Items e and j should	be removed as a goal.		
SuggestedRemedy replace "Link Layer Id	entifier" with "Logical Link ID"			Proposed Response	Response Status O		
Proposed Response	Response Status 0						

 TYPE: TR/technical required T/technical E/editorial Reditorial RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause
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 C/ 64
 SC 64.1.1

P802.3ah Draft 1.3 Comments C/ 64 SC 64.1.1 P 323 L 30 C/ 64 SC 64.1.2 P324 L 50 # 737 # 116 AMCC Bemmel, Vincent Alloptic Brown, Benjamin Comment Status D Comment Status D Comment Type Е Comment Type т This paragraph is used to describe the number of MACs in an OLT. It says the total Term "Negotiating" is misleading... isn't this really a disclosure? number is N+1. I was told in the January meeting that the number is 2N+1: N Unicast SuggestedRemedy MACs, N Multicast MACs and 1 Broadcast MAC. use "Disclosure" instead SuggestedRemedy Proposed Response Response Status 0 Beginning with the 3rd sentence, replace "An additional" with "This MAC is referred to as the Unicast MAC. A Multicast MAC per ONU is instantiated to support multicast transmissions to all ONUs except the one with the same LLID. Finally, one more" SC 64.1.2 P 323 C/ 64 / 46 # 114 Also, fix spelling of instanciate (should be instatiate) later in this same sentence. Brown, Benjamin AMCC Comment Status D Also, fix number of instances of MultiPoint in Figure 64-4 Comment Type Е spelling Proposed Response Response Status 0 SuggestedRemedy Replace "extention" with "extension" C/ 64 SC 64.1.2 P 325 L 1 # 821 Proposed Response Response Status 0 Lynskey, Eric UNH-IOL Comment Status D Comment Type T C/ 64 SC 64.1.2 P 323 Clause 65 states that 2N+1 MACs are supported in the OLT, a unicast and multicast for L 5 # 117 each ONU and the broadcast. Brown. Beniamin AMCC SuggestedRemedy Comment Status D Comment Type E Change N+1 to 2N+1. Add sentence to paragraph stating that "The OLT supports both a A reference to clause 65 where the filter descptions exist would be useful here unicast and multicast MAC for each ONU. SuggestedRemedy Response Status 0 Proposed Response Add reference to 65.1.3.2 at the end of this sentence. Proposed Response Response Status 0 SC 64.1.2 C/ 64 P 325 L1 # 947 Hidekazu Miyoshi Sumitomo Electric Ind C/ 64 SC 64.1.2 P 324 / 19 # 305 Comment Status D Comment Type T Ken, Murakami Mitsubishi Electric The number of MAC instances within the OLT is 2N+1 not N+1. Because there are two instances per LLID, an unicast instance and a broadcast (non unicast) instance, and there Comment Type E Comment Status D is one SCB MAC per OLT. PHY is not indicated in Figure 64-2. SuggestedRemedy SuggestedRemedy Change the expression, gN+1 h -> g2N+1 h, in line 1 of page 325 and in line 18 of PHY should be indicated like other Figures such as Figure 56-1. page 338. Proposed Response Response Status 0 Proposed Response Response Status 0

Cl 64 SC Yoshimura, Mine	C 64.1.3 oru	<i>P</i> 325 NEC	L	# 455	C/ 64 Wu, Mingy	SC 64.1.3 vei	P 325 Institute for Infe	L 39 ocomm	# 222
Comment Type "MPC_LLID	E .request"use	Comment Status D ed in clause 65 is not describ	ed in this claus	se.	<i>Comment</i> In figu	<i>Type</i> E re 64-4, Trans	Comment Status D mitProgress[1] of line 39 should	be TransmitInF	Progress[1] according to
SuggestedReme	edy				the fo Trans	lowing definition mitInProgress[on. And also the TransmitProgree [N].	ss[1] in line 43	should be
Proposed Resp	onse	Response Status O			Suggested Chang Trans	<i>dRemedy</i> ge TransmitPro mitProgress[1]	ogress[1] of line 39 into Transmit in line 43 into TransmitInProgre	InProgress[1]. ss[N].	And also change the
<i>Cl</i> 64 SC Wu, Mingwei	C 64.1.3	P 325 Institute for Inf	L 10 ocomm	# 219	Proposed	Response	Response Status 0		
Comment Type	Е	Comment Status D			CI 64	SC 64.1.3	P 325	L 42	# 221
In Figure 64	-4, the MAC	client and MAC_Control clie	nt are lost on t	op of the MAC Control	Wu, Ming	vei	Institute for Info	ocomm	
SuggestedRemo Add MAC cl Interface of	<i>edy</i> lient and MA line 12 for c	C_Control client in about line onsistency with the description	e 10 on top of th on in section 64	ne MAC Control Service 4.2 .	In figu MAC in line	re 64-4, Trans Control instand 43.	mitEnable[1] in line 42 should be ce n. The same with the Transmi	e TransmitEnat tPending[1] and	ble[N] for the Multi-point d TransmitProgress[1]
Proposed Resp	onse	Response Status O			Suggestee Chane	<i>dRemedy</i> ge TransmitEn	able[1] in line 42 into TransmitEr	able[N], chanc	e the
C/ 64 SC	C 64.1.3	P 325	L 21	# 220	Trans Trans	mitPending[1] mitInProgress[and TransmitProgress[1] in line 4	43 into Transm	itPending[N] and
Wu, Mingwei		Institute for Inf	ocomm		Proposed	Response	Response Status O		
Comment Type	E	Comment Status D							
Since in the be a frame	e following de called OMP	escription one function block surrounding the OMP functio	called OMP is n block in figur	mentioned, there should e 64-4.	C/ 64	SC 64.1.3	P 325	L 44	# 223
SuggestedRem	edy				vvu, iviingv			ocomm	
Add a sepe	rate frame w	ith a name of OMP round the	OMP function	block .	Comment	lype E	Comment Status D	and line 15 abs	auld ha "Multi naint
Proposed Resp	onse	Response Status O			MAC	Control instand	ce 1//N" for the consistency with	h that in line 20) of page 326.
					Suggestee Chang instan	dRemedy ge "Multi-point ce 1//N".	instance 1//N" in line 44 and lir	ne 45 into "Mult	ti-point MAC Control
					Proposed	Response	Response Status 0		

P802.3ah Draf	t 1.3 Comments
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C/ 64	SC 64.1.3	P 325	L 9	# 505	1
Chan Kim		ETRI			-

Comment Type T Comment Status D

In most cases, the multiple MACs in OLT will be implemented in single MAC hardware and software with LLID-awareness at points where it's needed. Really implementing multiple MAC hardware or software blocks would be unnecessary because only one MAC is activated in RX and TX at a time not to mention it is ineffective in resource utility. But to maintain classical MAC service interface with upper layer, we need separate client interfaces.

In Fig. 64-3, we already have multiple client interfaces with a single multi-point MAC control sublayer which has a conveniently merged form for many LLIDs not like multiple MAC sublayer entities in the same figure.

As we remember, representing multiple MAC entities were ony for maintaining classic MAC service interfaces upward and downward. Here are some points for wihch I think that the Fig. 64-4 does not appropriately represent real protocol nature in OLT side... not only in implementation but also in theory. By the way, the title of Fig. 64-4 should identify OLT only case.

Points to consider are

1. discovery process is not independent for LLIDs. It is common procedure for all LLIDs. LLID value is assigned from common LLID value pool and discovery gate is responded by possibly many unregistered ONUs at the same time. When having received multiple REGISTER_REQ, the OLT should process them one at a time. It's not LLID independent process but a common process.

report and gate processing is not LLID independent either. analyzing the report and assigning the gate from the usable window period should be a common process across all active LLIDs. looking at all LLIDs at the same time. Practically, in a real implementation, we cannot assign bandwidth to an ONU without looking at other ONU reports.
 Also, this picture cannot represent the case of using SCB mode (anti-LLID). If we should

have a MAC for any logical link, including SCB mode LLID(that is, LLID indicating all ONU's except amy specific ONU), we should have another N MACs. So we should have 2N+1 MACs to completely represent the case.

SuggestedRemedy

The better way to represent the situation is, as a conclusion, to think of LLID as just a parameter associated with every frame in EPON. in upstream and downstream. This LLID virtually represent the logical link but we don't need separate MACs for this purpose. Other than that, the MAC entities in the figuare no longer represent the classical MAC specified in clause 4. we have a special requrement of constant delay path in transmit and receive path. So it already different MAC. Why do we have multiple MACs which is only conceptual and not real, and why do we separate the OMP processing for separate LLIDs which is also unreal and cannot nicely explain every processing and many discrepancy with real processing?

Rather than having separate MACs and separate OMP processing for LLIDs, just having a single MAC with added service parameter LLID would be nice. It will require a modification to clause 4 MAC definition with a couple of requirements(like time delay).

We should also consider to have single OMP with the same discoveyr, report, and gate processing as already in 64.3.8, 64.3.9, 64.3.10. The OMP processing blocks are not multiply instantiated for LLIDs. but the service interface is separate or merged with added parameter of LLID. separate presentation may be needed.

Proposed Response	Response Status	0		
C/ 64 SC 64.1. Brown, Benjamin	4 P3: AMCC	26 <i>L</i> 10	#	122
Comment Type E spelling	Comment Status	D		
SuggestedRemedy Replace "indefinet	ly" with "indefinitely"			
Proposed Response	Response Status	0		
<i>Cl</i> 64 <i>SC</i> 64.1. Brown, Benjamin	4 P 32 AMCC	26 L 3	#	121
Comment Type E wrong word	Comment Status	D		
SuggestedRemedy Replace "comprise	ed" with "comprises"			
Proposed Response	Response Status	0		
C/ 64 SC 64.2	P3:	26 <i>L</i> 15	#	123
Comment Type E Wrong word	Comment Status	D		
SuggestedRemedy Replace "comprise	ed" with "comprises"			
Proposed Response	Response Status	0		
C/ 64 SC 64.2 Ken, Murakami	P 3: Mitsul	26 L 17 bishi Electric	#	306
Comment Type E Typo	Comment Status	D		
SuggestedRemedy Replace "is respor	nsible or synchronizing" w	ith "is responsible fo	r synchronizi	ng".
Proposed Response	Response Status	0		

 TYPE: TR/technical required T/technical E/editorial
 COMMENT STATUS: D/dispatched A/accepted R/rejected
 SORT ORDER: Clause, Page, Line, Subclause
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 W/written C/closed
 U/unsatisfied Z/withdrawn
 C/ 64
 SC 64.2

			P802.3ah [Draft 1.3 Co	mment	S			
C/ 64 SC 64.2	P 326	L 17	# 124	C/ 64	SC	64.2	P 326	L 25	# 226
Brown, Benjamin	AMCC			Wu, Ming	jwei		Institute for Inf	ocomm	
Comment Type E	Comment Status D			Commen	t Type	Е	Comment Status D		
wrong words SuggestedRemedy Replace "blocks is re	sponsible or" with "block is res	ponsible for"		As ca can b of lin forwa	an be see be the M/ e 25 sho arded frai	en from f AC client uld be ch mes: the	igure 64-4, the source of forward , the Flow Control function bloch nanged into: This block is resp MAC client, the Flow Control f	arded frames by ck or the OMP onsible for sele function block o	y Control Multiplexer block. So the sentence cting the source of the or the OMP block.
Proposed Response	Response Status 0			Suggeste	dRemed	ly			
				Char forwa	ige the s arded frai	entance mes: the	of into: This block is responsib MAC client, the Flow Control f	le for selecting unction block o	the source of the or the OMP block.
C/ 64 SC 64.2 Wu, Mingwei	P 326 Institute for In	L 20 focomm	# 224	Proposed	d Respor	ise	Response Status O		
Comment Type E As the Multi-point MA Control client. So the	Comment Status D C Control instance n interface whole sentence of this line sho	with both the M ould be changed	AC client and MAC d into: This block is	<i>Cl</i> 64 Brown, B	SC enjamin	64.2	<i>Р</i> 326 АМСС	L 25	# 127
instanciated for each	MAC and respective (MAC Co	ntrol/MAC) clier	nts associated with	Commen	t Type	Е	Comment Status D		
SuggestedRemedy	ntanaa of lina 20 inta. Thia hla	ak ia inatanaiata	d for each MAC and	The I	atter par	t of bulle	t d doesn't make much sense	and is unneces	sary
respective clients(MA	C Control/MAC) associated wi	th	d for each MAC and	Suggeste Rem	edRemed ove ever	<i>ly</i> vthing af	ter the colon.		
Proposed Response	Response Status O			Proposed	d Respor	ise	Response Status O		
Cl 64 SC 64.2 Brown, Benjamin	<i>Р</i> 326 АМСС	L 20	# 125	C/ 64	SC	64.2	Р 326 АМСС	L 29	# <u>128</u>
Comment Type E spelling	Comment Status D			Commen	t Type	Е	Comment Status D		
SuggestedRemedy				This	is the firs	st use of	the acronym OMP		
Replace "instanciated	d" with "instantiated"			Suggeste	edRemed	ly			
Proposed Response	Response Status O			Repl Disco	ace the c ovey, Re	pening opening opening of port and	of bullet f) with "Optical MultiPo Gate. These blocks are respon	nsible"	essing blocks, including
				Proposed	d Respor	ise	Response Status O		
C/ 64 SC 64.2 Brown, Benjamin	<i>P</i> 326 AMCC	L 23	# 126						
Comment Type E Control Parser is unn	Comment Status D ecessary - see my comment o	n Fig 64-4							
SuggestedRemedy Remove bullet C									
Proposed Response	Response Status 0								

TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn Page 123 of 169

C/ 64 SC 64.2

C/ 64 SC 64.2.1	P 326	L 33	# 129	C/ 64 SC 64.2.1	P 326 Mitsubishi Elect	L 36	# 308
Comment Type E Wrong reference SuggestedRemedy	Comment Status D			Comment Type E The referred Clause SuggestedRemedy	Comment Status D		
Replace the reference t	to 56-4 with 64-4			Replace Clause 57 w	vith Clause 65.		
Proposed Response	Response Status O			Proposed Response	Response Status O		
C/ 64 SC 64.2.1 Ken, Murakami	P 326 Mitsubishi Elect	L 33 tric	# 307	C/ 64 SC 64.2.1 Brown, Benjamin	<i>Р</i> 326 АМСС	L 36	# 132
Comment Type E The referred figure is no	Comment Status D ot updated.			Comment Type E wrong reference	Comment Status D		
SuggestedRemedy Replace Figure 56-4 wit	th Figure 64-4.			SuggestedRemedy Replace the referenc	e to Clause 57 with Clause 65.		
Proposed Response	Response Status O			Proposed Response	Response Status O		
C/ 64 SC 64.2.1 Brown, Benjamin	Р 326 АМСС	L 33	# 130	C/ 64 SC 64.2.1 Wu, Mingwei	P 326 Institute for Info	L 39 comm	# 227
Comment Type E missing word / spelling	Comment Status D			Comment Type E The sentence in line function.	Comment Status D 39 should be:a single instance	of the Contro	ol Parser/Multiplexer
SuggestedRemedy Replace "Multi-Point Co	ontrol instanses" with "Multi-Po	int MAC Contr	ol instances"	SuggestedRemedy			
Proposed Response	Response Status O			Change the sentence function.	e in line 39 into:a single instand	e of the Cont	rol Parser/Multiplexer
				Proposed Response	Response Status O		
C/ 64 SC 64.2.1	P 326	L 35	# 131				
				C/ 64 SC 64.2.1	P 326	L 45	# 133
missing word				Brown, Benjamin			
SuggestedRemedy				Clean up wording	Comment Status D		
Replace "unique MAC"	with "unique unicast MAC"			SuggestedRemedy			
Proposed Response	Response Status O			Replace "Note that th enabled transmit inte not receive and trans	ne receive enabled interface (j) is rface (i)." with "Note that the Mul smit packets associated with the s	not required t ti-Point MAC same interfac	to coincide with the Control sublayer need e at the same time."
				Proposed Response	Response Status 0		

TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn Page 124 of 169 C/ 64

SC 64.2.1

C/ 64 SC 64.2.1	P 326	L 54	# 134	C/ 64	SC 64.2.2	P 328	L 10	# 231
Brown, Benjamin	AMCC			wu, wingv		Institute for	Infocomm	
Comment Type E	Comment Status D			Comment	Type T	Comment Status D	un immut als audal la s	a st laft band side of
modified in order to pe	erform the requested MAC Contr	ol function."	elayed, discarded or	block.	64-5. transmis	sion_in_progress[1n] as a	in input should be	at left hand side of
SuggestedRemedy				Suggested	dRemedy			
Perhaps something cl	loser to this could be written here	Э.		Chang	ge transmission_	in_progress[1n] to left ha	nd side of block.	
Proposed Response	Response Status 0			Proposed	Response	Response Status O		
C/ 64 SC 64.2.1 williamsen, erica	Р 327 IOL/UNH	L 23	# 598	<i>Cl</i> 64 Brown, Be	SC 64.2.2.2 njamin	Р 328 АМСС	L 49	# 137
Comment Type E MA_DATA.indicate pr	Comment Status D			<i>Comment</i> This v	<i>Type</i> T ariable isn't used	Comment Status D in the state diagram.		
SuggestedRemedy should be changed to	MA_DATA.indication primitives			Suggested Modify	dRemedy / the description	of the "select" function to m	nention how this r	nay be used.
Proposed Response	Response Status O			Proposed	Response	Response Status O		
C/ 64 SC 64.2.1	P 327	L 33	# 135	C/ 64	SC 64.2.2.2	P 329 Oki Electric	L1	# 357
	ANICC			Raiasawa			muustry	
Comment Type E This paragraph adds	Comment Status D nothing. It is a repeat of the secc	ond paragraph	in 64.1.2	<i>Comment</i> The va	<i>Type</i> E ariable, multipoin	Comment Status D at_transmit_pending, is not	used in the state	diagram Figure 64-6.
SuggestedRemedy Remove paragraph				Suggested Remo	<i>dRemedy</i> ve multipoint_tra	nsmit_pending.		
Proposed Response	Response Status O			Proposed	Response	Response Status O		
C/ 64 SC 64.2.1	P 327	L 39	# 136	C/ 64	SC 64.2.2.2	P 329	L 1	# 235
Brown, Benjamin	AMCC			Wu, Ming	vei	Institute for	Infocomm	
Comment Type E This is a great summa	Comment Status D ary of the receive operation			Comment multip	Type E oint_transmit_pe	Comment Status D ending doesn't appear at all	in Multiplexing C	ontrol state diagram
SuggestedRemedy				Figure	: 04-0 al P330.			
Move this paragraph e	earlier, between paragraphs 4 &	5 of this section	on.	Suggester	arcemeay e multipoint trans	smit pending		
Proposed Response	Response Status O			Droposod	Reenonco	Response Status		
				Fioposed	response	Response Status U		

 TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause Page 125 of 169
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 RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 C/ 64
 SC 64.2.2.2

C/ 64 SC 64.2.2 Brown, Benjamin	2.3 <i>P</i> 329 AMCC	L 13	# 138	C/ 64 Brown, B	SC 64.2.3 enjamin	Р 330 АМСС	L 44	# 143
Comment Type E spelling	Comment Status D			Commen The c	<i>t Type</i> E control multiplexe	Comment Status D r is different for OLT and ONU	J	
SuggestedRemedy Replace "forawardir	ng" with "forwarding"			Suggeste This	edRemedy would be a good	place to mention how and why	/ they're differ	ent.
Proposed Response	Response Status O			Proposed	l Response	Response Status O		
C/ 64 SC 64.2.2 Jaeyeon Song	2.6 P 330 Samsung	L	# 439	<i>C</i> / 64 Wu, Ming	SC 64.2.3	P 332 Institute for In	L 10 focomm	# 237
Comment Type T In Figure 64-6, the frame. But, in this d	Comment Status D MAC instance is selected by se iagram, the action in the case o	elect(). This MAC	is allowed to send a not defined.	<i>Commen</i> Figur diagr	<i>t Type</i> T e 64-9. Input Las ams Figure 64-10	Comment Status D serControl is not used in Control, 11, 12.	rol Multiplexer.	. Cannot find in state
SuggestedRemedy solutions are : 1) add a condition o 2) add a loop condit	of checking the array is empty of tion in the SELECT state for the	r not before SEL case of empty a	ECT(like Draft v1.2) array(select()=NONE).	Suggeste Delet Proposed	edRemedy e input LaserCon I Response	trol. Response Status O		
Proposed Response	Response Status O			C/ 64	SC 64.2.3.1	P 332	L 27	# 144
C/ 64 SC 64.2.3 Brown, Benjamin	P 330 AMCC	L 39	# 140	Brown, B <i>Commen</i> The /	enjamin <i>t Type</i> T T/R/R/ is only 3 b	AMCC Comment Status D bytes, not 6.		
Control Parser has been modified to us MA_CONTROL.req	been removed - see my comme e TransmitFrame function calls uest primitives	ent on Fig 64-4 (rather than MA <u>-</u>	Control Multiplexer has _DATA.request and	<i>Suggeste</i> Chan to inc	edRemedy lige the PCS traile clude the FEC ext	r number from 6 to 3. Or perh ension.	aps it should l	be increased if you want
SuggestedRemedy Remove all reference Modify all reference	ces to the Control Parser. s to the Control Multiplexer to u	se TransmitFrar	ne function calls rather	Proposed	l Response	Response Status O		
than MA_DATA.req Proposed Response	uest and MA_CONTROL.reque Response Status 0	st primitives		C/ 64 Brown, B	SC 64.2.3.2 enjamin	Р 333 АМСС	L 9	# 145
	, -			Commen Each the e valid	<i>t Type</i> T instance of the C ntire bus. There i at a time.	Comment Status D Control Multiplexer sees exactl s no need to talk about the fac	y one transmit ct that only one	tEnable, it does not see e bit of this bus should be
				Suggeste Remo	edRemedy ove the last line c	f this variable description.		
				Proposed	l Response	Response Status O		

SC 64.2.3.2

C/ 64 SC 64.2.3.3 P 333 L 32 # 600 C/ 64 SC 64.2.3.6 P334 L14 # 601 williamsen, erica IOL/UNH williamsen, erica IOL/UNH Е Comment Status D Comment Status D Comment Type Comment Type Ε speci.ed parameters. Figure 64-10 Page 334 SuggestedRemedy Line 14 (Length_Type ==MAC Control) specified parameters. Line 16 (Length Type ==MAC Control) Proposed Response Response Status 0 SuagestedRemedv Change == to symbol = (Alt-061) Proposed Response Response Status **O** SC 64.2.3.3 P 333 L 32 C/ 64 # 146 AMCC Brown, Benjamin Е Comment Status D C/ 64 SC 64.2.3.6 P334 L14 # 603 Comment Type williamsen, erica IOI /UNH spelling SuggestedRemedv Comment Status D Comment Type E All state diagrams should follow state diagram conventions and use list of special symbols Replace "speci.ed" with "specified" and operations. A boolean and should be represented with *. Proposed Response Response Status 0 (Length_Type==MAC Control) and (opcode not in {...}) Line 16 C/ 64 SC 64.2.3.4 P 333 L 36 (Length_Type==MAC Control) and (opcode in {...}) # 309 Ken. Murakami Mitsubishi Electric Figure 64-11 Comment Status D Comment Type Ε Page 335 Line 18 Туро MA Control.request and (opcode in {..}) SuggestedRemedy MA_Control.request and !(opcode in {...}) Replace "ot" with "or". Line 19 Proposed Response Response Status 0 MA DATA.request and IMA CONTROL.request Figure 64-12 Page 336 C/ 64 SC 64.2.3.4 P 333 / 39 # 599 Line 22 IOL/UNH williamsen, erica MA DATA.request(DA,SA,m sdu) and !MA CONTROL.request(..... Comment Type E Comment Status D 64.3.7.6 Control Parser ot Figure 64-14 SuggestedRemedy Page 342 Line 15, 28,29 (Master and me==broadcast ID) Control Parser or (opcode==GATE) and (FLAG==Normal gate) Proposed Response Response Status 0 ((opcode ==GATE) and (FLAG==Discovery gate)) SuggestedRemedy In all cases replace and with * (Alt-042) Proposed Response Response Status 0

