

**Cl 01**    **SC 1.4**                      **P20**        **L 22**        # **2882**  
 Kramer, Glen                              Teknovus, Inc.

**Comment Type**    **E**                      **Comment Status**    **X**  
 definitions for 10/10G-EPON and 10/1G-EPON follow 10G-EPON

**SuggestedRemedy**  
 "(see definitions above)" should be "(see definitions below)"

**Proposed Response**                      **Response Status**    **O**

**Cl 56**    **SC 56.1.3**                      **P58**        **L 24**        # **2884**  
 Kramer, Glen                              Teknovus, Inc.

**Comment Type**    **E**                      **Comment Status**    **X**  
 Since several drafts ago we have removed units from " Rate" column header, all entries in this column should have units added to them.

**SuggestedRemedy**  
 Add "Mb/s" to rate for 10PASS-TS and 2BASE-TL

**Proposed Response**                      **Response Status**    **O**

**Cl 76**    **SC 76.3.2.1.1**                      **P127**        **L 40**        # **2889**  
 Kramer, Glen                              Teknovus, Inc.

**Comment Type**    **T**                      **Comment Status**    **X**  
 Constund IDLE\_COLUMN is not used anywhere in the draft.

**SuggestedRemedy**  
 delete definition for this constant

**Proposed Response**                      **Response Status**    **O**

**Cl 76**    **SC 76.3.2.1.5**                      **P130**        **L 1**        # **2885**  
 Kramer, Glen                              Teknovus, Inc.

**Comment Type**    **T**                      **Comment Status**    **X**  
 In Figure 76-10, IdleCount counter can overflow during a long interburst gap.

**SuggestedRemedy**  
 Add this line to RESET\_ALIGNMENT state:  
 "IdleCount = DelayBound"  
 (use proper assignment symbol)

**Proposed Response**                      **Response Status**    **O**

**Cl 76**    **SC 76.3.2.5**                      **P137**        **L 19**        # **2886**  
 Kramer, Glen                              Teknovus, Inc.

**Comment Type**    **T**                      **Comment Status**    **X**  
 "Two consecutive XGMII transfers provide eight characters that are encoded into one 66-bit transmission block. The burst may occasionally be required to transmit an extra 4 bytes of data, causing the burst to extend into the next grant period."

The first sentence does not provide any new information. It describes 64B/66B encoding and thus is out of place in the Data Detector section. The second sentence is technically incorrect. EPON cannot work with a burst extending into another grant period.

**SuggestedRemedy**  
 Remove the above paragraph.

**Proposed Response**                      **Response Status**    **O**

**Cl 76**    **SC 76.3.3.4.4**                      **P154**        **L 28**        # **2887**  
 Kramer, Glen                              Teknovus, Inc.

**Comment Type**    **T**                      **Comment Status**    **X**  
 In Figure 76-23, timer should follow the notation defined in 64.1.5 or in 77.1.5

**SuggestedRemedy**  
 1) add expiration interval to the timer in state START\_TIMER  
 2) add brackets around timer in state START\_TIMER  
 3) add underscore between "interval\_timer" and "done" in 4 places

**Proposed Response**                      **Response Status**    **O**

**Cl 76**    **SC 764.1.2**                      **P158**    **L 20**                      # **2890**  
 Kramer, Glen                                      Teknovus, Inc.

*Comment Type*    **E**                      *Comment Status*    **X**

"the ONU TX clock tracks the ONU RX clock and in turn locks to OLT TX clock" is better written as

"the ONU TX clock tracks the ONU RX clock, which in turn locks to OLT TX clock"

*SuggestedRemedy*  
 Replace "and" with ", which"

*Proposed Response*                      *Response Status*    **O**

**Cl 77**    **SC 77.2.2.4**                      **P201**    **L 39**                      # **2881**  
 Kozaki, Seiji                                      Mitsubishi Electric

*Comment Type*    **T**                      *Comment Status*    **X**

The equation of CheckGrantSize(length) is wrong.

*SuggestedRemedy*  
 Add "- fecOffset" at the end of the current one.  
 Correct equation is as below. See also 3av\_0901\_kozaki\_1.pdf.  
 $FEC\_Overhead(length) = ceiling((fecOffset + length) / FEC\_PAYLOAD\_SIZE) * FEC\_CODEWORD\_SIZE - fecOffset$

*Proposed Response*                      *Response Status*    **O**

**Cl 76A**    **SC 76A.2**                              **P165**    **L 42**                      # **2891**  
 Kramer, Glen                                      Teknovus, Inc.