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williamsen, erica IOUNH Ken, Murakami Misubaki Electric Comment Status D Figure 64-10 MAC Control not defined Suggested/Fremdy In 64:2.3.1 Constants, add constants MAC control of the looking or sets should be added. Proposed Response Tests and D Figure 64-10 Mac Control NUT to TRANSMIT READY. Suggested/Fremdy Control of the looking or sets should be added. Control NUT to TRANSMIT READY. Suggested/Fremdy Figure 64-10 (control not in (ATE_REPORT.REGISTER Proposed Response Response Status O Ci 64 SC 64.2.3.6 P 336 L 1 # [31] Figure 64-10 Suggested/Fremdy Ci 64 SC 64.2.3.6 P 336 L 1 # [31] Figure 64-10 Suggested/Fremdy Ci 64 SC 64.2.3.6 P 336 L 1 # [31] Figure 64-10 Suggested/Fremdy Ci 64 SC 64.2.3.6 P 336 L 1 # [31] Figure 64-10 Suggested/Fremdy Ci 64 SC 64.2.3.6 P 336 L 1 # [31] Figure 64-12 Suggested/Fremdy Ci 64 SC 64.2.3.6 P 336 L 1 # [31] Figure 64-12 Suggested/Fremdy Ci 64 SC 64.2.3.6 P 336 L 1 # [31] Figure 64-12 Suggested/Fremdy Ci 64 SC 64.2.3.6 P 336 L 1 # [31] Figure 64-12 Suggested/Fremdy Ci 64 SC 64.2.3.6 P 336 L 1 # [31] Figure 64-12 Suggested/Fremdy Suggested/Fremdy Ci 64 SC 64.2.3.6 P 336 L 1 # [31] Figure 64-12 Figure 64-12 Figure 64-12 Figure 64-12 Figure 6	CI 64	SC 64.2.3.6	P 334	L 14	# 602	C/ 64	SC	64.2.3.6	P 335	L 1	# 310
Comment Type T Comment Status D Figure 64-1 MAC Control not defined Suggested/Remedy In 64.2.31 Control ALTA 'Srey in SIGNAL DATA 'The following cases should be added The following cases should be added 'The following cases should be added 'The solution of the length type field as defined in Clause 31.4.1.3. 'Type:''integri DEFAULT VALUE: Bool Proposed Response Response Status D Figure 64-1 'Comment Type E Comment Status D Figure 64-1 '' the solution of the length type field as defined in Clause 31.4.1.3. 'Type:''integri DEFAULT VALUE: Bool Proposed Response Response Status D Figure 64-10 (opcode not in (CATE_REPORT_REGISTER '''ALTA 'Srey in SIGNAL CONTROL ''''.'.'.'.'.'.'.'.'.'.'.'.'.'.'.'.	williamsen,	erica	IOL/UNH			Ken, Murak	ami		Mitsubishi Elec	tric	
Figure 64-10 MAC Control on defined Figure 64-10 More than one request primitives will arrive at the Control Multiplexer while the state transis from NIT to TRANSMIT FEADY. Suggested/Remedy In 64.2.3.1 Constaints, add constants: MAC Control The value of the length type field as defined in Clause 31.4.1.3. TYPE: integer MAC Control The value of the length type field as defined in Clause 31.4.1.3. TYPE: integer MAC Control The value of the length type field as defined in Clause 31.4.1.3. TYPE: integer MAC Control The value of the length type field as defined in Clause 31.4.1.3. TYPE: integer MAC Control MAC Control Control The value of the length type field as defined in Clause 31.4.1.3. TYPE: integer Suggested/Remedy Cl 64 SC 64.2.3.6 P 334 L 15 # 604 Cl regers 61.0 IULNH If the sequential primitive is MA, DATA request, state transits to SIGNAL DATA. If the sequential primitive is MA, DATA request, state transits to SIGNAL DATA. Figure 64.10 If the sequential primitive is MA, DATA request, state transits to SIGNAL DATA. If the sequential primitive is MA, DATA request, state transits to SIGNAL DATA. Suggested/Remedy charge 64.0 If the sequential primitive is MA, DATA request, state transits to SIGNAL DATA. If the sequential primitive is MA, DATA request, state transits to SIGNAL DATA. Proposed Response Response Status 0 If the sequential primitive is MA, DATA request, state transits to SIGNAL DATA. Suggested/Remedy transe tor (oort in Acting Tabe)	Comment 7	Гуре Т	Comment Status D			Comment T	Гуре	т	Comment Status D		
SuggestedRenergy In 64.2.3.1 Constants, add constants: In 64.2.3.1 Constants, add constants: MAC Control The value of the length type field as defined in Clause 31.4.1.3. Type: integer TYPE: integer BEFAULT VALUE: 8808 Proposed Response Response Status O Integer CI 64 SC 64.2.3.6 P334 L15 # [804 Williamsen, erica IOL/UNH B04 Control on the log reaction of the existence of sequential request primitives and metabolis to SIGNAL CONTROL. Great A SC 64.2.3.6 P334 L15 # [804 Williamsen, erica IOL/UNH Figure 64-10 (opcode not in (SATE, REPORT, REGISTER The (not in) should be replaced with the symbol that indicates nonmembership. SuggestedRenergy Ci 64 SC 64.2.3.6 P336 L1 # [312] SuggestedRenergy change to (pocode (ALT-0207) (GATE, REPORT, REGISTER Response Status O Ci 64 SC 64.2.3.6 P336 L1 # [312] SuggestedRenergy sizeo((m_sdu)+tail_guard-cremaining_time is wong. SuggestedRenergy sizeo(11, signing, signin	Figure MAC C	64-10 ontrol not define	ed			Figure More th	64-11 nan or	ne request p	primitives will arrive at the Co	ntrol Multiple	exer while the state
In 64.2.3.1 Constants, add constant: MAC Control The value of the length type field as defined in Clause 31.4.1.3. TYPE: mteger DEFAULT VALUE: 8808 Proposed Response Response Status O CI 64 SC 64.2.3.6 P 334 L 15 # Igod Williamsen, erica IOL/UNH Comment Type E Comment Status D Figure 64-10 (opcode not in (GATE,REPORT,REGISTER Proposed Response Response Status O CI 64 SC 64.2.3.6 P 336 L 1 # J31 Comment Status D Figure 64-10 (opcode not in (GATE,REPORT,REGISTER Proposed Response Response Status O CI 64 SC 64.2.3.6 P 336 L 1 # J31 Comment Type I Comment Status D Figure 64-10 (opcode not in (GATE,REPORT,REGISTER Proposed Response Status O CI 64 SC 64.2.3.6 P 336 L 1 # J31 Comment Type I Comment Status D Figure 64-10 (opcode not in (GATE,REPORT,REGISTER Proposed Response Status O CI 64 SC 64.2.3.6 P 336 L 1 # J31 Comment Type I Comment Status D Figure 64-12 State framing_time is orgenese Status O CI 64 SC 64.2.3.6 P 336 L 1 # J31 Comment Type I Comment Status D Figure 64-12 State framing_time is correct. Proposed Response Status O CI 64 SC 64.2.3.6 P 336 L 1 # J31 Comment Type I Comment Status D Figure 64-12 State framing_time is correct. Proposed Response Response Status O CI 64 SC 64.2.3.6 P 336 L 1 # J31 Comment Type I Comment Status D Figure 64-12 State framing_time is correct. Proposed Response Response Status O CI 64 SC 64.2.3.6 P 336 L 1 # J31 Comment Type I Comment Status D Figure 64-12 State framing_time is not specified. The definition of remaining_time is not specified. The update process of remaining_time is not specified. The update process of remaining_time is not described. Suggested/Remedy State process of r	Suggested	Remedy				transits	Trom		ANSMIT READY.		
MAC Control The value of the length type field as defined in Clause 31.4.1.3. TYPE: integer DEFAULT VALUE: 8008 Proposed Response Response Status 0 Cl 64 SC 64.2.3.6 P334 L15 # [04 Cl 64 SC 64.2.3.6 P336 L1 # [312 Cl 64 SC 64.2.3.6 P336 L1 # [312] Cl 64 SC 64.2.3.6 P336 L1 #	ln 64.2	.3.1 Constants,	add constant:			Suggestedi	Reme	dy 1 cases sho	uld be added		
Proposed Response Response Status O Cl 64 SC 64.2.3.6 P 334 L15 # 604 Cl 64 SC 64.2.3.6 P 334 L15 # 604 Cl 64 SC 64.2.3.6 P 334 L15 # 604 Cl 64 SC 64.2.3.6 P 334 L15 # 604 Comment Type E Comment Status D Figure 64-10 If the sequential primitive is MA_CONTROL-request, state transits to SIGNAL CONTROL. Copcode not in (GATE_REPORT.REGISTER The (not in) should be replaced with the symbol that indicates nonmembership. SuggestedRemedy Cl 64 SC 64.2.3.6 P 336 L1 # 312 SuggestedRemedy change to (opcode (ALT-0207) (GATE_REPORT.REGISTER Narakami Mitsubish Electric Proposed Response Response Status O O Cl 64 SC 64.2.3.6 P 336 L1 # 312 SuggestedRemedy change to (opcode (ALT-0207) (GATE_REPORT.REGISTER SuggestedRemedy	MAC C The TYF DEF	control value of the len PE: intege FAULT VALUE:	gth type field as defined in Clar er 8808	use 31.4.1.3.		- MA_D - MA_D - MA_C After tr	DATA. DATA. DATA. CONTI ansmi	request eve request eve ROL.request itting frame.	ent at SIGNAL DATA ' Stay in ent at SIGNAL CONTROL ' Si st event at SIGNAL CONTRO , the existence of sequential r	SIGNAL DA tay in SIGNA L ' Stay in S request primi	ATA AL CONTROL IGNAL CONTROL itives should be checked.
CI 64 SC 64.2.3.6 P334 L15 # [604] Williamsen, erica IOL/UNH In the sequential primitive sites, state transits to SIGNAL CONTICUE. Comment Type E Comment Status D Figure 64-10 (opcode not in (GATE,REPORT,REGISTER The (not in) should be replaced with the symbol that indicates nonmembership. SuggestedRemedy Cl 64 SC 64.2.3.6 P336 L1 # [312] SuggestedRemedy change to (opcode (ALT-0207) (GATE,REPORT,REGISTER Proposed Response Response Status D Proposed Response Response Status O Cl 64 SC 64.2.3.6 P 336 L1 # [312] SuggestedRemedy sizeo((m, sdu)+tail.guard>-remaining_time is wrong. Suggested(m.sdu)+tail.guard>-remaining_time is correct. Proposed Response Response Status O Cl 64 SC 64.2.3.6 P 336 L1 # [311] Cl 64 SC 64.2.3.6 P 336 L1 # [311] The definition of remaining_time is not specified. The update process of remaining_time is not specified. The update process of remaining_time is not specified. The update process of remaining_time is not specified. The update process of Response Response	Proposed F	Response	Response Status O			followin - If the	ing to ig stat seque	the existen te transition ential primiti	ice of sequential request prim i should be enforced. ive is MA_DATA.request, stat	te transits to	e type of primitive, the SIGNAL DATA.
Figure 64-10 (opcode not in (GATE,REPORT,REGISTER The (not in) should be replaced with the symbol that indicates nonmembership. SuggestedRemedy change to (opcode (ALT-0207) (GATE,REPORT,REGISTER Proposed Response Response Status O Cl 64 SC 64.2.3.6 P.336 L1 # [312] Comment Type T Comment Status D Figure 64-12 sizeof(m_sdu)+tail_guard>remaining_time is wrong. SuggestedRemedy sizeof(m_sdu)+tail_guard<=remaining_time is correct. Proposed Response Response Status O Cl 64 SC 64.2.3.6 P.336 L1 # [312] Figure 64-12 SiggestedRemedy SuggestedRemedy The update process of remaining_time is not described. SuggestedRemedy The update process of remaining_time should be added in Figure 64-12. After transmitting frame, remaining_time should be added in Figure 64-12. After transmitting frame, remaining_time should be added in Figure 64-12. After transmitting frame, remaining_time should be added in Figure 64-12. After transmitting frame, remaining_time should be added in Figure 64-12. After transmitting frame, remaining_time should be added in Figure 64-12. After transmitting frame, remaining_t	Cl 64 williamsen.	SC 64.2.3.6 erica	<i>P</i> 334 IOL/UNH	L 15	# 604	- If no s	seque	ntial primitiv	ve exists, state transits to INI	Γ.	IS IS SIGNAL CONTROL.
(opcode not in (GATE,REPORT,REGISTER The (not in) should be replaced with the symbol that indicates nonmembership. SuggestedRemedy change to (opcode (ALT-0207) (GATE,REPORT,REGISTER Proposed Response Response Status 0 Figure 64-12 C/ 64 SC 64.2.3.6 P.336 L1 # <u>312</u> SuggestedRemedy sizeof(m_sdu)+tail_guard>=remaining_time is wrong. SuggestedRemedy sizeof(m_sdu)+tail_guard<=remaining_time is correct. Proposed Response Response Status 0 C/ 64 SC 64.2.3.6 P.336 L1 # <u>312</u> SuggestedRemedy sizeof(m_sdu)+tail_guard<=remaining_time is correct. Proposed Response Response Status 0 C/ 64 SC 64.2.3.6 P.336 L1 # <u>311</u> SuggestedRemedy sizeof(m_sdu)+tail_guard<=remaining_time is not specified. The update process of remaining_time is not specified. The update process of remaining_time is not described. SuggestedRemedy The definition of remaining_time is not described. SuggestedRemedy The definition of remaining_time is not described. SuggestedRemedy The update process of remaining_time should be added in section 64.2.3.2. The update process of remaining_time should be added in Figure 64-12. After transmitting frame, remaining_time should be updated. Proposed Response Response Status 0	Comment 7	Гуре Е 64-10	Comment Status D			Proposed F	kespol	nse	Response Status O		
The (not in) should be replaced with the symbol that indicates nonmembership. SuggestedRemedy change to (opcode (ALT-0207) (GATE,REPORT,REGISTER Proposed Response Response Status O Figure 64-12 sizeof(m_sdu)+tail_guard<=remaining_time is correct. Proposed Response Response Status O C/ 64 SC 64.2.3.6 P336 L1 # 311 Comment Type T Comment Status D Figure 64-12 The definition of remaining_time is not specified. The update process of remaining_time is not specified. The definition of remaining_time is not specified. The definition of remaining_time is not specified. The definition of remaining_time is not described. SuggestedRemedy The definition of remaining_time should be added in Figure 64-12. After transmitting frame, remaining_time should be updated. Proposed Response Response Status O	(opcod	e not in {GATE,I	REPORT,REGISTER			Cl 64	SC	64.2.3.6	P 336	L 1	# 312
SuggestedRemedy change to (opcode (ALT-0207) (GATE,REPORT,REGISTER Proposed Response Response Status O SuggestedRemedy sizeof(m_sdu)+tail_guard>=remaining_time is wrong. SuggestedRemedy sizeof(m_sdu)+tail_guard>=remaining_time is correct. Proposed Response Response Status O C/ 64 SC 64.2.3.6 P 336 L 1 # 311 Comment Type T Comment Status D C/ 64 SC 64.2.3.6 P 336 L 1 # 311 Mitsubishi Electric Comment Type T Comment Status D Figure 64-12 The definition of remaining_time is not specified. The update process of remaining_time is not described. SuggestedRemedy The update process of remaining_time should be added in Figure 64-12. After transmitting frame, remaining_time should be updated. Proposed Response Response Status O	The (no	ot in) should be r	replaced with the symbol that ir	ndicates nonme	mbership.	Ken, Murak	ami		Mitsubishi Elec	tric	
Proposed Response Response Status O SuggestedRemedy sizeof(m_sdu)+tail_guard<=remaining_time is correct.	Suggested	Remedy to (opcode (AL	T-0207) {GATE,REPORT,REG	ISTER		Comment 7 Figure (sizeof(r	<i>ັype</i> 64-12 ກ sdເ	T u)+tail quar	Comment Status D		
Proposed Response Response Status O Cl 64 SC 64.2.3.6 P 336 L 1 # 311 Ken, Murakami Mitsubishi Electric Comment Type T Comment Status D Figure 64-12 The definition of remaining_time is not specified. The update process of remaining_time is not described. SuggestedRemedy SuggestedRemedy The definition of remaining_time should be added in section 64.2.3.2. The update process of remaining_time should be updated. Proposed Response Response Status O	Proposed F	Response	Response Status O			Suggested sizeof(r	– R <i>eme</i> n_sdu	/ dy u)+tail_guar	rd<=remaining_time is correc	t.	
Cl 64 SC 64.2.3.6 P 336 L 1 # [311] Ken, Murakami Mitsubishi Electric Comment Type T Comment Status D Figure 64-12 The definition of remaining_time is not specified. D The update process of remaining_time is not described. SuggestedRemedy The definition of remaining_time should be added in section 64.2.3.2. The update process of remaining_time should be added in Figure 64-12. After transmitting frame, remaining_time should be updated. Proposed Response Response Status O						Proposed F	Respo	nse	Response Status O		
Comment Type T Comment Status D Figure 64-12 Figure 64-12 The definition of remaining_time is not specified. The update process of remaining_time is not described. SuggestedRemedy The definition of remaining_time should be added in section 64.2.3.2. The update process of remaining_time should be added in Figure 64-12. After transmitting frame, remaining_time should be updated. Proposed Response Response Status O						C/ 64 Ken, Murak	SC ami	64.2.3.6	P 336 Mitsubishi Elec	L 1	# 311
SuggestedRemedy The definition of remaining_time should be added in section 64.2.3.2. The update process of remaining_time should be added in Figure 64-12. After transmitting frame, remaining_time should be updated. Proposed Response Response Status O						Comment 7 Figure (The def The up	<i>Type</i> 64-12 finitior date p	T n of remaini process of r	Comment Status D ing_time is not specified. emaining_time is not describe	ed.	
frame, remaining_time should be updated. <i>Proposed Response Response Status</i> O						Suggested The de The up	Reme finitior date p	<i>dy</i> n of remaini process of r	ing_time should be added in emaining_time should be add	section 64.2. Jed in Figure	.3.2. ∋ 64-12. After transmitting
						trame, Proposed F	remai Respo	ning_time s nse	snould be updated. Response Status O		

C/ 64	SC 64.2.3.6	P 336	L13	# 239	C/ 64	SC 6	64.3	P 336	L 37	# 148
Wu, Ming	wei	Institute for Info	ocomm		Brown, Be	njamin		AMCC		
Comment	Туре Т	Comment Status D			Comment	Туре	Е	Comment Status D		
Figure when	e 64-12. remainir there's enough re	ng_time is not defined anywhe emaining time to transmit the r	re. Transmiss next frame.	sion should only proceed	Figure	e 64-4 do	besn't ha	we a functional block labeled	OMP.	
Suggested Define This v TYPE DEFA	dRemedy e remaining_time ariable holds the : 16 big unsigned ULT VALUE: 00	at 64.2.3.2 P333 L26 as: time remaining for the presen d -00	t grant.		Either block Same	draw a l or chang thing for	y block ard ge the wo r line 51.	bund the OMP processing blo ording of this sentence to "Op	cks and label i tical Multi-Poir	t as the OMP functional t processing blocks".
Figure MA D	e 64-12 L12 trans ATA.request(DA	ition condition should be: ,SA,m_sdu)*(sizeof(m_sdu)+ta	ail quard <ren< td=""><td>naining time)+</td><td></td><td>ricoponi</td><td></td><td></td><td></td><td></td></ren<>	naining time)+		ricoponi				
_ Proposed	Response	Response Status O		<u> </u>	<i>Cl</i> 64 Ken, Mura	SC 6 Ikami	64.3	P 336 Mitsubishi Ele	L 50 ectric	# 313
C/ 64 Wu, Mingv	SC 64.2.3.6 wei	P 336 Institute for Infe	L 6 pcomm	# 241	Comment The re Suggested	<i>Type</i> eferred fi d <i>Remed</i>	E gure is r V	Comment Status D not updated.		
Comment Figure transn	<i>Type</i> E e 64-12. ONU ha nission_in_progre	Comment Status D s only 1 instance and no Multi ess is not needed.	plexing Contro	bl, so	Repla Proposed	ce Figur Respon	, e 56-2 w se	ith Figure 64-3. <i>Response Status</i> 0		
Suggested Delete L6: tra L26-2	dRemedy e: ansmission_in_pr 7 in 3 states: tran	ogress=false smission_in_progress=true			<i>Cl</i> 64 Brown, Be	SC 6 njamin	64.3	Р 336 АМСС	L 50	# 150
Proposed	Response	Response Status O			Comment Bad re	<i>Type</i> eference	т	Comment Status D		
Cl 64 Brown Be	SC 64.3	Р 336 АМСС	L 35	# 149	Suggested Repla	dRemedy ce the re	y eference	56-2 with 56-3 or perhaps 65	-1, I'm not sur	e which is correct.
Comment OMP	<i>Type</i> T Parser and Multir	Comment Status D	ved - see mv	comment on Fig 64-4	Proposed	Respon	se	Response Status O		
Suggested Remo	dRemedy ve all references	to OMP Parser and Multiplexe	er.		C/ 64 Wu, Mingv	SC 6 wei	64.3	P 336 Institute for In	L 50 focomm	# 242
Proposed	Response	Response Status O			Comment Claus	<i>Type</i> e re-num	E nbered.	Comment Status D Figure 56-2 wrong		
					Suggested Chang	dRemed ge to Fig	<i>y</i> ure 64-4	Ļ		
					Proposed	Respon	se	Response Status 0		

C/ 64 Glen Krame	SC 64.3.10 er	P 356 Teknovus	L	# 728	<i>Cl</i> 64 Brown, Benja	SC 64.3.10.3	<i>P</i> 359 AMCC	L 1	# 181
Comment T	<i>Type</i> T eroperability, the	Comment Status D maximum number of outstan	ding grants in	ONU should be	Comment Ty Missing	pe T a function	Comment Status D		
Suggested	Remedy the maximum n	umber of outstanding grants	= 16		SuggestedR Add min	e <i>medy</i> (A,B)			
Proposed I	Response	Response Status O	- 10		Proposed Re	esponse	Response Status O		
Cl 64 Brown Ber	SC 64.3.10	P 356	L 45	# 178	C/ 64 Brown, Benja	SC 64.3.10.3	<i>P</i> 359 AMCC	L 3	# 182
Comment 7	<i>Type</i> E uppercase	Comment Status D			<i>Comment Ty</i> Some fu	pe E nctions have ty	Comment Status D pes in front of their names:		
Suggested Replac	Remedy e "achieved, Tra	nsmission" with "achieved, tra	ansmission"		boolean element	empty(list) structure min_e	extract(field,list)		
Proposed I	Response	Response Status O			SuggestedR Remove	e <i>medy</i> these types be	fore the function names.		
C/ 64 Brown, Ber	SC 64.3.10.2	<i>Р</i> 358 АМСС	<i>L</i> 1	# 179	Proposed Re	esponse	Response Status O		
Comment T Specify	<i>Type</i> T / in each variable	Comment Status D e if if is used by ONU, OLT or	both		C/ 64 Wu, Mingwei	SC 64.3.10.4	P 359 Institute for In	L 36 focomm	# 240
Suggested Add the	<i>Remedy</i> e type that the va	riable is used by.			Comment Ty The peri 354. Sug	pe E odic_timer in lin Igest changing	Comment Status D te 36 of page 359 is confusir it into gate_periodic_timer in	ig with that defi dicating it is us	ined in line 39 of page sed only for gate
Proposed I	Response	Response Status O			processi SuggestedR	ng. e <i>medy</i>			
Cl 64 Brown Ber	SC 64.3.10.2	<i>P</i> 358 AMCC	L 23	# 180	Change change t	the periodic_tin hose two in line	e 15 and that one in line 11 o	o gate_periodic f figure 64-27 i	n page 361.
Comment T LaserC by othe	<i>Type</i> T Control for the OL er means but as f	Comment Status D T is always on. Tha laset may ar as this variable goes, it is	/ be disabled f always on.	or other purposes and	Floposed Re	sponse			
Suggested Replac	<i>Remedy</i> e "OLT, except v	when disabled, and" with "OLT	. For the ONL	J, LaserControl"					
Proposed I	Response	Response Status O							

C/ 64	SC 64.3.10.6	P 361	L 9	# <u>32</u> 4	C/ 64	SC 64.3.2	F	⁹ 337	L 26	# 141
Ken, Mura	kami	Mitsubishi Ele	ectric		Brown, Benja	amin	AM	CC		
Comment Figure At the	Type T e 64-27 completion of dis	Comment Status D	grant is issued	. However, the necessity	Comment Ty spelling SuggestedRe	pe E emedy	Comment Statu	is D		
Suggester	Remedy				Replace	"inteface" w	ith "interface"			
At the state.	completion of dis	covery, the OLT just starts t	he periodic_ti	ner and transits to WAIT	Proposed Re	esponse	Response Statu	s O		
Proposed	Response	Response Status O			C/ 64 Ken, Muraka	SC 64.3.3 mi	F Mits	337 Subishi Elect	L 35 tric	# 303
<i>CI</i> 64 Hirth, Ryar	SC 64.3.10.6 n	P 362 Terawave Co	<i>L</i> 37 mmunica	# 339	Comment Ty No text is	pe T s provided in	Comment Statu section 64.3.3.	is D		
Comment provisi need t	<i>Type</i> T ions should be ad to be turned off.	Comment Status D Ided to support back to back	transfers whe	re the laser does not	SuggestedRe I prepare murakan	emedy the initial te ni_p2mp_1_0	ext based on the state 0303.doc. Many com	e diagrams o ments and a	of D1.3. Pleas appropriate m	e review the file odifications are
Suggested On exi STAR	dRemedy it from START TX T TX.	, check grant_list and transi	tion to either ⁻	URN LASER ON or	Proposed Re	esponse	Response Statu	s O		
Proposed	Response	Response Status O			<i>Cl</i> 64 Brown, Benja	SC 64.3.4.2	2 F AM	9 338 CC	L 12	# 142
<i>CI</i> 64 Hirth, Ryar	SC 64.3.10.6	P 362 Terawave Co	L 6 mmunica	# 338	Comment Ty Change	pe T the heading	Comment Statu	is D		
Comment Sort fu STAR	<i>Type</i> T unction does not w T TIMER occurs,	Comment Status D vork. If an earlier grant is re then the grant will expire be	ceived after th fore it is sent.	e transition to the SET	SuggestedRe Replace	e <i>medy</i> "Single copy	/ bradcast suppport"	with "Multica	ast and single	copy broadcast support"
Suggested Remo	<i>dRemedy</i> ve the grant_start	timer and compare to gran	local time.	Also, add text descibing the use of the Multicast MAC. At the end of the second sentence in this subclause, replace "the SCB support is introduced. At the OLT on of the MACs is marked as " with " the multicast and sch support is introduced. Each unicast MAC has a						
Proposed	Response	Response Status O	corresponding multicast MAC for broadcasting traffic to all ONUs except the one associated with that MAC. In addition, one more MAC is marked as"							
					Then rep	lace "N+1" v	with "2N+1"			
					Proposed Re	esponse	Response Statu	s O		

C/ 64 SC 64.3.4.2 Ken, Murakami	P 338 Mitsubishi Elec	<i>L</i> 18 tric	# 314	Cl 64 S Brown, Benjam	C 64.3.4.2	<i>Р</i> 338 АМСС	L 22	# 152
Comment Type E Typo	Comment Status D			<i>Comment Type</i> The details generation	T at this level of the MPC_	Comment Status D are descibed in Clause 65. LLID service primitives used	The text here sh d by Clause 65.	ould only refer to the
Replace "on of the MA	Cs" with "one of the MACs".			SuggestedRem	ledy			
Proposed Response	Response Status O			Replace thi	s text with a	full description of the MPC_	LLID service pri	mitive.
				Proposed Resp	oonse	Response Status 0		
C/ 64 SC 64.3.4.2 Brown, Benjamin	<i>Р</i> 338 АМСС	L 20	# 151	Cl 64 Si Brown Benjam	C 64.3.4.3	P 338	L 32	# 154
multicast MACs as we connected to? I haven MACs. If this protocol packets transmitted th SuggestedRemedy	II) should not be connected to a 't seen anywhere in this protoco doesn't describe it and they car rough them?	an 802.1D bridg bl that controls n't connect to a	ge port, what are they transmissions to these bridge port, how are	For the pur and bullets its packet b this standa SuggestedRem	poses of this e & f? I undo out any descu rd. nedy	s clause, what is the difference erstand that applications ma ription of this should be left fo	ce between bulle y want to know or the text book:	ets a & c, bullets b & d which MAC to use for s and not be a part of
Remove this sentence	or descibe where the transmitt	ed packets co	me trom.	All of this s	ubclause sho	ould be combined into a sect	tion that descibe	es the MPC_LLID
Proposed Response	Response Status O			primitive. Proposed Resp	oonse	Response Status 0		
C/ 64 SC 64.3.4.2 Glen Kramer	P 338 Teknovus	L 22	# 277	C/ 64 S Brown, Benjam	C 64.3.4.3 in	<i>Р</i> 338 АМСС	L 42	# 153
Comment Type T "sets mode parameter SuggestedRemedy Exchange order of sub Add cross ref to clause	Comment Status D to 1" - mode parameter and LL oclauses 64.3.4.2 and 64.3.4.3 e 65	ID structure is	not explained yet.	Comment Type According t the same s SuggestedRem	E to the style g ubclause. It nedy	Comment Status D juideline, you can't start a nu makes it too hard to reference	mbered/lettered ce a particular li	l list over again within st item
Proposed Response	Response Status O			rework this Proposed Resp	subclause oonse	Response Status O		

CI 64	SC 64 3 4 3	D 339	/ 44-47	# 049		<u>.</u>	64344	D 3 2 9	/ 19	# 220 -
Hidekazu I	Viyoshi	Sumitomo El	ectric Ind	# 1940	Hirth, F	yan 30	J7.J.4.4	F 330 Terawave Co	ommunica	# J29
Comment	Type T	Comment Status D			Comme	ent Type	т	Comment Status D		
It woul the ON broadd 380), t other h	Id be easier to un NU, if one sentend cast LLID h is ad hree conditions o hand, in clause 64	derstand the conditions of the ce such as gaccept if the r lded. Because on one hand, f filtering incoming frames a 4, only two conditions are de	ne rules for filterin node-bit is one ar in clause 65 (line t the ONU are nic scribed. Although	g incoming frames at d the LLID is the 22 through 24, page ely described, on the the expression in	Thi val S <i>ugges</i> Ad	e diagram ues shoul tedReme d diagram	from the b d be addec <i>dy</i> and descr	aseline proposal showing th to the draft. iption.	ne calculation of	the delay compensation
clause follow	for many readers	proper condition, the expres	sion in clause 65	s much easier to	Propos	ed Respo	nse	Response Status O		
Suggested	Remedy									
Chang If mod frame.	e sentence b) as e-bit is one and th	follows. ne LLID is not this ONU, or t	he LLID is the bro	oadcast LLID- Accept						
Proposed	Response	Response Status O								
<i>CI</i> 64 Hirth, Ryar	SC 64.3.4.4	P 338 Terawave Co	L 49 mmunica	# 331						
Comment	Type TR	Comment Status D								
A timir delay period	ng model of the sy variation of no mo ically reset by the	ystem is not defined. P338 ore than 32 bit times" conflic OMP functional block"	L54 states an ON ts with P339 L9 L	IU "shall maintain a ocal_time "is						
32 bit referei bit win timest	times implies that nce in the MPCP dow would be ne amp would have t	the ONU would have to have messages. Since the time at to impossible. The jitter to to be defined.	ve a PLL to lock to quata are in 16-bit ansfer function fo	o the downstream time times, meeting a 32 r the MPCP	e					
Local_ for in t messa betwee 250 by	time being set by he guard time of tage. If the maxim en clocks, then th te times.	the OMP implies that the c the OLT. The ONU will sim um time between messages e clock delta between ONU	locking difference oly correct its time is defined as 10 and OLT may be	will be compensated on each MPCP nS, with 200ppm delt as large as 2uS or	a					
Suggested	Remedy									
The po descri	ortion of the guard bing the clocking	d window alloted for ONU tin references should be descio	ne variance must ded on and added	be defined. A model to the specification.						
Proposed	Response	Response Status O								

C/ 64	SC 64.3.4.4	P 338	L 51	#	716

Nokia

Pietilainen, Antti Comment Type

T Comment Status D

In last meeting it was agreed that processing delay of ONU is embedded in RTT by setting time stamp in report message as

time stamp = local time - processing delay

instead of

time stamp = local time

This solves some problems indicated earlier but also creates new ones. The main problem is delay jitter. The largest delay that packets will face is just after a registration period has occurred. Embedding processing delay in RTT will cause that the difference between maximum and minimum anticipated processing delay of an unregistered ONU has to be added to the length of registration period. The maximum is specified currently to 20 microseconds and the minimum is not specified resulting in an uncertainty of 20 microseconds. The effect is emphasized in a short length EPON where, in a steady state situation, registration window has been otherwise shortened to a minimum.

Another problem caused by the decision is that measuring fiber length with adequate accuracy using RTT value would not be possible anymore unless all ONUs support MIB variables which indicate the processing delay of each ONU. The capability of being able to create a one-dimensional topology view of the two-to-three-dimensional reality may prove to be an important competitive advantage of EPONs. Having to add higher layer functionalities to support this is an unnecessary complication in a device that should be of very low cost.

SuggestedRemedy

Use method where

time stamp = local time

The proposed method is probably more efficient than was agreed in last meeting in most cases. However, if only fast ONUs are allowed in a network, only few ONUs are allowed for achieving fast cycle time, the network is small in physical dimensions, and fast dynamic bandwidth allocation is used, the method agreed in last meeting would provide lower delays. However, the efficiency in majority of cases should not be compromized for achieving better performance in more rare cases.

If the proposed system is accepted, the problems indicated earlier have to be solved. The inevitable processing delay for interpreting gate messages has to be specified. In addition, the correspondence between time stamp and local time value has to be specified.

Proposed amendments into suitable places are as follows

Specifying effect of maximum processing delay: Grant start time value given in a gate message shall be larger than the time stamp by more than 20 microseconds. (It may be agreed to shorten this time if 20 microseconds is assumed to be more than enough) Specifying correspondence between time stamp and local time values:

Interpretation of receive and launch times

The moment when a time stamp is received by an implemented Ethernet stack is specified as the time when the leading edge of the first bit of the time stamp arrives in the stack.

The moment when a time stamp is sent by an implemented Ethernet stack is specified as the time when the leading edge of the first bit of the time stamp leaves the stack.

Specification of allowed deviations

a) The value of the local time of an ONU, upon setting a new time, shall be similar to the time of a clock that has been set to the time stamp value exactly when the corresponding time stamp was received. The maximum allowed deviation is 32 bit times.

b) Time stamp in a message sent by an ONU shall represent the local time of the ONU at the moment the time stamp is sent with a maximum deviation of 32 bit times.

The sum of the deviations given in a) and b) may not vary more than 32 bit times from occasion to occasion in the same device to ensure that variation of RTT measurement is not more than 32 bit times.

Proposed Response Response Status **O**

C/ 64	SC 64.3.4.4	P 338	L 54	# <u>359</u>	
Karasawa	a, Satoru	Oki Electric I	ndustry		

Comment Type T Comment Status D

While the draft says that a delay variation specification is no more than 32 bit times, the frequency is not specified. This causes the misunderstanding of the specification.

SuggestedRemedy

Add the frequnecy (or bit rate) to the sentence.

Proposed Response Response Status **O**

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

Page 134 of 169 C/ 64 SC 64.3.4.4

C/ 64	SC (64.3.4.4		P 339	L 1	#	278		C/ 64	SC	64.3.6		P 339	L 27	# 279
Glen Kramer	r		Те	eknovus					Glen Krame	er			Teknovus		
Comment Ty	/pe	т	Comment Sta	tus D					Comment T	Гуре	т	Commer	nt Status D		
"An OLT is capab techniqu This is a and it sh arrival ar	shall ble of c les." confu nould b nd gra	disregard a compensatir using statem be described ant start time	ny delay occu ng for its proce nent. Either ON d in the draft, c e.	ring by proce essing delay NUs should u or OLT shoul	essing in the ON using buffering use Ryan's com Id allow at least	IU assum and look a pensation 20 us bet	ing the ONU ahead technique ween GATE		The pro Exampl a = FF- b = 00-	ovided le: ·FF-FF 00-00	I descriptio F-FE -01	n for time c	omparison doesi	n't work	
SuggestedR	emed	y							(b-a) =	00-00	-00-03				
Modify the	his sta	itement as f	ollowing:						It return	ns MS	B = 0 so (a	a < b) return	s false, yet b is 3	3 TQ larger than	a.
"OLT mu of the gr Grant[i].	ust en ant. Ir StartT	sure that the other word ïme - Times	ere is at least 2 s, in any GAT stamp >= 1250	20 us interva E message f) for each i (?	al between GAT the following co 1250 TQ = 20 u	E arrival a ndition sho s)"	nd beginning ould hold:]	Suggested The foll	R <i>eme</i> lowing duce '	<i>dy</i> g approach "time horiz	will work	nt which tells how	v far into the futu	ure the schedule may
Proposea Re	espon	se i	Response Stat	tus U					exist 2. (a <	b) is e	equivalent t	to the (b-a <	time_horizon)		,
<i>Cl</i> 64 Hirth, Ryan	SC (64.3.4.4	Te	P 339 erawave Cor	L 1 mmunica	#	330		Proposed F	Respo	nse	Response	e Status O		
Comment Ty Descript	/pe tion of	T the process	<i>Comment Sta</i> sing delay com	ntus D Inpensation o	f the ONU is we	ak.			<i>Cl</i> 64 Brown, Ben	SC ijamin	64.3.6		P 339 AMCC	L 29	# 155
SuggestedR Add diag delay is	e <i>med</i> gram f comp	y rom hirth_p; ensated for.	2mp_1_0103.p	odf page 3 a	nd description c	of how ON	U processing)	Comment 7 spelling	Гуре Э	E	Commer	nt Status D		
Proposed Re	espon	se l	Response Sta	tus O					Suggestedl Replace	Reme e "arro	<i>dy</i> ound" with	"around"			
									Proposed F	Respo	nse	Response	e Status O		
								1	Cl 64 Brown, Ben	SC ijamin	64.3.6		Р 339 АМСС	L 30	# 156
									Comment 7 I'm con a is less someth	<i>Type</i> Ifused s than Iing is	E by the def b but acco reversed	Comment inition of a ording to the	nt Status D b. If a = 0002 an e description, the	d b = 0003, b - a answer returne	a = 0003 - 0002 = 0001. d is false. I think
									Suggestedl Either o	Re <i>me</i> descril	<i>dy</i> be this as №	MSB(a-b) ດເ	r reverse the "tru	e" and "false" la	bels.
									Proposed R	Respo	nse	Response	e Status O		~ ~ . ~ .

C/ 64 SC 64.3.7 P 339 L 33 # 157 Brown, Benjamin AMCC Comment Status D Comment Type Т OMP Parser and Multiplexer have been removed - see my comment on Fig 64-4 SuggestedRemedy Remove this entire subclause Proposed Response Response Status 0 C/ 64 SC 64.3.7.1 P 340 L 28 # 971 Yokomoto, Tetsuva Japan Comment Type E Comment Status D The old claus number is referred to. SuggestedRemedy Modify "Clause 57" into "Clause 65". Response Status 0 Proposed Response C/ 64 SC 64.3.7.4 P 341 L 10 # 256 Wu, Mingwei Institute for Infocomm Comment Type **T** Comment Status D

From pg 342 line 19, Figure 64-14, the omp timer definition doesn't reflect its functionality.

SuggestedRemedy

Suggest changing it to:

"This timer is used to ensure that a logical link is maintained between the associated OLT MAC instance and the ONU. If an ONU only receives discovery gate frames and not other OMP frames destined to it over a long period of time, it means that the logical link between the associated OLT MAC instance and ONU is down. This is considered a fatal fault that will generate an OMPError message which requires a hard reset to the ONU OMP functional blocks. The timeout..."

Proposed Response Response Status O

P802.3ah Draft 1.3 Comments

C/ 64	SC 64.3.7.6	P 342	2 L 19	# 243
Wu, Mingwe	¥İ	Institute	e for Infocomm	
Comment Ty Figure 6	ype E 54-14, in state U	Comment Status I PDATE TIMER, equal) condition should be	e == rather than =.
The who	ole condition is r	not easy to compreher	nd.	
SuggestedF	Remedy			
Change if !(opco	to ode==GATE)+!(F	Flag==discovery gate)		
!((opcoc	le==GATE)*(Fla	ag==discovery gate)) is	s more straight forwa	ard.
Proposed R	esponse	Response Status (D	
C/ 64	SC 64.3.7.6	P342	2 L 20	# 315
Ken, Muraka	ami	Mitsubi	shi Electric	
Comment T	ype T	Comment Status)	
Figure 6 The defi	64-14 initions of times	tamp_error and guard	_threshold are not s	pecified.
SuggestedR	Remedy			
The defi 64.3.7.2	initions of times and section 64	tamp_error and guard. .3.7.1, respectively.	_threshold should be	e added in section
Proposed R	esponse	Response Status (D	
C/ 64	SC 64.3.7.6	P 342	2 L 29	# 332
Hirth, Ryan		Terawa	ve Communica	
Comment T	ype T	Comment Status)	
The ass	ignment of a M	AC in the discovery pro	ocess should be def	ined.
SuggestedF	Remedy			
The Dis OLT Pro	covery Processi ocess Requests	ing OLT Window Setu State Machine should	p State Machine and I only exist in the bro	d Discovery Processing adcast MAC.
			•	

Processing OLT Final Registration State Machine.

Proposed Response Response Status O

			P802.3ah D	Draft 1.3 Cor	mments			
C/ 64 SC 64.3.8	B P 343	L	# 950	C/ 64	SC 64.3.8	P 343	L 26	# 158
Hidekazu Miyoshi	Sumitomo Ele	ctric Ind		Brown, Be	enjamin	AMCC		
 Comment Type T Comment Status D There is an unclear point how llids are used in MPCP messages during the discovery process. 1) The LLID value used by the Register_req message is not clear. I think we need to define gdefault LLID h, which is ALWAYS accepted by the OLT for this purpose. 2) The OLT needs to send the Gate message for allowing the ONU to send the Register_ack message. The LLID value used by this gate message is not clear. I see two possibilities. One is the gate message uses the newly assigned LLID to the ONU. This requires two constrains: a) the Gate message MUST be sent after the Register message is sent, b) the Gate message MUST reach to the ONU after the ONU successfully finishes to prepare for receiving MPCPDUs with the newly assigned LLID. The second option is that the Gate message uses the broadcast LLID. 3) The LLID value used by the Register_ack message is not clear: a newly assigned LLID or the default LLID? SuggestedRemedy Please clarify this in the text. Below is one idea for the usage of LLIDs. x) Discovery Gate: the broadcast LLID (mode=1, logical_link_id=0x7fff) or an unicast LLID. 					Type T many Discovery Pring. However, it certs to be significant of bed. dRemedy in this subclause of coordinated proce Response SC 64.3.8 enjamin Type E ng commas, spellir	Comment Status D occesses are running? Figure tainly appears as though only coordination between the N p what parts of this protocol at ss and what parts are spreat Response Status O P343 AMCC Comment Status D ng, extra space	e 64-4 shows that ly one should ex processes and the re handled by a ad out across the <i>L</i> 30	at there are N of them ist, or at least there his coordination isn't single N processes. # 1 <u>60</u>
 x) Register: the bro x) Register_req: the x) Gate for Register x) Register_ack: (m Proposed Response 	adcast LLID (mode=1, logical_lin e default LLID (mode=0, logical_lin r_ack: (mode=0, logical_link_id= node = 0, logical_link_id = a newly <i>Response Status</i> O	k_id=0x7fff) nk_id = 0x7fff) a newly assigne r assigned LLID	ed LLID))	Suggester Line 3 Line 3 "Off-lin "Off-lin	dRemedy 30: Replace "by the 34: Replace ne ONUs upon rec on ONUs upon rec	OLT which" with "by the Ol	LT, which" for the period" v	vith
C/ 64 SC 64.3.8	3 P 343 Teknovus	L	# 293	Proposed	Response	Response Status O	or the period	
Comment Type T There is no descrip LLID during registra SuggestedRemedy Add corresponding	Comment Status D tion in clause 64 explaining that th ation.	ne broadcast LL	ID is used as a default	Cl 64 Brown, Be Comment This s mention	SC 64.3.8 enjamin <i>Type</i> T section talks about on what is the resu	P 343 AMCC Comment Status D how to reduce the likelihood lit of a collision. Also, do col	L 36	# 1 <u>59</u> t would be helpful to ur at the beginning of a
Proposed Response	Response Status 0			transr and a the gr an en Suggested	nission window or Ilow it to transmit ir anularity of the bad tire packet (includi dRemedy	will one device be transmitti hto the middle of the packet ckoff such that there is plent ng all the startup delays)?	ng and another of the first devic ty of time for a s	device's back expire :e? In other words, is ingle device to transmit
				Add te	ext to this section t	hat discusses the issues rai	sed above.	