*Comment Type*    **E**                      *Comment Status*    **X**

Continue sentence "Thus, the first ten bits transmitted are: 10 0100 0000 ..." with the previous paragraph.

*SuggestedRemedy*

*Proposed Response*                      *Response Status*    **O**

**Cl 77**    **SC 77.2.2.4**                              **P186**    **L 22**                      # **2892**  
 Eric, Lynskey                                      Teknovus

*Comment Type*    **T**                      *Comment Status*    **X**

The constant COLUMN\_SIZE is not defined.

*SuggestedRemedy*  
 Define new constant in 77.2.2.1.

**COLUMN\_SIZE**  
 TYPE: integer  
 This constant represents the size of a column in octets.  
 Value: 4

*Proposed Response*                      *Response Status*    **O**

Cl 77 SC 77.2.2.7 P191 L29 # 2879  
Mandin, Jeff PMC Sierra

Comment Type T Comment Status X

1. In the "Check Size" state of figure 77-14, when the result of the CheckGrantSize() function is divided by the tqSize, the quotient is rounded down rather than rounded up.
2. It will sometimes happen that the result of CheckGrantSize (in octet times) is larger than the number of TQ left in the grant, whereas the result of division by TqSize (ie. rounded down) is precisely equal to the number of TQ remaining in the grant.
3. In such a case, MPCP will allow the packet to be transmitted, but the data detector in the PCS will continue to transmit data past the end of the grant. This can then cause a collision with the transmission of a subsequent ONU and a missed burst.

This issue should be addressed by the TF and resolved in the current draft or the next one

SuggestedRemedy

1. On page 186 line 4 Change:

-----  
 "CheckGrantSize(length) = | (fecOffset + length) / FEC\_PAYLOAD\_SIZE| x  
 FEC\_CODEWORD\_SIZE"

to:

--- ----  
 "CheckGrantSize(length) = | T / tqSize |"

where:

-----  
 T = | (fecOffset + length) / FEC\_PAYLOAD\_SIZE| x FEC\_CODEWORD\_SIZE"

2. In the "Check Size" state of figure 77-14, modify the expression:

"nextTxTime <= CheckGrantSize(sizeof(data\_tx) + tailGuard))/tqSize"

to:

"nextTxTime <= CheckGrantSize(sizeof(data\_tx) + tailGuard))"

- 3.

Proposed Response Response Status O

Cl 77 SC 77.3.3.5 P201 L27 # 2888  
Kramer, Glen Teknovus, Inc.

Comment Type T Comment Status X

Message parameters should not have default values. The parameters are always set explicitly in generating state diagrams.

SuggestedRemedy

Remove "This parameter has the default value of 0" from definitions for laserOnTime and laserOffTime

Proposed Response Response Status O

Cl 77 SC 77.3.3.6 P202 L31 # 2880  
Mandin, Jeff PMC Sierra

Comment Type T Comment Status X

In Draft 2.2, the 10GEPON Discovery State diagrams are instantiated on both the 10G and the 1G broadcast LLIDs.

This breaks the ability for a 10G OLT to support 1G ONUs in "dual-rate mode".

The cl77 state diagrams are supposed to be instantiated only on 7ffe and not 7fff.

This issue should be addressed by the TF and resolved in the current draft or the next one.

SuggestedRemedy

Change:

"Instantiation of state diagrams as described in Figure 77-19, Figure 77-20, and Figure 77-21 is performed only at the Multipoint MAC Control instances attached to the appropriate broadcast LLID(s) (0x7FFF and/or 0x7FFE for 1G-EPON and 10G-EPON, respectively)."

to:

"Instantiation of state diagrams as described in Figure 77-19, Figure 77-20, and Figure 77-21 is performed only at the Multipoint MAC Control instances attached to the broadcast LLID (0x7FFE)."

Proposed Response Response Status O

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Cl **99** SC P11 L1 # 2883  
Kramer, Glen Teknovus, Inc.

Comment Type **E** Comment Status **X**

In table of contents, page numbers are not aligned properly for some clauses:  
66, 66.5, 75, 75.10, 76, 76.5, 76.5.4, 77.5

SuggestedRemedy

Proposed Response Response Status