Proposed Response Response Status **0**

C/ 64	SC 64.3.8	P 343	L 40	# 316	C/ 64	SC	64.3.8	P 343	L 42	# 819
Ken, Murak	ami	Mitsubishi Elect	ric		Lynskey,	Eric		UNH-IOL		
Comment T	уре Т	Comment Status D			Comment	Туре	т	Comment Status D		
Unnece	ssary paramet	ers are described.			The p	aragra	phs dealing	g with the discovery process, a	and subseque	nt state diagrams, do
SuggestedF	Remedy				Contr	ol layer	provides t	he RS with an LLID to be use	d in the pream	ble of every frame that
Remove	e "the ONU's L	aser turn-on and turn-off param	eters".		is ser	t. How	vever, wher	n an ONU first powers up and	before it has	registered, it is not clear
Proposed R	lesponse	Response Status O			that d	o not m	natch the loss comment	bgical_link_id parameters from t seems to imply the creation	n the MPC_LL	ID.request primitive. al MAC, and I'm not sure
C/ 64	SC 64.3.8	P 343	/ 41	# 294	if this	is the b	best way to	o do this. I am proposing that	initially, all ON	IUs send frames with
Glen Krame	r	Teknovus			assoc	iate a r	new LLID v	with the source address of the	received fram	ie and send that
Comment T	ype T	Comment Status D			inforn will th	nation i en nee	n a unicast d to receiv	t frame to the ONU that conta e the frame with the default L	ins the same of ID and parse	default LLID. The ONU according to destination
"Include on and	ed in the Regis turn-off param	ter_Req message is the ONU's eters."	MAC address,	the ONU's Laser turn-	addre been	ss. It v submit	vill then us ted against	e the new LLID for future tran t Clause 65.	smissions. A	similar comment has
L acor ti	urp op and turr	off parameters are not part of I			Suggeste	dReme	dy			
since th	e values are fi	xed and known to both OLT and	ONU.	EQ message anymore,	Add to	ext here	e, or in the	appropriate location stating: '	The default va	alue of each ONU's LLID
SuggestedF	Remedy				ONU	will be	assigned a	a new LLID by the OLT."	on of a succe	ssiul registration, the
Remove	e reference to	Laser turn-on and turn-off param	neters from the	e above sentence	Proposed	Respo	nse	Response Status 0		
Proposed R	esponse	Response Status O								
					C/ 64	SC	64.3.8	P 343	L 42	# 244
					Wu, Ming	wei		Institute for Inf	ocomm	
					Comment	Туре	Е	Comment Status D		
					"The The v	OLT re	gisters the ciprocal" is	ONU, allocating LLID and s confusing.	bonding recipr	ocal MACs to LLID"
					Suggeste	dReme	dy			
					Chan	ge to b	onding "co	rresponding" MACs to LLID.		
					Proposed	Respo	nse	Response Status O		
					C/ 64	SC	64.3.8	P 343	L 46	# 161
					Brown, Be	enjamin	1	AMCC		
					Comment Acror	<i>Type</i> ym use	E ed without I	Comment Status D being described		
					Suggeste Repla	dReme .ce "OL	dy .T's AGC" v	with "OLT's Automatic Gain C	ontrol (AGC)"	
					Proposed	Respo	nse	Response Status O	. ,	
						-,				

C/ 64 SC 64.3.8 Ken, Murakami	Р 343 Mitsubishi Ele	L 46 ectric	# 317	C/ 64 Glen Kram	SC 64.3.8 ner	P 343 Teknovus	L 48	# 289
Comment Type T Unnecessary param SuggestedRemedy	Comment Status D eter is described.			Comment When REGI	<i>Type</i> T OLT sends REC STER_ACK may	Comment Status D GISTER to ONU followed by G y not be ready by the grant sta	GATE (for REGI	STER_ACK), the the limit for
Remove "and suppo	rted capabilities".			to that	t ONU.	R message, or now many time		
Proposed Response	Response Status O			Suggested Specit	<i>dRemedy</i> fy maximum pro	cessing delay for REGISTER	message at ON	U
C/ 64 SC 64.3.8 Glen Kramer	P 343 Teknovus	L 47	# 282	Proposed	Response	Response Status 0		
Comment Type T Capability vectors ar	Comment Status D			<i>Cl</i> 64 Brown, Be	SC 64.3.8 enjamin	P 343 AMCC	L 50	# 162
SuggestedRemedy Remove "Also, the C	DLT echoes the ONU's capabilit	y vector and La	ser turn-on, turn-off	<i>Comment</i> This s	<i>Type</i> E entence adds no	Comment Status D othing		
Proposed Response	Response Status O			Suggested Remo	dRemedy we the sentence	starting with "It should be not	ed"	
				Also,	in the next sente	ence, remove the third word "a	lso"	
Cl 64 SC 64.3.8 Ken, Murakami	P 343 Mitsubishi Ele	L 47 ectric	# 318	Proposed	Response	Response Status O		
Comment Type T Unnecessary param	Comment Status D eter is described.			C/ 64	SC 64.3.8	P 343 Mitoubichi Ela	L 50	# 319
SuggestedRemedy Replace the sentence grants."	e "Also, the OLT echoes Åc" wi	ith "Also, the O	T echoes the pending	Comment Unneo	<i>Type</i> T cessary sentenc	Comment Status D e is described.	CIIC	
Proposed Response	Response Status O			Suggested Since be rer	<i>dRemedy</i> the capability ve noved.	ector was removed, the senter	nce "It should be	e noted that Åc" should
				Proposed	Response	Response Status O		

			P802.3ah D	0raft 1.3 Co	mments				
C/ 64 SC 64.3. Brown, Benjamin	8 <i>P</i> 344 AMCC	L 2	# 163	<i>Cl</i> 64 Glen Krar	SC 64.3 mer	.8	P 344 Teknovus	L 45	# 295
Comment Type E Change wording	Comment Status D			Comment const	<i>t Type</i> T ant broadcas	<i>Con</i> st_ID was no	nment Status D t used anywhere in di	iscovery state d	agrams.
SuggestedRemedy Replace "to deregi Proposed Response	ister the ONU" with "of its desire t	o deregister"		<i>Suggeste</i> We p diagra	dRemedy robably neec ams, or other	to specify w wise, consta	what LLID is used by o ant's description shou	default and shov Id be removed.	v it somewhere in the
				Proposed	l Response	Resp	onse Status O		
C/ 64 SC 64.3. Hidekazu Miyoshi	8 P 344 Sumitomo Ele	L 4 ectric Ind	# 954	C/ 64	SC 64.3	.8	P344	L 5	# 164
Comment Type T Below two sentenc the Register_req m	Comment Status D ces are not correct. Because the f nessage are not bit fields.	lag fields of the	Register message and	Comment Destr	<i>t Type</i> E ruction/Deallo	Con	nment Status D gister - Can we find a	longer name fo	r this term?
At line 3 to 4: gth Deallocate c h At line 5 through 6 Destruction/Deallo	e REGISTER message contains g cthe REGISTER_REQ mest cation/Deregister bit that signifies	two bits, Force ssage contains t s c h	registration and he	Suggeste Just o Proposed	dRemedy call this Dere I Response	gister. Resp	oonse Status O		
SuggestedRemedy									
Modify the sentence Proposed Response	ce to accommodate the meanings Response Status O	s of the flag field	S.	Cl 64 Bemmel, Comment	SC 64.3 Vincent <i>t Type</i> E	.8 Con	P 344 Alloptic nment Status D	L 5	# [<u>742</u>
C/ 64 SC 64.3.4 Wu, Mingwei	8 P 344 Institute for In	L 4 Ifocomm	# 228	The F what Suggeste	REGISTER_F is the real na edRemedy	REQ messag me of this bi	ge contains the "Desti it?	ruction/Dealloca	tion/Deregister bit"
The Deallocate bit sentence in line 4	in REGISTER message for OLT should be:, Force registration a	is used for dere and Deallocate(o	gister the ONU. So the deregister), that if	use o Proposed	orrect name Response	as defined in Resp	onse Status O		
SuggestedRemedy									
Change the senter if	nce in line 4 into:, Force registr	ation and Deallo	ocate(deregister), that	C/ 64 Glen Krar	SC 64.3 ner	.8	P 346 Teknovus	L 40	# 296
Proposed Response	Response Status O			Comment 1. the 2. it n	<i>t Type</i> T e value of 624 nakes sense	<i>Con</i> I ns for grant to include m	nment Status D t_window_timer shou inimum IFG before th	ld be explained. ne frame as well	
				Suggeste Add t	dRemedy	sentence:			

"The transmission during registration attempt is comprised of the following parts: IFG, preamble, REGISTER_REQ frame, closing sequence (/T/R/R/), a total of 90 bytes (720 ns).

Proposed Response Response Status **O**

 TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause Page 1
 Page 1

 RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 U/unsatisfied Z/withdrawn
 C/ 64

Page 140 of 169 C/ 64 SC 64.3.8

C/ 64 SC 64.3.8	.1 <i>P</i> 345	L 2	# 166	C/ 64 S	C 64.3.8.2	P 345	L 37	# 167
Brown, Benjamin	AMCC			Brown, Benjam	nin	AMCC		
Comment Type E	Comment Status D			Comment Type	e E	Comment Status D		
There hasn't been a	clear definition of what time_q	uanta is. It has t	been referred to before,	spelling				
SuggestedRemedy	tely after talking about being ac	ivanced by a tim	ier at 62.5 MHZ.	SuggestedRen Replace "fl	nedy lase" with "fa	150"		
Either add the refere about what time_quant throughout the entire	ence to the timer here or, better anta means and that the values e clause are specified in terms	r, spend some ti s of many of the of time_quanta.	me somewhere talking variables used	Proposed Resp	ponse	Response Status O		
There are many var time_quanta. The va was more global.	iables throughout this clause th alues specified would make mo	at use values wi re sense if the c	th respect to oncept of time_quanta	C/ 64 S Brown, Benjam	C 64.3.8.3	<i>P</i> 345 AMCC	L 43	# <mark>168</mark>
Proposed Response	Response Status O			Comment Type END functi	e T ion isn't nece	Comment Status D		
C/ 64 SC 64.3.8 Glen Kramer	2 P 345 Teknovus	L 23	# 283	SuggestedRen Remove th until reset.	nedy his function a	nd modify the state machin	ne to go to a END) state and stay there
Comment Type T variable "me" is not	Comment Status D used anywhere in the discovery	/ state diagrams	i	Proposed Resp	oonse	Response Status O		
SuggestedRemedy Remove "me"				Cl 64 S Brown, Benjam	C 64.3.8.3	Р 345 АМСС	L 48	# 169
Proposed Response	Response Status O			Comment Type Don't italici	e E ize variables	Comment Status D		
C/ 64 SC 64.3.8 Wu, Mingwei	.2 P 345 Institute for I	L 35 nfocomm	# 246	SuggestedRen If there is a	nedy a need to diff	ferentiate between a generi	c term and a spe	cific variable or
Comment Type E Variable name insid Rename as inside_c	Comment Status D e_register is misleading. It is u discovery_window	sed to indicate o	discovery window.	Proposed Res	oonse	Response Status O		
SuggestedRemedy Rename as inside_o	discovery_window.			C/ 64 S Wu, Mingwei	C 64.3.8.3	P 345 Institute for	L 49 Infocomm	# 230
64.3.8.6 P349 Figur 64.3.8.6 P350 Figur	e 64-18 L7, L25, e 64-19 L9, L10,			Comment Type There is a	e E redundant "I	Comment Status D MAC address" in line 49.		
Proposed Response	Response Status O			SuggestedRen Delete one	nedy e of them.			
				Proposed Resp	oonse	Response Status 0		

 TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause Page 141 of 169
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 RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 C/ 64
 SC 64.3.8.3

		101				Brown Bor	niamin		AMCC					
I 'ammant Iv	ma T	Commont Stat				Commont	Turno	-	Commant Statua					
Registration processing (including authentication, authorization) is done by MAC Control Client at the OLT. Timer "wait-for_register_msg_timer" puts unnecessary time constraint on the MAC Control						There should not be a "shall" in this sentence. Just because an ONU doesn't register, doesn't mean it shall try to register again. It may choose to do so but it should not be required to do so.								
	client in the OLT.						SuggestedRemedy							
SuggestedRemedy Remove "wait-for_register_msg_timer". Specify operation as following:							Remove the "shall" from this sentence.							
							Proposed Response Response Status O							
1. OLT N 2. All suc	AC Control c	lient issues reques eived REGISTER_I	t to send Dl REQs are ir	ISCOVERY GA	TE client	C/ 64	SC	64.3.8.4	P 346	L 25	# <u>253</u>			
3. MAC (ent does not issue	another DIS	SCOVERY GAT	E until it processes all	Wu, Mingw	vei		Institute for Ir	nfocomm				
the pend	ING REGISTE					Comment	Туре	Е	Comment Status D					
In ONU t	he logic beco	mes very simple: If	ONU recei	ves a DISCOVI	ERY GATE after	VALUE not easy to read.								
Sending I	REGISTER_F	REQ, that means th spond to each DIS	e REGISTE	ER_REQ has co	ollided. In other words,	Suggested	IRemea	V						
Proposed Response Response Status O						Change to: VALUE: A random value less than the net discovery window less The timer value is set dynamically based on								
<i>Cl</i> 64 Wu, Mingwei	SC 64.3.8.4	F Ins	346 titute for Inf	L 10 ocomm	# 247	Proposed I	Respon	se	Response Status O					
Comment Ty	<i>pe</i> E Ime register v	<i>Comment State</i> vindow size timer	<i>u</i> s D is misleadir	na. It is used to	signal end of	C/ 64 Brown Ber	SC (64.3.8.4	P 346	L 32	# 171			
discovery Suggest	y window. standardizing	naming of "discove	ery window'	".		Comment	Type	т	Comment Status D					
SuggestedRe	emedy					This ta	alks abo	ut a defer	ral process though such a th	hing hasn't been m	nentioned before.			
Change I And char	register_windonge according	ow_size_timer to di ly at 64.3.8.6 P349	scovery_wi Figure 64-	ndow_size_time 18 L29.	er.	Suggested Either	lRemea remove	y this or de	escibe it in an earlier section	I.				
Proposed Response Response Status O					Proposed I	Respon	se	Response Status 0						
						<i>Cl</i> 64 Wu, Mingw	SC (vei	64.3.8.4	P 346 Institute for Ir	L 32 nfocomm	# 229			
					Comment Type E Comment Status D The sentence of "As a result," in line 32 should be deleted. SuggestedRemedy Delete the sentence of "As a result," in line 32.									

 TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause Page 142 of 169
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 RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 C/ 64
 SC 64.3.8.4

C/ 64	SC 64.3.8.4	P 346	L 34	# 257	C/ 64	SC 64.3.8.	5 P	L	# 265		
Wu, Mingwei Institute for Infocomm					Tan, Chik	Liang	I2R				
Comment	Туре Т	Comment Status D			Comment	Туре Т	Comment Status D				
IDLE_ future	timer is not self ex suggested timers	planatory and a general term or other clauses of the same	which can b draft.	be easily referenced by	The fr availa	unctional definit ble in the list of	ion of the following messag message descriptions for t	e which appeared in the Discovery Proc	in Fig 64-20 is not ess in page 346-347		
Suggested	Remedy				ΜΑ		act/register register status	which appears in	Fig 64-20 on page 351		
Sugge Other	est changing IDLE	_timer to clk_sync_setup_time ds changing are 64.3.8.6 Figu	er. ire 64-21 P3	52 line 28 and 30,	in lines 30 and 32.						
64.3.1	0.4 page 359 line	28, 64.3.10.6 P362 Figure 64	4-29, line 25	and 28.	Suggeste	dRemedy	, as a functional definition f	ar tha abaya manti			
Proposed	Response	Response Status O			Sugg		as a functional definition in	JI THE ADOVE ITTERTION	Jheu message.		
<i>Cl</i> 64 Wu, Mingv	SC 64.3.8.4 vei	P 346 Institute for Info	<i>L</i> 36 comm	# 258	MA_C The s dereg The D	CONTROL.requirervice primitive ister a registere DA parameter	est(DA,register,register_sta used by a client to request d ONU. the MAC address of the O	itus) the Discovery Proc NU requested to re	cess to reregister or reregister.		
Comment	<i>Type</i> E re no PDUs are al	Comment Status D lowed is a bit ambiguous.			The p Wher would rereat	arameter regist register_status l be sent a REG	er_status hold the values re s = reregister, and the funct ISTER message with its re	eregister or deregis ion invoked, the Of register flag set an	ter. NU addressed to DA d it would have be		
Suggested Sugge perio	<i>Remedy</i> est changing it to od till PDUs are all	lowed			Wher would ONU	register_status be sent a REG that it has been	s = deregister, and the func ISTER message with its de deregistered.	tion invoked, the O eregister flag set, th	NU addressed to DA nerefore signifying to te		
Proposed	Response	Response Status 0			Furth functi	er note: The DA on definition to	(destination address) para contain the MAC address o	meter was further a of the ONU for rerected on the second of the second	added to the message gistration or be		
<i>Cl</i> 64 Brown, Be	SC 64.3.8.4 njamin	<i>P</i> 346 AMCC	L 43	# 172	Proposed	Response	Response Status O		ich Ono to address.		
<i>Comment</i> Where	<i>Type</i> T does the 78 byte	Comment Status D s come from for the grant_wir	ndow_timer	value?	CI 64	SC 64.3.8.	5 P346	L 45	# 506		
Suggested	Remedy	too comes from			Chan Kim Comment	Type F	ETRI Comment Status D				
Proposed Response Response Status O						It would be easy to understand if the text contains whether each message is used in OLT or ONU or both.					
					SuggestedRemedy add "used in OLT", "used in ONU" or "used in OLT and ONU" at the beginning of the message description.						
					Proposed Response Response Status O						

C/ 64	SC 64.3.8.5	P 346	L 45	# 174	C/ 64	SC 64.3.8.5	P 347	L 31	# 245			
Brown, Benjamin AMCC						Wu, Mingwei Institute for Infocomm						
Comment	Type T Com	nment Status D			Comment Typ	e E	Comment Status D					
All of diagra would	these messages my be b am section. There are qui be verv useful	better introduced in a dite a few and using the	dedicated space e common subcl	outside the state auses for each of them	Primitive MA_CONTROL.request(register_ack) name is similar to PDU REGISTER_ACK, which is quite confusing.							
Suaaeste	dRemedv				It is used by MAC Control client to initiate acceptance of an ONU's registration request.							
Move	all of these messages, a	nd probably all the m	essages in this c	lause into a dedicated	SuggestedRemedy Change to MA_CONTROL.request(reg_req_ack) The service primitive used by the MAC Control client to initiate acceptance of an ONU's registration request.							
subcl a.b.c a.b.c	ause, using the common Mapping of XX_YY.reque 1 Eunction	subclauses of: est/indication										
a.b.c.	2 Semantics of the servic	e primitive			And renar	ne according	ly at 64.3.8 P344 L11 Figure 6	64-16, 64.3.8.6	P 351 L7 Figure 64-20.			
a.b.c.	3 When generated				Proposed Response Response Status O							
See 3	35.2.1 or numerous other	places for examples										
Be ca alread	areful not to change the do dy defined in Clause 2	efinitions of the MA_C	ONTROL primit	ves from how they're	C/ 64 . Chan Kim	SC 64.3.8.5	Р 347 ETRI	L 31	# <u>507</u>			
lt wou	uld also be very helpful to	describe how they m	ight be different	for the OLT and ONU.	Comment Typ	e T	Comment Status D					
Proposed	Response Resp	onse Status O			The MPC MA_CON REGISTE	P message to TROL.reques R_ACK. It's o	b be transmitted by t(DA,register_ack,ID,register_ confusing. So, the parameter to be transmitted in MA_CO	_status) is REG	SISTER, not e the same as the			
<i>Cl</i> 64 Brown, Be	SC 64.3.8.5 enjamin	<i>P</i> 346 AMCC	L 52	# 173	This holds line 11(reg	s true for MA_ gister should	CONTROL.request(DA,regist better be changed to "discove	ter,start_time,gr er").	rant_length,length) in			
Comment	Type T Com	nment Status D			SuggestedRe	medy						
This o	description is very confusion	ing. What is the defau	It or non-default	port?	change "r	egister_ack" t	to "register" in line 31. change	register to "d T as Lunderstar	liscovery gate" in line			
Suggeste	dRemedy				understan	d for all.						
Clarif	y this description, using te	erms already introduc	ed.		Proposed Res	sponse	Response Status O					
Proposed	Response Resp	onse Status O										
<i>Cl</i> 64 Ken, Mura	SC 64.3.8.5 akami	P 347 Mitsubishi Ele	L 27 ctric	# 320								
Comment Grant	<i>Type</i> T Com	nment Status D nt grant_start and gra	nt_length param	eters.								
Suggeste Repla	dRemedy ace "length" with "grant_le	ength".										
Proposed	Response Resp	onse Status O										
C/ 64 SC 64.3	.8.6	Р	L	# 953	C/ 64	SC 64.3.8	6 P 349	L 11	# 262			
--	--	--	--	---	--	---	---	---	---			
Hidekazu Miyoshi		Sumitomo Ele	ctric Ind		Tan, Chik	Liang	I2R					
Comment Type T	Comment S	tatus D			Comment	Туре Е	Comment Status D					
Due to a inconsist messages, some in figure 64-20 and Figure 64-22 shou DEREGISTER blo	ent usage of flag fie confused expression d figure 64-22. For e ld be gsuccess = t ock in Figure 64-22 s	lds of Register of OMP.indic xample, gfla true, h and g should be gfla	r, Register_req a ation() and OMI gs = success h gregister = false ag = deregister	and Register_ack P.request() can be seen in the ACK block in in the LOCAL h	In refe MA_C the for Clause MA_C	rence to Figur ONTROL.request mat of the cor 64.3.8.5 Pg 3 ONTROL.request	e 64-18, the format of the me lest(register,DA,start_time,gr responding message notation 347 Line 11. In the latter, the lest(DA,register,start_time,gr	essage rant_length,length) n in the message of format of the mess rant_length,length)	is not consistent with lescription displayed in sage is			
SuggestedRemedy					Suggested	IRemedy						
I see two possibili a) For Register an Register_ack mes	ties to solve this pro d Register_req mes sage, gsuccess=t	blem. sages, gflag rue/false h sh	= *** h should ould be used.	be used, and for the	Sugge MA_C MA_C	st replacing th ONTROL.requ ONTROL.requ	e message lest(register,DA,start_time,gr lest(DA,register,start_time,gr	ant_length,length) ant_length,length)	with			
 b) Change the me expression of gfl 	aning of the flag fiel ag = ***. h	d of Regiter_a	ck to a value, ar	nd we use only the	Proposed	Response	Response Status O					
Proposed Response	Response S	tatus O										
		D0 40		"	<i>Cl</i> 64 Wu, Mingv	SC 64.3.8. /ei	6 P 349 Institute for	L 14 r Infocomm	# 248			
Jaeveon Song	.8.6	P 349 Samsung	L	# 438	Comment	Туре Е	Comment Status D					
Comment Type T	Comment S	tatus D			State	name SEND F	EGISTER WINDOW is misle	eading. low"				
In SEND REGIST "MA_CONTROL.r But, the request p MA_COMTROL.re	ER WINDOW state, equest(grant, own_i rimitive of Discovery equest().	there is MA_0 d, start_time, g process is ON	CONTROL.reque grant_length, dis MP.request(), no	est primitive, scovery flag=true)". ot	Suggester Chang	Remedy le state name	to SEND DISCOVERY WINE	DOW				
SuggestedRemedy					Proposed	Response	Response Status 0					
Correct the primiti MA_CONTROL.re > OMP.request(ve name. quest(grant, own_id grant, own_id, start_	, start_time, g time, grant_lei	rant_length, disc	covery flag=true) flag=true)	C/ 64 Wu, Mingy	SC 64.3.8.	6 P 349 Institute for	L 15 r Infocomm	# 225			
Proposed Response	Response S	tatus O			Comment The m MA_C of figu	<i>Type</i> T essage ONTROL.requ re 64-18 in pa	Comment Status D lest(grant,own_id,start_time, ge 349 is not defined in previ	grant_length,disco ous section.	/ery_flag=true)in line 15			
					Suggested Sugge OMP.I descri	Remedy st changing it equest(grant, ption for it in p	into: own_id,start_time,grant_leng age 347.	th,discovery_flag=	rue) and adding text			
					Proposed	Response	Response Status 0					

C/ 64	SC 64.3.8.6	P 349	L 15	# 945	C/ 64	SC 64.3.8.6	P 351	L 21	# 336		
Hidekazu I	Miyoshi	Sumitomo Electr	ic Ind		Hirth, Rya	an	Terawave Co	mmunica			
Comment	Туре Т	Comment Status D			Comment	t Type T	Comment Status D				
Comm	ent 169, which I s	submitted in the last meeting, w	as accepted	. But draft 1.3 does not	contents of echoed parameters should also be verified						
Include	e the mounication	i suggested. Thus i ani subinit	ung a sinniai	comment again.	Suggeste	dRemedy					
The O	LT has a capabilit	ty to send the discovery gate m	essages with	the broadcast and	chang	ge if(success_flag)) to if(success_flag & echoed	d_good)			
multica diagra messa MA	ast addresses and m shows no evide age is issued from	d unicast addresses. But it seer ence of this capability. In addition the discovery processing to the () in the SEND REGISTER WI	ns to me tha on, since the e OMP multi NDOW block	t the current state discovery gate plexer, c in Figure 64-18 needs	Proposed Response Response Status O						
to be 0	OMP.request()			Children of To heeds	C/ 64	SC 64.3.8.6	P 351	L 28	# 251		
Suggested	Remedy				Wu, Ming	wei	Institute for In	nfocomm			
Chang MA_C MA_C	e the second arg ONTROL.request ONTROL.request	ument of MA_CONTROL.requs () to OMP.request() in the SEN (grant, own_id,,,) -> OMP.req	t() as shown D REGISTEI uest(grant, D	below, and change R WINDOW block. A,,,)	Comment Primi its no	t Type E tive MA_CONTRC tation at 64.3.8.5	Comment Status D DL.indication(accepted, state P347 L36	.MAC, state.ID,	RTT) format doesn't fit		
Proposed	Response	Response Status 0			Suggeste	dRemedy					
					Chan RTT)	ge to MA_CONTR	OL.indication(register_ack,	state.MAC, state	e.ID, status=accepted,		
<i>CI</i> 64 Wu, Mingv	SC 64.3.8.6 vei	P 349 Institute for Infoc	L 23 omm	# 249	Proposed	l Response	Response Status O				
Comment State r Sugge	<i>Type</i> E name INSIDE RE est standardizing r	Comment Status D GISTER WINDOW is misleadir naming of "discovery window".	ng.								
Suggested Chang	Remedy state name to I		1								
Dranaaad											
Fioposeu	Response										
<i>Cl</i> 64 Wu, Mingv	SC 64.3.8.6 vei	P 351 Institute for Infoc	L 13 comm	# 250							
<i>Comment</i> Condit	<i>Type</i> T tion register_statu	Comment Status D s=accept+register_status==rer	egister is diff	icult to read							
Suggested Chang (regist	<i>IRemedy</i> je to er_status==accep	ot)+(register_status==reregister)								
Proposed	Response	Response Status O									

CI 64	SC 64.3.8.6	P 351	L 30	# 264	C/ 64	SC 64.3.8.6	6 P 351	L 39	# 321
Tan, Chil	Liang	I2R			Ken, Mura	akami	Mitsubishi	Electric	
Commen	t Type T Co	mment Status D			Comment	Туре Т	Comment Status D		
The fi the li MA_0 MA_0 Thes	ollowing messages are st of message description CONTROL.request(regist CONTROL.request(regist e two messages have the	not defined and do not ons for the Discovery P ster, register_status = r ster,register_status = d ne same functional des	have a prior fun rocess in page 3 eregister) line30 eregister) line31 cription.	ctional description in 46-347.	Figure In cas REGI On the REGI 20. Howe	e 64-20 se of de-register STER_REQ with e other hand, if STERED state, ver, the ONU ta	from ONU, the ONU trans h deregister flag as shown the OLT receives the REG it returns the REGISTER v kes no action at the receip	its to WAIT state a in Figure 64-22. ISTER_REQ with o vith deregister flag t of the REGISTEF	fter transmitting the deregister flag in as shown in Figure 64- R at WAIT state.
Suggeste	edRemedy				Suggestee	dRemedy			
A con MA_0 the ro 346-3	mplete functional descrip CONTROL.request(regis est of the Discovery Pro- 347.	otion of the message ster,register_status) sho cess message descript	ould be defined a ions listed in sub	and placed alongside oclause 64.3.8.5 pages	Since dereg Proposed	the REGISTER ister flag is igno Response	R with deregister flag that is bred, this REGISTER can b <i>Response Status</i> O	the response to the omitted.	ne REGISTER_REQ with
Sugg	est the following as a fu	nctional definition for th	ne above mentio	ned message:	C/ 64	SC 64.3.8.6	6 P351	L 5	# 333
The s dereg The l The j Whe would rereg Whe would	MA_CONTROL.request(DA,register,register_status) The service primitive used by a client to request the Discovery Process to reregister or deregister a registered ONU. The DA parameter is the MAC address of the ONU requested to reregister or deregister. The parameter register_status hold the values reregister or deregister. When register_status = reregister, and the function invoked, the ONU addressed to DA would be sent a REGISTER message with its reregister flag set and it would have be reregister_status = deregister, and the function invoked, the ONU addressed to DA would be sent a REGISTER message with its deregister flag set, therefore signifying to te				Hirth, Rya Comment The a Suggestee Add a Proposed	n <i>Type</i> T Ilocation of MAC <i>dRemedy</i> Mac_Free sign <i>Response</i>	Comment Status D Cs at the OLT needs be de nal to the IDLE state of figur Response Status O	fined. 'e 64-20.	
Furth funct dereg	er note: The DA (destin ion definition to contain gistered. This was deem	ation address) paramet the MAC address of the ed necessary in order t	er was further a e ONU for reregi to ascertain whic	dded to the message stration or be ch ONU to address.	C/ 64 Hirth, Rya Comment	SC 64.3.8.6 n <i>Type</i> E	P 351 Terawave Comment Status D	L 7 Communica	# 335
Proposed	l Response Res	sponse Status O			match	n register status	to message status		
					Suggestee chang accep	dRemedy je register_statu it to success on	us == deny to Nack on REC REGISTER to WAIT for R	STER to IDLE ch	aange register_status ==
					Proposed	Response	Response Status 0		

C/ 64 SC 64.3.8.6 P 351 L 7 # 440 Jaeyeon Song Samsung	C/ 64 SC 64.3.8.6 P 352 L 11 # 605 williamsen, erica IOL/UNH						
Comment Type T Comment Status D In fig 64-20(line 7), the condition from IDLE state to REGISTER state is a reception of the registeration primitive from higher layer to Discovery processing block. However, there is the MA_CONTROL. request(register_ack,).	Comment Type T Comment Status D The two transitions out of the CHECK UNICAST state are both true. SuggestedRemedy						
SuggestedRemedy Correct the primitive.	Change the transition condition from CHECK UNICAST to WAIT for WINDOW UNICAST to false. Proposed Response Response Status 0						
Proposed Response Response Status O							
	C/ 64 SC 64.3.8.6 P 352 L 14 # 233						
C/ 64 SC 64.3.8.6 P 351 L 7 # 263 Tan, Chik Liang I2R	Comment Type E Comment Status D						
Comment Type E Comment Status D In reference to Figure 64-20, the message MA_CONTROL.request(register_ack,ID,register_status) is not consistent with the format of the message description in Subclause 64.3.8.5 Page 347 Line 31. The message notation should be MA_CONTROL.request(DA,register_ack,ID,register_status)	The condition "true" in line 14 should be "false". SuggestedRemedy Change the condition "true" into "false". Proposed Response Response Status O						
SuggestedRemedy Suggest changing the above message to MA_CONTROL.request(DA,register_ack,ID,register_status)	C/ 64 SC 64.3.8.6 P 352 L 14 # 442						
Proposed Response Response Status O	Comment Type E Comment Status D In fig 64-21, there is CHECK UNICAST state. if True, transfer to WAIT for WINDOW						
C/ 64 SC 64.3.8.6 P 351 L 7 # 334 Hirth Byan Terawaye Communica	UNICAST state, if False, goes to WAIT for WINDOW state. But, the condition is not correct. Both of them is True, in the figure.						
Comment Type T Comment Status D The transition from IDLE to REGISTER should occur on a register_req.	SuggestedRemedy Correct the condition. The condition from CHECK UNICAST to WAIT for WINDOW state is False(not unicast DA).						
SuggestedRemedy Change register_ack to register_req.	Proposed Response Response Status O						
Proposed Response Response Status O	Cl 64 SC 64.3.8.6 P 352 L 22 # 252 Wu, Mingwei Institute for Infocomm Inst						
	Comment Type T Comment Status D Figure 64-21. Maximum random delay must take into account of IDLE_time, laser_off_time, laser_on_time and sizeof(MPCPDU)						
	SuggestedRemedy Change to random/length-IDLE_time-laser_off_time-laser_on_time-sizeof/MPCPDU//						
	Proposed Response Response Status O						

C/ 64 SC	C 64.3.8.6	P 352	L 9	# 232	C/ 64	SC 64.3.8.6	P 352	L 9	# 94	
Vu, Mingwei		Institute for In	focomm		Hidekazu	Miyoshi	Sumitomo Ele	ectric Ind		
Comment Type	E Co	omment Status D			Comment	Туре Т	Comment Status D			
There is no MA_CONTR privious sec	such message a ROL.request(crea tion. So change	is ate_discovery_window,I this message into	DA,start,length)	in line 9 defined in the	Comr modif	nent 173, I subm ied.	itted at the last meeting, was	accepted, but t	he text has r	
MA_CONTR	ROL.request(regi	ster,DA,start_time,gran	t_length,length)	accordingly.	The discovery gate message is passed from the OMP parser to the discovery process the form of OMP.indication. In this sense, the arrow below the WAIT block in figure 64 should be represented by OMP.indication().					
SuggestedReme	edy									
Change the MA_CONTR	message of line	9 in figure 64-21 into: ster DA start time gran	t length.length)		SuggestedRemedy					
Proposed Respo		snonse Status O	it_iongin,iongin)		Chan	ge MA_CONTRO	L.request() to OMP.indication	n() in the figure		
Γιοροσοά Νοσρο					Proposed	Response	Response Status O			
C/ 64 SC	C 64.3.8.6	P 352	L 9	# 443						
Jaeyeon Song		Samsung			C/ 64	SC 64.3.8.6	P 353	L 14	# 33	
Comment Type	T Co	omment Status D			Hirth, Rya	n	Terawave Co	mmunica		
So, the cond In addition, t length) is no	dition from WAII the primitive MA of in the message	state to CHECK UNIC _CONTROL.request(cre e list.	AST state is not eate_discovery_	appropriate. window, DA, start,	Trans Proposed	itions for Reregis Response	ter and Deregister should be <i>Response Status</i> 0	defined in the l	REGISTER_R	
The conditio	euy on should be cha	nged			01.04		Dese	1.00		
MA_CONTR > OMP.ind	ROL.request(creation(DA, SA,	ate_discovery_window, subtype=GATE, flag=di	DA, start, length scovery, start, l	ו) ength)	Ci 64 Hidekazu	SC 64.3.8.6 Miyoshi	P 353 Sumitomo Ele	L 23 ectric Ind	# 95	
					Comment	Туре Т	Comment Status D			
defined yet i	s of OMP.Indicati	ion may be not accurate	e. Because the v	whole parameters is not	There	is an inconsister	nt behavior between OLT and	ONU when the	e Register me	
Proposed Respo	onse Re	sponse Status O			Nack when IDLE not ex are de Regis comp	is sent. On one r it receives the R state after sendir pect to receive t fined when it rec ter_ack message exity.	egister message with Nack, or ng the Register message with he Register_ack message with seives the Register_ack mess a with unsuccess is not neces	Ister_ack mess on the other har Nack. This me th unsuccess (r sage with unsu ssary, and this r	age with unsi- id, the OLT go ans that the C io particular p ccess). Thus message just	
					Suggeste	dRemedy				
					Get ri sente NACH	d of the procedur nce, OMP.reques block in Figure	e of sending the Register_ac st (SA, DA, opcode=REGIST 64-22.	k message with ER_ACK, succe	າ unsuccess. ອss = false), f	

Proposed Response Response Status **0**

C/ 64 SC 64.3.8.6	P 353	L 25	# 255	C/ 64	SC 64.3.8.6	P 353	L 32	# 261
Wu, Mingwei	Institute for In	focomm		Wu, Mingwe	i	Institute for In	focomm	
Comment Type T Repetition of "registere	Comment Status D ed=true" at state ACK and RE	GISTERED.		Comment Ty Figure 6	/pe T 4-22	Comment Status D		
SuggestedRemedy Delete "registered=true Proposed Response	e" at state ACK. Response Status O			It is show the LOC some lin slow dow due to a	wn in the figur AL DEREGIS les of code to wn the system hang in the C	e that when omp_timer_done TER state. This would mean t check and jump to this state v execution. Another possibility DNU which make the system u	is activated, the hat every state vhen the omp_t of the omp_tim nable to execut	ONU state will jump to of the ONU will have imer is up. This can her going off could be this instruction.
C/ 64 SC 64.3.8.6	P 353	L 25	# 322	SuggestedR	emedy			
Ken, Murakami Comment Type T	Mitsubishi Ele Comment Status D	ectric		I sugges omp_tim involves	at taking out th her that the on both hardwar	ne omp_timer_done from the s np_timer_done message is us e and firmware.	tate diagram bu ed to trigger a s	It add a sentence in the system reset which
Figure 64-22 The process "registere	d=true" is duplicate.			Proposed Re	esponse	Response Status O		
SuggestedRemedy The process "registere	d=true" in REGISTERED sta	te should be rem	noved.	C/ 64	SC 64.3.8.6	P 353	L7	# 254
Proposed Response	Response Status O			Wu, Mingwe	i	Institute for In	focomm	
				Comment Ty MA_CO	<i>/pe</i> E NTROL.reque	Comment Status D st(register=true) doesn't easily	/ map into any p	primitive defined in
C/ 64 SC 64.3.8.6	P 353 Sumitomo Ek	L 32	# 949	64.3.8.5	. ,			
				SuggestedR	to MA_CONT	ROI request(DA register reg	n register-true)	
In draft 1.3, when the or deregister and then tra the ONU means no rec	omp_timer expires, the ONU states to the WAIT state. But stopping the gate message is	sends the Regist since the expirat n a certain perio	er_req message with on of the omp_timer of d of time, which is	Proposed Re	esponse	Response Status O	, register-itae)	
probably due to an unre the Register_req mess encounters omp timeor	ecoverable error, it is almost age at this situation. In additi ut since it has not received a	certain that the (on, it is likely than y Report messa	ONU is not able to send at the OLT also ages from the ONU.	<i>Cl</i> 64 Brown, Benja	SC 64.3.9 amin	<i>Р</i> 353 АМСС	L 44	# 176
Thus, when the omp_ti ONU would probably e message is not necess	imer expires, trying to send the nded in failure, additionally the sary to reach to the OLT. This	he Register_req he Register_req is suggests that v	with deregister by the with deregister when omp_timer	Comment Ty Change	/pe E wording	Comment Status D		
expires, the Register_r	eq with deregister is not nece	essary.		SuggestedR	emedy			
SuggestedRemedy Three modifications are	e needed in Figure 64-22.			Replace status re	"layers, imple ports" with "la	ementing the MAC Control clie ayers and passed to the MAC ie reports"	nts indicating th Control sublaye	eir status. Typically by the MAC Control
a) Delete the arrow of o	omp_timer_done entering to	the LOCAL DER	EGISTER block.	Proposed Re	esponse	Response Status O		

b) Add a new block where MA_CONTROL.indication (register_ack, status = deregistered) is issued

c) Add the arrow of omp_timer_done from the Registered block to the new block.

Proposed Response Response Status **O**

C/ 64 SC 64.3.9	P 353	L 46	# 234	C/ 64	SC 64	3.9.4	P 354	L 39	# 238	
Wu, Mingwei	Institute for Inf	ocomm		Wu, Ming	wei		Institute for Ir	focomm		
Comment Type E	Comment Status D			Comment	Туре Е	C C	omment Status D			
The "in word multiples long. So it's clearer to	" is quite misleading because put as "in 2-byte multiples".	a word sometir	nes can be 4 bytes	Since there is a periodic_timer defined both for Report processing and Gate processing(in line 36 of page 359) with different meanings. So suggest changing the name of periodic times in line 20 into appendix times.						
SuggestedRemedy				timer	in line 39 li	nto report_p	eriodic_timer.			
Change "in word multi	iples" in line 46 into "in 2-byte r	nultiples".		Suggester	dRemedy	adia timar in	line 20 inte report pari	adia timor And	change these two in	
Proposed Response	Response Status O			line 34	4 and that	one in line 3	80 of figure 64-25 in pag	e 356 according	gly.	
				Proposed	Response	Re	esponse Status O			
C/ 64 SC 64.3.9	P 353	L 48	# 259							
Wu, Mingwei	Institute for Inf	ocomm		C/ 64	SC 64	3.9.4	P 354	L 41	# 236	
Comment Type T	Comment Status D			Wu, Ming	wei		Institute for Ir	focomm		
The paragraph is a bit	t difficult to understand.			Comment	Туре Е	C	omment Status D			
SuggestedRemedy				" per	riodicity of	at least" is	s not accurate			
Suggest changing it to) Mahdag timor in the regionageti			Suggeste	dRemedy					
processing functional	block will generate report mes	sades autonon	nously on a periodic	Shoul	d be " pe	iodicity of le	ess than the timeout_va	lue."		
fashion. The periodic ensuring the network i	report messages will maintain is functioning properly. These i	a minimal rate eport message	OMP message flow es have no contents."	Proposed	Response	Re	esponse Status O			
Proposed Response	Response Status 0									
				C/ 64	SC 64	3.9.5	P 355	L7	# 260	
C/ 64 SC 64.3.9	P 353	/ 48	# 177	Wu, Ming	wei		Institute for Ir	focomm		
Brown. Beniamin	AMCC	2.10	"	Comment	Туре Е	C	omment Status D			
Comment Type E This paragraph is con	Comment Status D fusing the way it is written			The 2 mention other	mentioned oned might parts of the	l parameter be confuse clause.	s valid and status is not ed with the 8th byte of th	very clear and he frame which i	the ~parameter[8] is the format used in	
SuggestedRemedy				Suggeste	dRemedy					
Replace entire paragra	aph with the following:			Sugge	est changir	ig it to				
"Queue reports must I being made. This kee ONU."	be generated periodically, ever ps a watch dog timer in the OL	n when no requ T from expiring	lest for bandwidth is g and deregistering the	"A que valid i queue status	eue status s a boolea e is empty s is a short	report has t n array with while "1" or integer (2 b	wo parameters, valid(ita a length of 8, "0" or fals true indicates that the q ytes) array of length 8	alic) and status(se indicates that ueue has some "	italic). The parameter the corresponding data. The parameter	
Proposed Response	Response Status O			If acc	epted, app	y same cha	anges to next paragraph	on MA_CONTR	ROL.indication.	
				Proposed	Response	Re	esponse Status O			

C/ 64 SC	C 64.3.9.6	P 356 Mitsubishi Eloc	L 29	# 323	C/ 64 Hidokazu	SC	64.4		P Sumitomo Ek	L	# 955
	_				Tiluekazu		_				
Comment Type	Т -	Comment Status D			Commen	t Type	Т	Comment S	tatus D		
At the comp necessity of	b eletion of dis this REPO	scovery, the REPORT with nu IRT is unclear.	Il queue report i	s issued. However, the	ne r multi addre	cast MA	, gagilane C addres	ss as the MAC D	A address, bu	ine discovery ga ut the current dr	aft does not define the
SuggestedRem	edy				Suggeste	dReme	dy				
At the comp state.	letion of dis	scovery, the ONU just starts the	ne periodic_time	er and transits to WAIT	Pleas	se clarify	what M/	AC DA address t	he discovery	gate uses.	
Proposed Resp	onse	Response Status O			Addit MPC	ionally, v PDUs. E	why don Below is r	ft we clarify in the standing the standing the standing term of t	ne text what N g.	MAC DA addres	ses are used in
<i>Cl</i> 64 SC Ken, Murakami	64.3.9.6	P 356 Mitsubishi Elec	L 30 ctric	# 325	x) Dis x) No x) Re x) Re	scovery ormal Ga egister_re egister: C	Gate: mu te: ONU eq: OLT ONU MAC	ulticast address (MAC address MAC address C address	???) or ONU	MAC address	
Comment Type	Т	Comment Status D			x) Re	gister_re	eq: OLT	MAC address			
The REPOF periodic_tim the grant pe	RT message ner_done as priodically to should be is	e including no queue report is s shown in Figure 64-25. For the send this REPORT message	issued at the e his purpose, it i e. This means th	vent of s necessary to assign nat the GATE	Proposed	l Respoi	nse	Response St	atus O		
On the othe	r hand, the	current draft specifies the GA	TE message in	cluding no grant for the	CI 64	SC	64.4.1		P 363	L 1	# <u>290</u>
MPCP keep	alive from	the OLT to the ONU. Howeve	r, since the GA	TE messages including	Glen Kra	mer			Teknovus		
at least one with no gran	grant shou	meaningless.	entioned above	, the GATE message	Commen	t Type	т	Comment S	tatus D		
Since the all this REPOR	bove REPO T message	RT message is issued by the e cannot be reported. Therefore ssignment in consideration of	MAC Control n e, in the OLT, t	ot Client, the grant for he MAC Control Client e periodic REPORT	"Dest the in	tination <i>i</i> ndividual	Adddress MAC ad	s (DA). The DA ir dress associated	MPCPDU is with the por	the MAC_Cont t to which the M	rol Multicast address, or IPCPDU is destined."
message.	sini gran a		and grant for an		Curre	ently MA	C Addres	ss 01-80-C2-00-0	0-01 is assig	ned to PAUSE	operation.
SuggestedRem	edy				Anne	x 31B: "	The glob	ally assigned 48	bit multicast	address 01-80-	C2-00-00-01 has been
Add the not	e that the tr	ansmission of the periodic RE	PORT messag	e from ONU assumes	from	a DTE ir	n a full di	Jolex mode IEEE	802.3 LAN.	' innibiting trans	mission of data frames
that the GATE message including at least one grant is issued periodically.					SuggestedRemedy						
Remove the	Remove the GATE message with no grant. Remove the periodic, timer at the OLT side.					use the	same we	ell-known multica	st address A	Annex 31B shou	IId be modified.
	ponouio_u				If we use the same well-known multicast address, Annex 31B should be modified,					la bo moanoa,	

Proposed Response Response Status **O**

If we use the same well-known multicast address, Annex 31B should be modified, otherwise we need to specify a new 48-bit value

Proposed Response Response Status **O**

C/ 64	SC 64.4.1	P 363	L 12	# 185	C/ 64	SC 64.4.1	P 364	L 13	# 340
Brown, Be	enjamin	AMCC			Hirth, Rya	in	Terawave Cor	mmunica	
Comment Claus	t <i>Type</i> T se 31 says new o	Comment Status D pcodes are defined in annexe	es to 31.		Comment Addir	<i>Type</i> T Ig a sequence n	Comment Status D umber to the MPCP PDU woul	d allow the prot	ocol to detect missing
Suggeste Reco	<i>dRemedy</i> ncile Clause 31 v	vith this clause.			frame	es thus making it not waith the states in th	more robust and manageable ray to tell if MPCP frames have	e been lost, drop	oped, or errored in the
Proposed	l Response	Response Status 0			syste	m.			
					Suggeste Add a	<i>dRemedy</i> a sequence num	ber to the PDU.		
<i>Cl</i> 64 Brown, Be	SC 64.4.1 enjamin	<i>P</i> 363 AMCC	L 27	# 186	Proposed	Response	Response Status O		
Comment This s	<i>Type</i> T section talks about	Comment Status D ut being compatible with this	version of MPCF	D.	<i>Cl</i> 64 Glen Krar	SC 64.4.1	P 364 Teknovus	L 32	# 291
Suggeste Is the What	are a version field does this vesion	so that an ONU can tell what mean? Please explain.	t version the cor	nected OLT is running?	Comment DISC	<i>Type</i> TR OVERY_GATE	Comment Status D and GATE messages are proc	essed in differe	ent functional blocks
Proposed	l Response	Response Status O			within more	Multi-Point MA complicated str	C Control. Because of desire to ucture:	o share the sam	ne opcode we have
C/ 64 Brown, Be	SC 64.4.1 enjamin	<i>Р</i> 363 АМСС	L 6	# 184	1. AG Numb 2. ON to for	C and CDR field perOfGrants value P Parser should ward the frame	Is are present only in DISCOV le to calculate the offset to acc d look at opcode and then at D sco. Figure 64 14)	ERY_GATE. O ess AGC and C iscovery_gate f	NU should read CDR fields lag to determine where
Comment	t Type E	Comment Status D			Suggeste	dRemedy			
Suggeste Choo	dRemedy se one and stick	with it.			Make Make regula	a DISCOVERY AGC and CDR ar GATE.	_GATE a separate message ty fields present only in DISCOVI	/pe (opcode = 0 ERY_GATE me	00-07) essage, but not in
Proposed	Response	Response Status O			Proposed	Response	Response Status O		
					<i>CI</i> 64 Chan Kim	SC 64.4.2	<i>Р</i> 364 ЕТПІ	L 53	# 508
					Comment	Туре Т	Comment Status D		
					lt is n end o	ot clear if the for f the correspond	ce_report flag is to ask the ON ling grant period, or after the c	IU to issue a RI orresponding gr	EPORT message at the rant period ends.
					Suggeste cleary	dRemedy / explain if the re	port is in the end of the corres	ponding grant a	and at the start of the
					the ne	ext grant.			
					Proposed	kesponse	Response Status 0		

Cl 64 Ken Mura	SC 64.4.2 kami	P 364 Mitsubishi Elec	L 54	# 304	C/ 64 Chan Kim	SC 64.4.2	<i>Р</i> 366 ЕТВІ	L 15	# 509
Comment		Comment Status D			Comment	Τνρο Τ	Comment Status D		
This contract In Tab	Domment relates to le 64-2, the desc	to the comment #204 on D1.2. cription "at the next transmission	on opportunity"	is not suitable.	how al This w registe	bout putting a re fill make the bou er_req message	served byte after number of g indaries of the fields 16 bit alig	rants/flags? gned. Same co	omment applies to
Renlad	re it with "at the	corresponding transmission on	nortunity indica	ated in this GATE"	Suggested	Remedy			
Proposed	Response	Response Status O			put a r field 1	eserved byte af 6 bit wide.	ter the "number of grants/flags	" field of GAT	E message or make that
					Proposed	Response	Response Status 0		
C/ 64	SC 64.4.2	P 365	L 30	# 187					
Brown, Be	njamin 	AMCC			C/ 64	SC 64.4.2	P 366	L 32	# 341
Comment	Type T	Comment Status D			Hirth, Ryar	n	Terawave Cor	mmunica	
Both A bits wi	de?	e and CDR Lock time allow onl	y 4 options. Wi	ny are these fields 16	Comment	Type T	Comment Status D		with the Original states
Suggested	lRemedy				AGC 3 machi	ne lock time.	a CDR Lock time should be co	ombined along	with the Sync state
Chang	e these fields to	use fewer bits or open up mor	e options.		Suggester	Remedy			
Proposed	Response	Response Status O			chang numbe	e AGC settling t er of Idle pattern	ime and Cdr Lock time to Idle s to be sent prior to transmitio	time where Id n of data fram	le time defines the es.
C/ 64	SC 64.4.2	P 365	L 31	# 326	Proposed	Response	Response Status O		
Ken, Mura	kami	Mitsubishi Elec	tric						
Comment	Туре Т	Comment Status D			C/ 64	SC 64.4.3	P 366	L 50	# 292
Accord	ding to the currer	nt descriptions about the AGC	settling time ar	d the CDR lock time, it	Glen Kram	ner	Teknovus		
seems	s that each of the	em can take one of four values	shown in the d	raft.	Comment	Туре Т	Comment Status D		
Suggested	IRemedy			(000	Currer	ntly we have spe	cified maximum GATE proces	ssing time at 2	0 us. That time includes
It is be	etter to describe t	that the sum of AGC and CDR	is at the maxin	num of 800ns.	the pa	rsing, veritying, equired to gener	and setting the first grant. Ho ate a REPORT message may	be larger.	Report bit is true, the
Proposed	Response	Response Status O			What	if REPORT is no	ot ready before the grant with '	'forceReport =	true" is ended?
					If its C specify and se forceR	DK that a grant w y forceReport fla end it in next ava Report is true, th	vith "forceReport = true" will ha ng for each grant (ONU will jus nilable grant). If its not OK hav en the maximum REPORT ge	ave no REPOR t prepare a RE e a grant witho nerating time s	RT, then we don't need to EPORT as fast as it can but REPORT if should be specified.
					Suggested	Remedy			
					Maxim arrival proces	num REPORT go and beginning of ssing time (20 us	enerating time should be spec of grant with "forceReport = tru s) plus maximum REPORT ge	ified. Minimum ie" should be s nerating time.	n interval between GATE set at maximum GATE

Proposed Response Response Status **0**

Cl 64	SC 64.4.3	P 367	L 1	# 188	C/ 64	SC 64.4.5	P370	L 25	# 191		
Comment "ONU	<i>Type</i> T s shall issue REI	Comment Status D PORT message occasionally."			Comment	<i>Type</i> T C Settling Time a	Comment Status D and CDR Lock Time are exchar	nged at regist	ration time, why are they		
This is	s not testable. W	hat does occasionally mean?			SuggestedRemedy						
Suggestee Remo	<i>dRemedy</i> ove this line or ge	t more specific.			Either don't bother exchanging these with registration or don't send them as part of the gate.						
Proposed	Response	Response Status 0			Proposed	Response	Response Status O				
<i>Cl</i> 64 Brown, Be	SC 64.4.3 enjamin	Р 367 АМСС	L 37	# 189	C/ 64 Hidekazu	SC 64.4.6 Miyoshi	P 371 Sumitomo Elec	<i>L</i> ctric Ind	# 952		
Comment	Туре Т	Comment Status D			Comment	Туре Т	Comment Status D				
Numb d) is c	ber of queue sets but of order.	comes just after the timestam	p in figure 64-	32. It's desciption (bullet	The flag field of the Register_ack message is defined as a bit-field, while the flag fields of the Register message and the Register_req message are defined as values. This inconsistent definition of the flag fields would probably causes readers f confusion. Thus						
Suggestee Move	<i>dRemedy</i> bullet d to after b	oullet a.			getting the fla	g rid of this inco ag field of the Re	nsistency would cure this confu gister_ack message would be	sion. I think cl easier.	hanging the meaning of		
Also,	31.4.1 limits MA	C Control frames to 64 bytes. T	his limits the	number of queue sets to	Suggestee	dRemedy	v in page 371				
Proposed	Response	Response Status O	ine iengin im	it on these packets?	gan gFla Chang	8 bit bitfield flag g bitmap fields ge the names of	h -> gan 8 bit flag register h -> gFlag field h at line 45 the first row of Table 64-6 to	h at line 43 gValue h, ્	gindication h, and		
<i>Cl</i> 64 Hirth, Rya	SC 64.4.5 In	P 370 Terawave Com	L 19 munica	# 342	Chang Value Value	ge the meaning = 0: The reques = 1: The registr	of the value as follows. sted registration attempt is deni ation process is successfully ad	ed by the high	ner-layer-entity		
Comment	Туре Е	Comment Status D			Value	= 2-255: Reserv	ved (Ignored on reception)	salo mougou.			
The flat registi	ag "success" is a ration has not be	a misnomer since the Register_ en completed successfully.	_ack has not l	been received and thus	Proposed	Response	Response Status 0				
Suggestee Renar	<i>dRemedy</i> me success to A	ck.			C/ 64	SC 64.5	P 374	L 48	# 653		
Proposed	Response	Response Status O			Maislos, A	vriel	Passave				
					Comment PICS	<i>Type</i> T not done yet	Comment Status D				
				SuggestedRemedy Collect mandatory and optional elements from text to build PICS for Draft 1.4							
					Proposed	Response	Response Status 0				

P802.3ah	Draft	1.3	Comments
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Cl 64 SC Fig 64 Brown, Benjamin	I-12 <i>P</i> 336 AMCC	<i>L</i> 1	# 147	C/ 64 Brown, Ber	SC Fig 64-2 njamin	9 <i>P</i> 362 AMCC	L 1	# 183
Comment Type T Missing function & v SuagestedRemedv	Comment Status D			Comment T Does th descib	<i>Type</i> T his stage diagra e what this mad	Comment Status D Im really need to be this crypti hine is doing?	c? Can't we fin	d a simpler method to
Add description of th	he function "sizeof" and variable	"remaining_tim	ne"	What c	loes case 1 me	an vs. case 2 in SORT state?		
Proposed Response	Response Status O			What is	s effective_leng	th START TX state?		
C/ 64 SC Fig 64	l-16 <i>P</i> 344	L 10	# 165	<i>Suggested</i> Simplif what's	Remedy y this state diag going on.	ram or add some desciption o	on a state by sta	ate basis to explain
Brown, Benjamin	AMCC			Proposed I	Response	Response Status 0		
Comment Type T Wrong/missing MA_	Comment Status D _CONTROL.requests & MA_CO	NTROL.indicati	ons	C/ 64	SC Fig 64-3	2 P 368	L 14	# 190
SuggestedRemedy				Brown, Ber	ijamin	AMCC		
In Figure 64-16, rep "MA_CONTROL.rec register.	lace "MA_CONTROL.request(re quest(discovery_gate)". This is r	egister_ack)" wi necessary to tel	th the ONU it's time to	Comment Numbe	<i>Type</i> E er of queue sets	Comment Status D is in a different font		
In Figure 64-17, add "MA_CONTROL.ind	d MA_CONTROL.request(registe lication(register_req)" with	er_ack). Replac	е	Suggested Use the	Remedy e right font			
"MA_CONTROL.ind "MA_CONTROL.ind	lication(discovery_gate)" and re lication(register_ack)" with "MA_	place _CONTROL.ind	ication(register)"	Proposed I	Response	Response Status O		
I'm not sure discove	ery_gate is the right term but I do	on't know what	to call it.		00 5 - 04 4	2005	1.40	
Proposed Response	Response Status O			C/ 64 Brown, Ber	ijamin	AMCC	L 10	# [118
				Comment	Гуре Т	Comment Status D		
C/ 64 SC Fig 64	-2 P 324	L1	# 115	Are the	Control Parse	and OMP Parser really neces	ssary?	
	AMOO			Suggested	Remedy			
Why does this figure	e only show 1 MAC?			* Remo Figure	e 31-4.	Parser and replace it with a bl	ock that referei	nces
SuggestedRemedy Replace with somet	hing similar to Figure 65-1			* Remo Figure * Remo	ove the Flow Co 31B-2. ove the OMP Pa	ontrol Annex 31A block and reparser Clause 64.3.7 block and	place it with a b	lock that references
Proposed Response	Response Status 0			specifi	c function active	ation" to all the OMP processir	ng blocks.	
				The on Client o everyo	ly difference is using MA_DAT/ ne can see wha	that your Control Parser passe A.indication. If you want to do t you're really doing.	es unrecognize this, you should	d opcodes to the MAC d change Clause 31 so
				Proposed I	Response	Response Status 0		

C/ 64	SC Fig 64-4	P 325	L 10	# 119
Brown,	Benjamin	AMCC		

Comment Type **T** Comment Status **D**

The transmit direction doesn't work according to the functions already defined in 802.3. * MA_DATA.request and MA_CONTROL.request(...,pause_command,...) go into the state diagram in Figure 31B-1

* The pause function chooses one of these and calls the TransmitFrame function within the MAC to begin immediate transmission

The Control Multiplexer block currently takes in both MA_DATA.request and MA_CONTROL.request, requests a transmit slot, waits for a grant and then calls the TransmitFrame function. This block attempts to displace the state diagram in Figure 31B-1 without actually performing the PAUSE function.

The OMP Multiplexer doesn't do much. I already expects only one OMP.request to be active at a time from the OMP processing blocks. It simply converts the OMP.request to a MA_CONTROL.request (though I don't like this name).

SuggestedRemedy

* Make no changes to Annex 31B

* Remove the OMP Multiplexer block. Outputs of OMP Processing blocks should be TransmitFrame.

* Add a block that takes in both MA_CONTROL.request and MA_DATA.request and puts out TransmitFrame. This block references Figure 31B-1

* Modify Control Multiplexer to take in multiple TransmitFrame function calls and outputs TransmitFrame to the MAC.

The Control Multiplexer block would parse these TransmitFrame requests enough to know if they contain a data frame or a MAC Control frame (check the Length/Type field). It would then use this information to request a transmit slot from the Multiplexing Control block then, when it gets a grant, passes the TransmitFrame call on to the MAC.

I don't know if this works because I don't think the TransmitFrame function call is a request in the same way that a service primitive is but it's closer to working with the current standard that what is there right now.

Proposed	l Response	Response Status O		
C/ 64	SC Fig 64-4	P 325	L 10	# 120
Brown, B	enjamin	AMCC		
Commen	t Type T	Comment Status D		
Subc	lauses 2.3.3.2 an opcodes and how	d 2.4.4.2 reference Clause 3 they effect the MA_CONTRO	1 and its annexe DL service primit	s for the desciptions of ives.
Suggeste	edRemedy			

Change Clause 2 to reference this clause as well.

Proposed Response Response Status **O**

Comment Type TR Comment Status D 1. Both MA_DATA and MA_CONTROL frames should be checked on fitting in the remaining slot 2. In transition from GATED to TRANSMIT READY comparison ">" should be "<=" SuggestedRemedy modify transition from GATED to TRANSMIT READY as follows (MA_DATA.request(DA,Opcode, operands) *(sizeof(m_sdu) + tail_guard <= remaining_time) Proposed Response Response Status O C/ 64 SC Figure 64-12 P 336 L # 276 Glen Kramer Teknovus Comment Type TR Comment Status D 1. "remaining_time" variable is not defined 2. "remaining time should be constantly updated synchronously with local_time SuggestedRemedy 1. instead of "remaining_time" use "stop_time" 2. "stop_time" variable should be set in "Gate Processing ONU Activation State Diag. 3. transition from GATED to TRANSMIT READY in Fig 54-12 should be as following (local_time + sizeof(m_sdu) + tail_guard <= stop_time) Proposed Response Response Status O C/ 64 SC Figure 64-13 P 340 L # 280 E Glen Kramer Teknovus D Figure 64-13 into separate figures for Parser and Multiplexer Proposed Response Response Status D <th>Comment Type TR Comment Status D 1. Both MA_DATA and MA_CONTROL frames should be checked on fitting in the remaining slot 2. In transition from GATED to TRANSMIT READY comparison ">" should be "<=" SuggestedRemedy modify transition from GATED to TRANSMIT READY as follows (MA_DATA.request(DA,SA,m_sdu) *(sizeof(m_sdu) + tail_guard <= remaining_time) Proposed Response Response Status O Cl 64 SC Figure 64-12 P 336 L # [276] Glen Kramer Teknovus Comment Status D 1. "remaining_time" variable is not defined 2. "remaining_time" variable is not defined 2. "stop_time" variable should be constantly updated synchronously with local_time SuggestedRemedy 1. instead of "remaining_time" use "stop_time" 2. "stop_time" variable should be set in "Gate Processing ONU Activation State Dia 3. transition from GATED to TRANSMIT READY in Fig 54-12 should be as following (local_time + sizeof(m_sdu) + tail_guard <= stop_time) Proposed Response Response Status O Cl 64 SC Figure 64-13 P 340 L # [280] Glen Kramer Teknovus O Comment Status D Figure 64-13 does not match Figure 64-4 SuggestedRemedy Split Figure 64-13 into separate figures for Parser and Multiplexer Proposed Response Response Status<th></th><th>ər</th><th>-12</th><th>Teknovus</th><th>L</th><th>" 215</th></th>	Comment Type TR Comment Status D 1. Both MA_DATA and MA_CONTROL frames should be checked on fitting in the remaining slot 2. In transition from GATED to TRANSMIT READY comparison ">" should be "<=" SuggestedRemedy modify transition from GATED to TRANSMIT READY as follows (MA_DATA.request(DA,SA,m_sdu) *(sizeof(m_sdu) + tail_guard <= remaining_time) Proposed Response Response Status O Cl 64 SC Figure 64-12 P 336 L # [276] Glen Kramer Teknovus Comment Status D 1. "remaining_time" variable is not defined 2. "remaining_time" variable is not defined 2. "stop_time" variable should be constantly updated synchronously with local_time SuggestedRemedy 1. instead of "remaining_time" use "stop_time" 2. "stop_time" variable should be set in "Gate Processing ONU Activation State Dia 3. transition from GATED to TRANSMIT READY in Fig 54-12 should be as following (local_time + sizeof(m_sdu) + tail_guard <= stop_time) Proposed Response Response Status O Cl 64 SC Figure 64-13 P 340 L # [280] Glen Kramer Teknovus O Comment Status D Figure 64-13 does not match Figure 64-4 SuggestedRemedy Split Figure 64-13 into separate figures for Parser and Multiplexer Proposed Response Response Status <th></th> <th>ər</th> <th>-12</th> <th>Teknovus</th> <th>L</th> <th>" 215</th>		ər	-12	Teknovus	L	" 215
1. Both MA_DATA and MA_CONTROL trames should be checked on fitting in the remaining slot 2. In transition from GATED to TRANSMIT READY comparison ">" should be "<="	1. Both MA_DATA and MA_CONTROL frames should be checked on fitting in the remaining slot 2. In transition from GATED to TRANSMIT READY comparison ">" should be "<="	Comment T	ype TR	Commen	t Status D		
SuggestedRemedy modify transition from GATED to TRANSMIT READY as follows (MA_DATA.request(DA,SA,m_sdu) *(sizeof(m_sdu) + tail_guard <= remaining_time)	SuggestedRemedy modify transition from GATED to TRANSMIT READY as follows (MA_DATA.request(DA,SA,m_sdu) *(sizeof(m_sdu) + tail_guard <= remaining_time)	1. Both remaini 2. In tra	MA_DATA and ing slot ansition from GA	MA_CONTE	NSMIT READY	uld be checked comparison ">"	on fitting in the
modify transition from GATED to TRANSMIT READY as follows (MA_DATA.request(DA,SA,m_sdu) *(sizeof(m_sdu) + tail_guard <= remaining_time) Proposed Response Response Status O Cl 64 SC Figure 64-12 P 336 L # 276 Glen Kramer Teknovus Comment Type TR Comment Status D 1. *remaining_time" variable is not defined 2. *remaining time should be constantly updated synchronously with local_time SuggestedRemedy 1. instead of "remaining_time" use "stop_time" 2. *stop_time" variable should be set in "Gate Processing ONU Activation State Diag 3. transition from GATED to TRANSMIT READY in Fig 54-12 should be as following (local_time + sizeof(m_sdu) + tail_guard <= stop_time) Proposed Response Response Status O Cl 64 SC Figure 64-13 P 340 L # 280 Glen Kramer Teknovus Comment Type T Comment Status D Figure 64-13 does not match Figure 64-4 SuggestedRemedy Split Figure 64-13 into separate figures for Parser and Multiplexer Proposed Response Response Status O	modify transition from GATED to TRANSMIT READY as follows (MA_DATA.request(DA,SA,m_sdu) *(sizeof(m_sdu) + tail_guard <= remaining_tim (MA_DATA.request(DA,opcode, operands) *(sizeof(MPCPDU) + tail_guard <= remaining_time) Proposed Response Response Status O Cl 64 SC Figure 64-12 P 336 L # 276 Glen Kramer Teknovus Comment Type TR Comment Status D 1. "remaining_time" variable is not defined 2. "remaining time should be constantly updated synchronously with local_time SuggestedRemedy 1. instead of "remaining_time" use "stop_time" 2. "stop_time" variable should be set in "Gate Processing ONU Activation State Dia 3. transition from GATED to TRANSMIT READY in Fig 54-12 should be as following (local_time + sizeof(m_sdu) + tail_guard <= stop_time) Proposed Response Response Status O Cl 64 SC Figure 64-13 P 340 L # 280 Glen Kramer Teknovus Comment Type T Comment Status D Figure 64-13 does not match Figure 64-4 SuggestedRemedy Split Figure 64-13 into separate figures for Parser and Multiplexer Proposed Response Response Status O	Suggested	Remedy				
Proposed Response Response Status O Cl 64 SC Figure 64-12 P 336 L # 276 Glen Kramer Teknovus Comment Type TR Comment Status D 1. "remaining_time" variable is not defined 2. "remaining time should be constantly updated synchronously with local_time SuggestedRemedy 1. instead of "remaining_time" use "stop_time" 2. "stop_time" variable should be set in "Gate Processing ONU Activation State Diag 3. transition from GATED to TRANSMIT READY in Fig 54-12 should be as following (local_time + sizeof(m_sdu) + tail_guard <= stop_time)	Proposed Response Response Status O Cl 64 SC Figure 64-12 P 336 L # 276 Glen Kramer Teknovus Comment Type TR Comment Status D 1. "remaining_time" variable is not defined 2. "remaining time should be constantly updated synchronously with local_time SuggestedRemedy 1. instead of "remaining_time" use "stop_time" 2. "stop_time" variable should be set in "Gate Processing ONU Activation State Dia 3. transition from GATED to TRANSMIT READY in Fig 54-12 should be as following (local_time + sizeof(m_sdu) + tail_guard <= stop_time)	modify (MA_D/ (MA_D/ remaini	transition from C ATA.request(DA ATA.request(DA ing_time)	GATED to TF ,SA,m_sdu) ,opcode, op	RANSMIT READ *(sizeof(m_sdu erands) *(sizeo	DY as follows u) + tail_guard < f(MPCPDU) + ta	= remaining_time) ail_guard <=
Cl 64 SC Figure 64-12 P 336 L # 276 Glen Kramer Teknovus Comment Type TR Comment Status D 1. "remaining_time" variable is not defined 2. "remaining time should be constantly updated synchronously with local_time SuggestedRemedy 1. instead of "remaining_time" use "stop_time" 2. "stop_time" variable should be set in "Gate Processing ONU Activation State Diag 3. transition from GATED to TRANSMIT READY in Fig 54-12 should be as following (local_time + sizeof(m_sdu) + tail_guard <= stop_time)	C/ 64 SC Figure 64-12 P 336 L # 276 Glen Kramer Teknovus Comment Type TR Comment Status D 1. "remaining_time" variable is not defined 2. "remaining time" variable is not defined 2. "remaining time" variable is not defined 2. "remaining time" variable is not defined 2. "remaining time" variable is not defined 2. "remaining time" variable should be constantly updated synchronously with local_time SuggestedRemedy 1. instead of "remaining_time" use "stop_time" 2. "stop_time" variable should be set in "Gate Processing ONU Activation State Dia 3. transition from GATED to TRANSMIT READY in Fig 54-12 should be as following (local_time + sizeof(m_sdu) + tail_guard <= stop_time)	Proposed R	Response	Response	Status O		
Glen Kramer Teknovus Comment Type TR Comment Status D 1. "remaining_time" variable is not defined 2. "remaining time should be constantly updated synchronously with local_time SuggestedRemedy 1. instead of "remaining_time" use "stop_time" 2. "stop_time" variable should be set in "Gate Processing ONU Activation State Diag 3. transition from GATED to TRANSMIT READY in Fig 54-12 should be as following (local_time + sizeof(m_sdu) + tail_guard <= stop_time)	Glen Kramer Teknovus Comment Type TR Comment Status D 1. "remaining_time" variable is not defined 2. "remaining time should be constantly updated synchronously with local_time SuggestedRemedy 1. instead of "remaining_time" use "stop_time" 2. "stop_time" variable should be set in "Gate Processing ONU Activation State Dia 3. transition from GATED to TRANSMIT READY in Fig 54-12 should be as following (local_time + sizeof(m_sdu) + tail_guard <= stop_time)	C/ 64	SC Figure 64	I-12	P 336	L	# 276
Comment Type TR Comment Status D 1. "remaining_time" variable is not defined 2. "remaining time should be constantly updated synchronously with local_time SuggestedRemedy 1. instead of "remaining_time" use "stop_time" 2. "stop_time" variable should be set in "Gate Processing ONU Activation State Diag 3. transition from GATED to TRANSMIT READY in Fig 54-12 should be as following (local_time + sizeof(m_sdu) + tail_guard <= stop_time)	Comment Type TR Comment Status D 1. "remaining_time" variable is not defined 2. "remaining time should be constantly updated synchronously with local_time SuggestedRemedy 1. instead of "remaining_time" use "stop_time" 2. "stop_time" variable should be set in "Gate Processing ONU Activation State Dia 3. transition from GATED to TRANSMIT READY in Fig 54-12 should be as following (local_time + sizeof(m_sdu) + tail_guard <= stop_time)	Glen Krame	ər		Teknovus		
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SuggestedRemedy 1. instead of "remaining_time" use "stop_time" 2. "stop_time" variable should be set in "Gate Processing ONU Activation State Diag 3. transition from GATED to TRANSMIT READY in Fig 54-12 should be as following (local_time + sizeof(m_sdu) + tail_guard <= stop_time)	SuggestedRemedy 1. instead of "remaining_time" use "stop_time" 2. "stop_time" variable should be set in "Gate Processing ONU Activation State Dia 3. transition from GATED to TRANSMIT READY in Fig 54-12 should be as following (local_time + sizeof(m_sdu) + tail_guard <= stop_time)	1. "rem 2. "rem	aining_time" var aining time shou	riable is not o uld be consta	defined antly updated sy	nchronously wit	h local_time
1. instead of "remaining_time" use "stop_time" 2. "stop_time" variable should be set in "Gate Processing ONU Activation State Diag 3. transition from GATED to TRANSMIT READY in Fig 54-12 should be as following (local_time + sizeof(m_sdu) + tail_guard <= stop_time)	 instead of "remaining_time" use "stop_time" "stop_time" variable should be set in "Gate Processing ONU Activation State Dia 3. transition from GATED to TRANSMIT READY in Fig 54-12 should be as following (local_time + sizeof(m_sdu) + tail_guard <= stop_time) Proposed Response Response Status O C/ 64 SC Figure 64-13 P 340 L # 280 Glen Kramer Teknovus Comment Type T Comment Status D Figure 64-13 does not match Figure 64-4 SuggestedRemedy Split Figure 64-13 into separate figures for Parser and Multiplexer Proposed Response Response Status O 	Suaaested	Remedv				
Proposed Response Response Status O Cl 64 SC Figure 64-13 P 340 L # 280 Glen Kramer Teknovus Comment Type T Comment Status D Figure 64-13 does not match Figure 64-4 SuggestedRemedy Split Figure 64-13 into separate figures for Parser and Multiplexer Proposed Response Response Status O	Proposed Response Response Status O Cl 64 SC Figure 64-13 P 340 L # 280 Glen Kramer Teknovus Teknovus Comment Type T Comment Status D Figure 64-13 does not match Figure 64-4 SuggestedRemedy Split Figure 64-13 into separate figures for Parser and Multiplexer Proposed Response Response Status O	1. inste 2. "stop 3. trans (local_t	ad of "remaining time" variable iition from GATE ime + sizeof(m_	time" use ' should be se D to TRANS _sdu) + tail_و	"stop_time" et in "Gate Proce SMIT READY in guard <= stop_tii	essing ONU Act Fig 54-12 shou me)	ivation State Diagra Id be as following:
Cl 64 SC Figure 64-13 P 340 L # 280 Glen Kramer Teknovus Comment Type T Comment Status D Figure 64-13 does not match Figure 64-4 SuggestedRemedy Split Figure 64-13 into separate figures for Parser and Multiplexer Proposed Response Response Status O	Cl 64 SC Figure 64-13 P 340 L # 280 Glen Kramer Teknovus Comment Type T Comment Status D Figure 64-13 does not match Figure 64-4 SuggestedRemedy Split Figure 64-13 into separate figures for Parser and Multiplexer Proposed Response Response Status O	Proposed R	Response	Response	Status O		
Glen Kramer Teknovus Comment Type T Comment Status D Figure 64-13 does not match Figure 64-4 SuggestedRemedy Split Figure 64-13 into separate figures for Parser and Multiplexer Proposed Response Response Status O	Glen Kramer Teknovus Comment Type T Comment Status D Figure 64-13 does not match Figure 64-4 D D SuggestedRemedy Split Figure 64-13 into separate figures for Parser and Multiplexer Proposed Response Response Status O						
Comment Type T Comment Status D Figure 64-13 does not match Figure 64-4 SuggestedRemedy Split Figure 64-13 into separate figures for Parser and Multiplexer Proposed Response Response Status O	Comment Type T Comment Status D Figure 64-13 does not match Figure 64-4 SuggestedRemedy Split Figure 64-13 into separate figures for Parser and Multiplexer Proposed Response Response Status O	C/ 64	SC Figure 64	l-13	P 340	L	# 280
SuggestedRemedy Split Figure 64-13 into separate figures for Parser and Multiplexer Proposed Response Response Status O	SuggestedRemedy Split Figure 64-13 into separate figures for Parser and Multiplexer Proposed Response Response Status O	C/ 64 Glen Krame	SC Figure 64	1-13	P 340 Teknovus	L	# 280
Proposed Response Response Status O	Proposed Response Response Status O	Cl 64 Glen Krame Comment T Figure (SC Figure 64 er <i>Type</i> T 64-13 does not r	I-13 <i>Commen</i> natch Figure	P 340 Teknovus <i>t Status</i> D e 64-4	L	# 280
		Cl 64 Glen Krame Comment T Figure 6 SuggestedF Split Fig	SC Figure 64 Fr Type T 64-13 does not r Remedy gure 64-13 into s	I-13 Commen match Figure separate figu	P 340 Teknovus <i>t Status</i> D e 64-4 ures for Parser a	L and Multiplexer	# <mark>280</mark>
		Cl 64 Glen Krame Comment T Figure (Suggested Split Fig Proposed F	SC Figure 64 er Type T 64-13 does not r Remedy gure 64-13 into s Response	I-13 Commen match Figure separate figu Response	P 340 Teknovus t Status D e 64-4 ures for Parser a s Status O	L and Multiplexer	# 2 <u>80</u>
		Cl 64 Glen Krame Comment T Figure (Suggestedf Split Fig Proposed F	SC Figure 64 er Type T 64-13 does not r Remedy gure 64-13 into s Response	I-13 Commen match Figure separate figu Response	P 340 Teknovus t Status D e 64-4 ures for Parser a s Status O	L and Multiplexer	# <mark>280</mark>
		Cl 64 Glen Krame Comment T Figure (SuggestedF Split Fig Proposed F	SC Figure 64 er Type T 64-13 does not r Remedy gure 64-13 into s Response	I-13 Commen match Figure separate figu Response	P 340 Teknovus t Status D e 64-4 ures for Parser a s Status O	L and Multiplexer	# 2 <u>80</u>
		Cl 64 Glen Krame Comment T Figure (Suggestedf Split Fig Proposed F	SC Figure 64 er Type T 64-13 does not r Remedy gure 64-13 into s Response	I-13 Commen match Figure separate figu Response	P 340 Teknovus t Status D e 64-4 ures for Parser a s Status O	L and Multiplexer	# 2 <u>80</u>

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

C/ 64	SC Figure 6	4-14	Р	L	# 281	C/ 64	SC Figure	64-21	P 352	L	# 297
Glen Kram	ner		Teknovus			Glen Krar	ner		Teknovus		
Comment	Type TR	Comme	ent Status D			Comment	t Type TR	Comm	ent Status D		
Before "times time R	e receiving REG stamp - local_tim REGISTER_REG	STER_REC e" value wil is received	Q message, the O I be very large and I.	NU's RTT is no d timestamp err	t known, so the or will be asserted every	In the The v transi	e state RANDO value of random mission size.	M WAIT the delay shoul	upper bound for the d be limited by the	e delay is wrong length of the sl	g. ot minus the
Suggested	dRemedy					Suggeste	dRemedy				
1. Spli 2. In C 3. ME is ente 4. In C	it OMP parser in OLT UPDATE TH ASURE RTT is e ered DNU this state sh	to OLT and MER state s entered whe	ONU versions should be split into en opcode in {REG) UPDATE RTT GISTER_REQ}, CAL CLOCK	and MEASURE RTT otherwise UPDATE RTT	1. add 2. wh max_ sizeo 3. in f [start	d variable max en parsing DIS delay = length f(/T/R/R/) - la RANDOW WA random_delay	_delay COVERY GA - laser_on - s ser_off T change the _timer. rando	ATE calculate max_ sizeof(IDLE_time) - e code to om(max_delay)]	_delay as IFG - preambl	e - sizeof(MPCPDU) -
Froposed	Response	Respons				Proposed	l Response	Respon	se Status O		
C/ 64 Glen Kram	SC Figure 6	4-20	P 351 Teknovus	L	# 284	C/ 64	SC Figure	64-21	P 352	L	# 285
<i>Comment</i> Variat	<i>Type</i> T ble success_flag	Comme is not defin	ent Status D ed			Glen Krar Comment	ner t <i>Type</i> T	Comm	Teknovus ent Status D		
<i>Suggested</i> Define Proba	dRemedy e success_flag ıbly should be "fla	ag == succe	ess"			1. Tra 2. Tra 3. Va 4. A s	ansition from C ansition from W lue for IDLE tin state showing p	HECK_UNIC AIT to CHEC ner should be parsing of DIS	AST to WAIT for W CK_UNICAST shou calculated based COVERY GATE s	/INDOW should Id be marked " on received GA hould be added	d be marked "false" OMP.indication()" \TE parematers
Proposed	Response	Respons	se Status O			Suggeste See c	<i>dRemedy</i> comment				
C/ 64 Maislos, A	SC Figure 6 Ariel	4-20	P 353 Passave	L 1	# 650	Proposea	l Response	Respon	se Status O		
Comment Use o	<i>Type</i> T f MPC_LLID[j].re	<i>Comme</i> equest primi	ent Status D itive is missing			C/ 64 Maislos, A	SC Figure	64-22	P 355 Passave	L 39	# 651
Suggested Add s	dRemedy upport for primiti	ve in diagra	ım			Comment Figure	t <i>Type</i> E e name is not o	Comm descriptive	ent Status D		
Proposed	Response	Respons	se Status O			Suggeste Chan	<i>dRemedy</i> ge figure name	e to "Discover	ry Processing ONU	Registration S	tate Diagram"
						Proposed	l Response	Respon	se Status O		

C/ 64 SC Figure 64-22 P 355 L 39 # 652 Maislos, Ariel Passave P P P P	C/ 64 SC Figure 64-6 P 330 L 1 # 139 Brown, Benjamin AMCC AMCC </th
Comment Type T Comment Status D Use of MPC_LLID[j].request primitive is missing	Comment Type T Comment Status D Missing transition label
SuggestedRemedy Add support for primitive in diagram	SuggestedRemedy Add "UCT" label on transition from INIT to SELECT
Proposed Response Response Status O	Proposed Response Response Status O
C/ 64 SC Figure 64-28 P 361 L # 727 Glen Kramer Teknovus Teknovus	C/ 64 SC Figure 64-9 P 332 L # 358 Karasawa, Satoru Oki Electric Industry
Comment Type T Comment Status D It would considerably simplyfy GATE processing at ONU if grants arrive in order of their start times. It is highly inefficient if scheduler comes back (in time) to fill the gaps.	Comment Type E Comment Status D LaserControl is not used in the Control Multiplexer.
SuggestedRemedy	SuggestedRemedy Remove the LaserControl signal from Figure 64-9.
 Specify that grants should arrive in order of their start times. Remove extract_min function from GATE processing diagram 	Proposed Response Response Status O
Proposed Response Response Status O	CL64 SC Eigure64-21 D252 L14 # 260
C/ 64 SC Figure 64-4 P 325 / # 272	Terayama, Hisanori Panasonic Mobile Co
Glen Kramer Teknovus	Comment Type E Comment Status D
Comment Type T Comment Status D Signals to and from Multi-Point instance N should have subscript N instead of 1	The change state condition from CHECK UNICAST state to WAIT FOR WINDOW state is wrong.
SuggestedRemedy change 1 to N	SuggestedRemedy Change "true" to "false".
Proposed Response Response Status O	Proposed Response Response Status O
C/ 64 SC Figure 64-6 P 330 L # 273	C/ 64 SC Figure64-4 P 325 L 42 # 268
Glen Kramer Teknovus	
Comment Type T Comment Status D Transition from SELECT to ENABLE happens only when at least one of TransmitPending[is not NONE otherwise it remains in SELECT state	The interface signals name between Multi-Point instance N and Multiplexing Control block are wrong.
Suggested Remedy	SuggestedRemedy
Transition from INIT to SELECT should be marked "UCT" Transition from SELECT to ENABLE should be marked "OR(TransmitPending[i] != NONE	Change "TransmitEnable[1]" to "TransmitEnable[N]". Change "TransmitPending[1]" to "TransmitPending[N]". Change "TransmitProgress[1]" to "TransmitProgress[N]".
) Proposed Response Response Status O	Proposed Response Response Status O

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

CI 65	SC 65.1.1	P 376	L 54	# 738	C/ 65	SC 6	5.1.2	P 377	<i>L</i> 1	# 441
Bemmel, V	incent	Alloptic			Jaeyeon	Song		Samsung		
Comment	Туре Т	Comment Status D			Commen	t Type	т	Comment Status D		
l don't multica	see why we now ast) plus one for	r need 2 MACs per LLID in th broadcast. This seems redur	e OLT (seperate ndant.	e for unicast vs.	Multio MAC mear	cast in 'Mu address i ing is not	ulticast I s Broad clear.	MAC' means SCB except the c cast MAC address or SCB mu	corresponding Iticast address	ONU? if so, Destination EFM defined? The
Also re	fer to 64.1.2, p	325 line 1			Suggeste	dRemedy	/			
Suggested	Remedy				Clarif	y the mea	aning.			
Use the	e (single) broade	cast MAC for both broadcast	and multicast.		Proposed	Respons	e	Response Status O		
Recall broadc	that the broadca asts. This MAC	ast MAC is a special MAC that allows the bridge to achieve	at allows us to in the efficient equ	plement single copy livalent of 'flooding' in a			-			
P2MP	topology.	5		0	C/ 65	SC 6	5.1.2	P 377	L 13	# 743
From t	he perspective o	f the bridge there should be	no difference. A	standard bridge floods	Bemmel,	Vincent		Alloptic		
broadc	ast and multicas	st packets in a similar way.			Commen	t Type	т	Comment Status D		
And jus frames the OL I.e, the sugges	st like with a sta based on multion T. total number of sted	ndard bridge, the destination cast group membership. This MACs at the OLT (for N ON	hosts should be should be trans Us) should be N	responsible for filtering parent to the bridge in +1, not 2N+1 as	Appe to ge Why When Why	ars to be t LLID vs. do we nee e is this in does it ex	a reques MAC in ed it? nfo usec	st at the OLT from the Multipoi fo. I? for an ONU?	nt MAC Contro	ol layer to the RS layer
Proposed F	Response	Response Status O			S <i>uggeste</i> Be m	<i>dRemedy</i> ore speci [:]	/ fic			
<i>Cl</i> 65 Daido, Furr	SC 65.1.1 nio	P 377 Sumitomo Ele	L 2 ectric Ind	# 435	Proposed	Respons	6e	Response Status 0		
Comment 7	Туре Т	Comment Status D			C/ 65	SC 6	5.1.2	P 377	L 20	# 739
In draft	1.3, the multica	st MAC and the broadcast N	IAC can not rece	eive packets. In this	Bemmel,	Vincent		Alloptic		
own LL Registe	ID. Because the ID. Req MPCPD	ELLID for ONU has not been	assigned yet, w	hen ONU issues the	Comment "Mult	t <i>Type</i> plexing C	E ontrol S	Comment Status D ublayer" is really a 'block' in th	e Multipoint M	AC control sublayer
Suggested	Remedy				Suggeste	dRemedy	,			
The bro	oadcast MAC sh	ould be able to receive only	the MPCPDU pa	ckets. When the ONU	Corre	ct accord	ingly			
issues transm	the Registe_Re ission.	q, the UNU uses the LLID of	mode=0 and log	jical_link_id=Ux/fff for	Proposed	Respons	e	Response Status 0		
Proposed I	Response	Response Status O								

C/ 65 SC 65.1.2	P 377	L 20	# 327	C/ 65	SC 65.1.2.1	P377	L 34	# 820
Ken, Murakami	Mitsubishi Ele	ctric		Lynskey,	Eric	UNH-IOL		k
Comment Type E "Multiplexing Control S	<i>Comment Status</i> D Sublayer" is not suitable.			Commen It see	<i>t Type</i> T ems that there sh	Comment Status D nould be a default value for the	e LLID of the ON	IU. If I understand the
SuggestedRemedy "Multi-Point MAC Cont	trol Sublayer" is suitable.			proce proce matc	edure properly, the ss. But in order b a known value	he OLT will assign a new LLID r for the OLT to receive a fram . How does the ONU know wi	to the ONU dur e, the LLID of th hat to put here b	ing the registration le received frame must lefore the OLT tells it?
Proposed Response	Response Status O			The I prear has r	Multi-Point MAC mble of every fra registered, it is no	Control layer provides the RS me that is sent. However, wh ot clear what the value should	with an LLID to en an ONU first be. Clause 65	be used in the powers up and before it states that the OLT
C/ 65 SC 65.1.2.1 Jaeyeon Song	P 377 Samsung	L 26	# 444	rejec MPC addit	t frames that cor _LLID.request pl ional MAC, and I	ntain LLIDs that do not match rimitive. Note that this comme I'm not sure if this is the best w	the logical_link_i ent seems to imp way to do this. I	id parameters from the oly the creation of an am proposing that
Comment Type TR 1) MPC.LLID[j].reques point MAC Control. 2) In addition, there is	Comment Status D t is not appreared in Clause 6 not MPC.LLID[j].indication pri	4 for connecting mitive in anywhe	each MAC and Multi-	with t receir same parse	the default LLID, ved frame and so default LLID. T e according to de	the OLT will associate a new end that information in a unica The ONU will then need to rece estination address. It will then	LLID with the so ist frame to the (eive the frame w use the new LL	DNU that contains the ith the default LLID and ID for future
SuggestedRemedy				Currente	dDomody	illar comment has been submi	lited against Cia	use 04.
 The relationship sho We should define M diagram in Clause 64, 	ould be defined. IPC.LLID[j].indication primitive too.	and add these	into the layer block	Add t 0x000	text to the primiti 00. Following th	ve: The default value of each e completion of a successful r	ONU's LLID before the construction of the cons	ore registration is ONU will be assigned a
- MPC.LLID[j].indicat (type - OLT or ONI	tion(type, mode, LLID) for OLT U, mode-unicast or multicast,	r LLID - LLID of C	DNU who sent frame)	Proposed	d Response	Response Status O		
- MPC.LLID[j].indicat (type - OLT or ON	tion(type, mode, LLID) for ON U, mode-unicast or multicast,	U LLID - destinatio	on LLID)	C/ 65 Teravama	SC 65.1.3.2 a Hisanori	2 P 379 Panasonic M	L 23	# 270
I will prepare a presen	tation about it.			Common		Commont Status		
Proposed Response	Response Status 0			I thin	k that replaceme ssity.	ent of a normal preamble of dis	scard the entire	paket does not have
				Suggeste Delet	edRemedy te description " re	eplacing it with normal preamb	ole ".	

Proposed Response Response Status **O**

C/ 65 SC 65.1.3.2.1	P 380	L 4	# 740	CI 65 S	SC 65.2.3.3	P 383	L 18	# 823
Bemmel, Vincent	Alloptic			Lynskey, Eric		UNH-IOL		
Comment Type T	Comment Status D			Comment Typ	e T	Comment Status D		
Which octet is the SPD	field really in 2nd or 3rd?			When /T_	FEC_E/ is co	mpared against the norm	al end delimiter it a	appears that over the
SuggestedRemedy Correct and allign section	ons 65.1.3.2.1 nd 65.1.3.2.2			codes (/T/ (/T/R/I2/I2	R/I2/T/R/), the thi	e second column contair rd column is the number	of bits different be	tween each 10-bit code.
Proposed Response	Response Status O			/T_FEC_E /K29.7/ -1/	E/ No 011101000-	ormal end delimiter Bit /K29.7/ -1011101000-	s different 0	
C/ 65 SC 65.2.1 Daido, Fumio	P 381 Sumitomo Elec	L 2 tric Ind	# 436	/K23.7/ -1 /K28.5/ -0 /D16.2/ +1	0110101000- 011111010+ 001000101-	/K23.7/ -1110101000- /K28.5/ -0011111010+ /D16.2/ +1001000101-	0	
Comment Type E	Comment Status D			/K29.7/ -1 /K23.7/ -1	110101000- 110101000-	/D16.2/ +1001000101-	3 7	
Regading the rate adap	otation at MAC layer, the referr	ed subclause s	should be specified.	SuggestedRei	medy			
SuggestedRemedy				Change d	=12 to d=10.			
Append the following pr	nrase to the sentence at line 2	, ", as describe	ed in 4.2.8."	Proposed Res	ponse	Response Status O		
Proposed Response	Response Status U							
				C/ 65 S	SC 65.2.3.3	P 383	L 34	# 502
C/ 65 SC 65.2.1 Lvnskev. Eric	P 381 UNH-IOL	L 5	# 822	Khermosh, Lic	or T	Passave		
Comment Type T Do we want to be a little sublayer are optional" S an EPON that they nee	Comment Status D e stronger with the sentence " Should we specifically state th d to implement it this way? The	The FEC functi at if someone i	onality and FEC is going to use FEC on bit implementations of	"The /l/ in disparity c	both the /T_F orrecting IDL t we can mate	EC_E/ and the /T_FEC_E) or an /I2/ (a disparity r	O/ ordered_sets ca neutral IDLE)" time after all the pa	an be either an /I1/ (a arity data is sent, maybe
other forms of FEC from	n being used.			not even a	at the marker	but at the first Idle in the	IPG afterwards.	
SuggestedRemedy				SuggestedRei	medy			
Add sentence: "A FEC shall behave as specifie	sublayer implemented for ope ed in 65.2	ration over a m	ulti-point optical link	Delete this	siine			
Proposed Response	Response Status O			Proposed Res	ponse	Response Status U		
C/ 65 SC 65.2.3.3	P 383	L 1519	# 972					
Yokomoto, Tetsuya	Japan							
Comment Type E Spelling error: "occuring	Comment Status D							
SuggestedRemedy Change to "occurring".								
Proposed Response	Response Status O							

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

Page 162 of 169 C/ 65 SC 65.2.3.3

C/ 65 SC 65.2.3.3	P 383	L 4	# 815	C/ 65	SC	65.2.4.1	P 385	L 52	# 824
Lynskey, Eric	UNH-IOL			Lynskey,	Eric		UNH-IOL		
Comment Type T	Comment Status D			Comment	t Type	т	Comment Status D		
The Ethernet frame m. /T/R/ then the frame w protect the delimiters.	arkers need to be protected. I vill not be accepted. It seems They can be explicitly include of it by passing up valid S. FE	f the PCS does that there are t d in the FEC ()	sn't receive valid /S/ and wo logical ways to preferred method) or the to the PCS even if they	How i Prear puts t	is 1553- nble an he total	octet buffer d SFD acco at 1552.	calculated? Frame size is ount for 7 bytes, T_FEC_E i	1518 bytes, S_ s 6 bytes, and p	FEC is 5 bytes, parity is 16 bytes. That
were received with sor	me errors.		to the PCS even in they	Suggeste	dReme	dy			
SuaaestedRemedv				Chan	ge 1553	3 to 1552.			
Remove the sentence modify Figure 65-9 to comment for exact cha	starting with "Therefore, the E include /S/ and /T/R/I/ or /T/R/ anges).	thernet frame R/I/ in the FEC	markers" Additionally, algorithm (see related	Proposea	l Respoi	nse	Response Status O		
Proposed Response	Response Status O			C/ 65	SC	65.2.4.2	P 385	L 30	# 818
				Lynskey,	Eric		UNH-IOL		
				Comment	t Type	Е	Comment Status D		
C/ 65 SC 65.2.4.1 Hirth, Ryan	<i>P</i> 383 Terawave Cor	L 50 nmunica	# 343	This i from	s a com the FEC	ment again ayer to the	st Figure 65-5. This figure PMA. The state diagrams	shows that tx_os use ftx_code-	code-group is passed group to do this.
Comment Type T	Comment Status D			Suggeste	dReme	dy			
FEC should be an auto	onegotiated parameter on the	link.		In the and F	e figure, PMA lay	replace tx_ ers.	code-group with ftx_code-g	roup in the inte	rface between the FEC
An PHY Receiver whic even if FEC is not use	ch supports FEC will incure a 2 d. This is significant latency a	2,389 byte (19 and should be o	uS) delay on all frames lisabled if not used.	Proposed	l Respoi	nse	Response Status O		
A PHY Transmiter will	waist overhead if FEC is used	and the received	ver does not support it.	01.05			Deed	/ 50	"
SuggestedRemedy Allow the PHYs to neg	potiate this parameter.			Yokomoto	o, Tetsu	65.2.4.2.2 ya	<i>P</i> 384 Japan	L 53	# <u> 973</u>
Proposed Response	Response Status O			<i>Comment</i> Spelli	t <i>Type</i> ing erroi	E r: "descibed	Comment Status D		
				Suggeste	dReme	dy			
C/ 65 SC 65.2.4.1	P 385	L 52	# 825	Chan	ge to "d	escribed".			
Lynskey, Eric	UNH-IOL			Proposed	- I Respoi	nse	Response Status 0		
Comment Type T PON does not prohibit	Comment Status D								
SuggestedPomody				C/ 65	SC	65.2.4.2.2	P 385	L 52	# 974
Add 4 octats to the bur	ffersize			Yokomoto	o, Tetsu	уа	Japan		
				Comment	t Type	Е	Comment Status D		
Proposed Response	Response Status 0			"1553	B-octet b	ouffer" is be	tter to unify with the block d	liagram of Figui	e 65.
				S <i>uggeste</i> Chan	dReme ge to "A	<i>dy</i> \ one packe	t buffer".		
				Proposed	- I Respoi	nse	Response Status 0		

 TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause
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 RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 C/ 65
 SC 65.2.4.2.2

C/ 65 SC 65.2.4.2.2	P 385	L 52	# 581	CI 65	SC 65.2.4.	2.2	P 386	L 16	# 208
Tom Mathey	Independent			Marris, Arth	nur		Cadence		
Comment Type T	Comment Status D			Comment	Гуре Т	Comment S	Status D		
If a 1553-octet buffer ex transmit path, then som	ists in the receive path, and po e words need to be added to A	ossibly some Annex 31B, cla	additional delay in the ause 31B.3.7.	Figure does n	65-8 needs to ot need to be	be made cleare balanced with the	r. Also I believ e FEC encode	re the delay for t ed data as either	the non-FEC frames r all or none of the data
SuggestedRemedy				on a lir	k will be FEC	encoded.			
Discuss.				Suggested	Remedy				
Proposed Response	Response Status O			Delete diagrar	delay box for n. Add text "rx	non-FEC data. D c_code_group<9:	elete "Selecto 0>" underneat	or" and "FIFO" b th arrow at the b	oxes at bottom of bottom of the diagram.
				Proposed I	Response	Response S	Status O		
C/ 65 SC 65.2.4.2.2	P 385	L 52	# 207						
Marris, Arthur	Cadence			C/ 65	SC 65.2.4.3	3.2	P 386	L 37	# 828
Comment Type T	Comment Status D			Lynskey, E	ric		UNH-IOL		
It is too prescriptive to s 1553 is arrived at and it of this buffer should be	pecify a 1553-octect buffer he makes no allowance for VLAN left up to the implementor.	re. It is not cle I-tagged and	ear how the value of jumbo frames. The size	Comment T The va	<i>Type</i> T riable fec_enc	Comment S code needs to be	Status D defined.		
SuggestedRemedy				Suggested	Remedy				
Delete the text "1553-oc	ctect".			fec_en	code				
Proposed Response	Response Status O			A boole function	ean set by the n.	FEC Transmit p	rocess to indic	cate the status c	of the RS_Encode(Data)
C/ 65 SC 65.2.4.2.2	P 386	L 12	# 975	Values FALSE	: TRUE; data ; data is not b	is acted upon by eing acted upon	the RS_Enco by the RS_En	de(Data) functio code(Data) func	on. ction.
Yokomoto, Tetsuya	Japan			Proposed F	Response	Response S	Status O		
Comment Type E Missing	Comment Status D			CI 65	SC 65 2 4	2.2	D 396	/ 37	# 024
SuggestedRemedy				Lynskey E	30 03.2.4.	5.2		L 31	# [831
Modify "Packetthat" into	Packet that".					0			
Proposed Response	Response Status 0			Comment	ype I	Comment S	Status D	al to motionat its a	ing in both tout and state
				diagrar	n.	defined and sho	uid de rename	ed to reflect its s	size in both text and state
				Suggested	Remedy				
				parity< An 8-bi Proces upon e	D7:D0> t array that co s. The eleme ach entry into	ntains the curren nts within the arr the XMIT_PARI	nt parity bits to ay are update TY state.	be encoded in d with the next a	the FEC Transmit 8-bits to be encoded
				For ead ONE;D	ch element wit ata bit is a log	thin the array: Va jical one.	alues:ZERO;Da	ata bit is a logic	al zero.
				Additio	nally, in Figure	e 65-9, change p	arity[x] to parit	ty <d7:d0>.</d7:d0>	
				Proposed I	Response	Response S	Status O		

C/ 65 SC 65.2.4.3 Lynskey, Eric	3.2 <i>P</i> 386 UNH-IOL	L 37	# 830	<i>CI</i> 65 Lynskey,	SC 65.2.4.3.3 Eric	<i>P</i> 387 UNH-IOL	<i>L</i> 1	# 812
Comment Type T parity_buffer_empty r	Comment Status D needs to be defined			Comment Need	<i>Type</i> T to add a function f	Comment Status D for check_ahead.		
SuggestedRemedy parity_buffer_empty A boolean set by the encoded. Values:TRUE;No mo FALSE;More parity by	FEC Transmit process to indic re parity bytes need to be enco ytes need to be encoded.	ate if more pari ded.	ty bytes need to be	Suggeste check Start_ order Proposed	dRemedy c_ahead: Prescient of_Packet in orde ed_sets with S_FE Response	t function used by the FEC r to replace the Start_of_P C. <i>Response Status</i> 0	Transmit proces acket and its two	ss to find the preceding IDLE
Proposed Response	Response Status O							
		/ 27	# 007	<i>CI</i> 65 Lynskey,	SC 65.2.4.3.3 Eric	Р 387 UNH-IOL	L 4	# 829
Lynskey, Eric	UNH-IOL	L 31	# 827	Comment	Type T	Comment Status D		
Comment Type T	Comment Status D			RS_E	incode(Data) funct	ion should state that it doe	es an 8B/10B deo	code.
Need to define ftx_bit	and place the appropriate refe	rence to clause	58.	Suggeste	dRemedy			
SuggestedRemedy				Add a functi	is a second senter on passes the data	a through DECODE([/x/]).	to the Reed Solo	mon encoder, this
ftx_bit A binary parameter u PMD_UNITDATA.req is a logical zero.	sed to convey data from the Pl luest service primitive as speci	MA to the PMD fied in 58.1.4.1.	via the Values:ZERO;Data bit	Proposed	Response	Response Status 0	/ 40	# 004
ONE;Data bit is a log	Ical one.			Lvnskev.	SC 65.2.4.3.4 Eric	UNH-IOL	L 18	# 834
	Response Status 0			Comment	<i>Type</i> T count not defined	Comment Status D		
C/ 65 SC 65.2.4.3	3.2 <i>P</i> 386	L 37	# 826	Suggeste	dRemedy			
Lynskey, Eric Comment Type T	UNH-IOL Comment Status D			loop_ alignr	count: A 3-bit cour	nter used to keep track of t	he number of loc	ops in the receive byte
The variable ftx_code	e-group needs a definition.			Proposed	Response	Response Status O		
SuggestedRemedy								
ftx_code-group<9:0> A vector of bits repre- has been prepared fo to the PMA as the pa element ftx_code-gro ftx bit transmitted.	senting one code-group,as spe or transmission by the FEC Tra rameter of a PMD_UNITDATA up<0> is the first ftx_bit transm	cified in Tables nsmit process. .request(ftx_bit) itted; ftx_code-	36–1a or 36–2, which This vector is conveyed service primitive. The group<9> is the last					
Proposed Response	Response Status O							

C/ 65	SC 65.2.4.3.7	P 388	L 1	# 811
Lynskey, Eric	;	UNH-IOL		
Comment Tv	pe T	Comment Status D		

This comment is against Figure 65-9. This state diagram uses PUDR as an exit condition for all states. Previous state diagrams, such as 36-6 use PUDR as an action taken within the state. It seems that the PUDR is something the PCS can do, whereas the PUDI is something the PCS needs to wait for, which is why PUDI is used as the exit condition in Figure 65-10.

SuggestedRemedy

Bring all occurrences of PUDR inside the states for which they exist as exit conditions. In order to clock between states, add the cg_timer as done in Figure 36-6.

Proposed Response Response Status **O**

C/ 65	SC 65.2.4.3.7	P 388	L 1	#	816
Lynskey, Eric	;	UNH-IOL			

Comment Type T Comment Status D

This is a comment against Figure 65-9. The state diagram should be modified to include the start and end delimiters within the FEC boundaries. I believe that the XMIT_ENCODE state, as it is currently written, will include the /S/ in the FEC. The setting of tx_code-group sets up the next 10 bits that will be transferred to the PMA during the next PUDR. So, once tx_code-group is set to /S/ in the XMIT_S_FEC_3, it will not be transferred until the next PUDR, which happens in the XMIT_ENCODE state. Since fec_encode gets turned on in the XMIT_ENCODE state, the /S/ should be covered. The end delimiter of /T/R/I/ or /T/R/R/I/ is not currently included in the FEC boundaries.

SuggestedRemedy

Remove from the XMIT_T_FEC1_TRRI state the action fec_encode<=FALSE. Add to the XMIT_T_FEC1_T state the action fec_encode<=FALSE. This should allow the end delimiter to be included in the FEC calculation.

Proposed Response Response Status O

C/ 65	SC 65.2.4.3.7	P 388	L 18	# 814	
Lynskey, Eric	;	UNH-IOL			

Comment Type T Comment Status D

This comment is against Figure 65-9. It's not clear if the /S/ is included in the FEC. Subclause 65.2.3.3 says that "the ethernet frame markers are not protected by the FEC code and are exposed to higher BER." The XMIT_ENCODE state of Figure 65-9 shows that the /S/ is covered by the FEC. The /T/R/ or /T/R/R/ are not covered by the FEC, and this agrees with the text.

SuggestedRemedy

Make text and state diagram agree by adding a new state, XMIT_S_FEC_4 that transmits the /S/ before entering into the XMIT_ENCODE state.

Proposed Response Response Status **O**

C/ 65	SC 65.2.4.3.7	P 388	L 31	# 817]
Lynskey, Eric		UNH-IOL			

Comment Type T Comment Status D

This comment is against Figure 65-9. If PUDR is pulled within the states, then you need to make sure you transition from XMIT_T_FEC1_TRRI to XMIT_T_FEC1_T when tx_codegroup = /T/ and not /D/.

SuggestedRemedy

Modify the exit condition on XMIT_T_FEC1_TRRI to be $tx_code-group = /T/$.

Proposed Response Response Status **O**

C/ 65	SC 65.2.4.3.7	P 388	L 6	# <u>810</u>
Lynskey, Erie	c	UNH-IOL		

Comment Type T Comment Status D

This comment is against Figure 65-9. On the exit condition from XMIT_IPG, it is not clear what happens when both exit conditions are satisfied at the same time, which would always be the case when the check_ahead condition is satisfied.

SuggestedRemedy

On the exit condition that loops back to XMIT_IPG, replace with: PUDR*(check_ahead != /K28.5/D/K28.5/D/S)

Proposed Response Response Status **O**

C/ 65 SC 65.2	4.3.7	P 388	L 8	# 813	C/ 65	SC 65	.2.4.3.8	P 3	89	L 46	# 833
Lynskey, Eric	L	JNH-IOL			Lynskey, E	Eric		UNH-	IOL		
Comment Type T	Comment Sta	atus D			Comment	Туре -	T Co	omment Status	D		
This comment is a the new S_FEC. /D/ codes need to	gainst Figure 65-9. ⁻ When the check_ahe be replaced with /D6	The XMIT_S_FE ad function sees .4/.	C_x states need t the /K28.5/D/K28	o be modified for 3.5/D/S/, the two	This is state of count	s a comme diagram. kept the d	ent against F In previous s levice in the	igure 65-10. C sync state diagr SYNC_ACQUII	urrently, the ams from C RED_A state	ere is no use o lause 36 and es for an addi	f good_cgs in the 48 the good_cgs tional 2 PUDIs.
SuggestedRemedy					Suggested	dRemedy					
XMIT_S_FEC_1 s XMIT_S_FEC_2 s Need to add XMIT and XMIT_S_FEC XMIT_ENCODE o	tate should have follo hould have following _S_FEC_3 and XMIT _2, respectively. The nly needs to be PUD	wing action: ftx_ action: ftx_code- 「_S_FEC_4 that e exit condition fr R since you alrea	code-group <= tx group <= /D6.4/ are identical to X om XMIT_S_FEC ady know it's an /S	_code-group MIT_S_FEC_1 ;_4 to S/.	Add a cggoo *good OR	n arc that d*good_c _cgs=3.	loops back ir gs!=3. On th	nto the SYNC_/ he two exit cond	ACQUIRED	_1ATHRU7A have a cggood	on the condition I, add the term
Proposed Response	Response Sta	atus O			Remo	ve all refe	rences to go	od_cgs in the s	tate diagran	n and text.	
					Proposed	Response	e Re	esponse Status	0		
CI 65 SC 65.2	4.3.8	P 389	L 26	# 832		•					
Lynskey, Eric	L	JNH-IOL			CI 65	SC 65	2 1	D 3	01	/ 14	# 076
Comment Type T	Comment Sta	atus D			Yokomoto	. Tetsuva		Japar)	L 14	# 970
It seems like the C handled in the CO	COMMA_DETECT_5 MMA_DETECT_1234	state is redunda 4 state.	nt, in that all of it's	s functionality is	Comment	Type I	E Co	omment Status	D		
SuggestedRemedy					Spellir	ng error: "a	aquisition"				
Delete COMMA_D	ETECT_5 state		F 10045		Suggested	dRemedy					
The exit conditions PUDI([/D/)*loop_c ACQUIRE_SYNC remove the loop_c	s from COMMA_DET ount!=5, and to SYNC _1234 state, the exit of count!=4 in the arc ba	ECT_12345 will C_ACQUIRED or condition into CC ack to COMMA_E	be to ACQUIRE_ PUDI([/D/])*loop MMA_DETECT_ DETECT_12345.	SYNC_1234 on o_count=5. In the 5 goes away and	Chang Proposed	ge to "acqi Response	e Re	esponse Status	0		
Proposed Response	Response Sta	atus O			C/ 65	SC Fig	gure 65-6	P 3	85	L 1	# 361
					Kawaguch	ii, Kazuho		Oki E	lectric Indus	stry c	
C/ 65 SC 65.2	4.3.8	P 389	L 44	# 835	Comment	Type I	E Co	omment Status	D detector w	which is the FF	C packet boundary
Lynskey, Eric	L	JNH-IOL			symbo	ols are ext	racted from t	transmit data, a	nd multiple>	xed by selecto	r with packet frame
Comment Type T	Comment Sta	atus D			and Fl be mu	EC parity	octet. Howe	ever, I think that out of 8B/10B Fr	the output o	of packet bour	e FFC packet
The Reed Solomo	n code being implem	ented has the ab	bility to correct 8 b	its in any given	bound	lary symbol	ols are const	tructed from 10	3 code-grou	ip.	
process, since that	t is what we can corr	ect up to.		byte alignment	Suggested	dRemedy					
SuggestedRemedy					The fig	g.65-6 sho	ould be revise	ed so that the o	utput of pac	ket boundary	detector is
Change diagram to names to 1THRU8	o reflect that 8 errors 3 and 1ATHRU8A. E	can be tolerated xit conditions be	. Change SYNC_ come *loop_coun	_ACQUIRED state t=8.	multip Proposed	Response	e Re	esponse Status	O	ider the 8B/10	B Encoder Diock.
Proposed Response	Response Sta	atus O	-								

P802.3ah	Draft	1.3	Comments
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C/ 66 SC 66 Daines, Kevin	<i>P</i> 393 World Wide P	L 1 ackets	# 882	<i>CI</i> 66 Barrass, H	SC 66.1 ugh	P 394 Cisco Systems	L 41	# 941
Comment Type E	Comment Status D			Comment	Tvpe T	Comment Status D		
Extra word in clause t	title.			Both th	ne rate and rea	ch for the two copper PHYs may	vary.	
SuggestedRemedy				The no	minal rate sho	uld be quoted for the nominal rea	ach.	
Change to read "Syst	em considerations for Ethernet	t subscriber ac	cess networks"	Suggester	Remedy			
Proposed Response	Response Status 0			In Tab	le 66-1			
C/ 66 SC 66.1	<i>P</i> 394 World Wide P	L 15 ackets	# 885	Chang Chang	e the rate colu e the span colu	mn for 10PASS-T to "10 (nomina umn for 10PASS-T to "0.75 (nom	l)" inal)"	
Comment Type E	Comment Status D			Chang Chang	e the rate colu e the span colu	mn for 2BASE-T to "2 (nominal)" umn for 2BASE-T to "2.7 (nomina	al)"	
Extra word.				Proposed	Response	Response Status 0		
SuggestedRemedy								
Remove 2nd with the	om last sentence of paragraph.			C/ 66	SC 66.1	P 394	L 7	# 884
Proposed Response	Response Status O			Daines, Ke	vin	World Wide Pac	ckets	
				Comment	Туре Е	Comment Status D		
C/ 66 SC 66.1	P 394	L 3	# 883	Plural				
Daines, Kevin	World Wide P	ackets		Suggested	Remedy			
Comment Type E Extra word.	Comment Status D			Chang "in net	e "in networks works of one o	of one or multiple EFM media typ r multiple EFM media type(s)".	be" to	
SugaestedRemedv				Proposed	Response	Response Status O		
Change to read "This networks, also referre	clause provides information or	n building Ethe	rnet subscriber access					
Proposed Response	Response Status O			<i>Cl</i> 66 Barrass, H	SC 66.4 ugh	P 395 Cisco Systems	L 28	# <u> </u> 942
				<i>Comment</i> Some	<i>Type</i> T mention of spe	Comment Status D ectral compatibility for subscriber	access copp	per is needed.
				S <i>uggested</i> Add a	<i>Remedy</i> new subclause	e (after 66.4):		
				66.5 D	eployment rest	trictions for subscriber access co	pper	
				10PAS access that sy goverr (2PAS	S-T and 2BAS networks, how stems are des mental and reg S-TL) for furthe	E-TL PHYs have been specified wever many local regulations app igned and configured to comply v gional requirements. Refer to An er information regarding configura	to allow dep ly to such ne vith all appro nex 62A (10F ation profiles	loyment on public etworks. It is important priate regulatory, PASS-T) and Annex 63A
				Proposed	Response	Response Status O		

C/ 66 SC 66.5	P 39	95 L 30	#	886
Daines, Kevin	World	Wide Packets		
Comment Type E System consideration of (Clause 22 PHY managenabled. If the bit was of traffic would be allow protocols at least.	Comment Status candidate: Ideally, one gement register bit 1. sent _without_ an OA ved to traverse the on	D e would not set "O, 7) without an OAM M sublayer either p e-way link. This wo	AM Unidirectio sublayer preso present or ena puld break som	nal Enable" ent and bled, all types ne L2
SuggestedRemedy				
Add OAM as a sub-cla system considerations	use. This sub-clause like the one suggeste	could become the ed in the comment.	repository for (DAM-related
If the chief editor agree	s, the OAM editor wil	I supply needed te	xt.	
Proposed Response	Response Status	0		
C/ 66A SC 66A.2.1	P41	16 L7	#	620
Radcliffe, Jerry	Hatter	as Networks		
objective to write an int interoperability, and is have been considered constitutes the extended An informative append SuggestedRemedy Adopt radcliffe_optics_ draft text for this apper	ormative appendix. Ir therefore out of scope in the design of the o ad temperature suppo ix to document the ter 1_0303.pdf, or other idix.	a general, temperal b. The maximum of ptical specification: rt required by the of mperature assump text that treats tem	ure does not a berational temp s. It is this con objective. tions is all that perature as inf	intect beratures sideration that is needed. formative, as
Proposed Response	Response Status	0		
C/ 66A SC 66A.2.1 Dawe, Piers	P 4 1 Agiler	16 L 7 nt	#	380
Comment Type TR Restating the obvious: specs. An informative SuggestedRemedy Please remove mentio	Comment Status 802.3 doesn't do env annex does not conta n of 'Explicit requirem	D ironmental specs, ain 'Explicit required ents'.	including temp nents'	erature
Proposed Response	Response Status	0		