Cl **01**   *SC* **1.5**   *P* **141**   *L* **16**   # 2

Dawe, Piers   Avago

Comment Type   **E**   *Comment Status*   **A**

complimentary metal oxide semiconductor

SuggestedRemedy

complementary

Response   *Response Status*   **C**

ACCEPT.

Cl **30**   *SC* **30.11.2.1.10**   *P* **420**   *L* **17**   # 5

Dawe, Piers   Avago

Comment Type   **E**   *Comment Status*   **R**

I doubt that aTCCRCErrors is relevant to 10BASE-T

SuggestedRemedy

Change "10 Mb/s implementations" to "10PASS-TS PHYs". Does it apply to 2BASE-TL? Is
it per PHY or per PME? You may wish to add text to the behaviour saying which PHY?
PME? types it will and won't increment for. There may be other attributes to review.

Response   *Response Status*   **C**

REJECT.

This comment is out of scope as it is on text that is unchanged from the previous draft.

This attribute is part of the oPME managed object class. As stated in subclause 30.2.2.1
'The oPME managed object class provides the management controls necessary to allow an
instance of a PME to be managed. The oPAF managed object contains the PME managed
object in a DTE.'. These attributes therefore apply to all PME types. Any exceptions would
be stated in the behavior text.

Cl **30**   *SC* **30.11.2.1.8**   *P* **419**   *L* **43**   # 3

Dawe, Piers   Avago

Comment Type   **T**   *Comment Status*   **R**

There is no 10 Mb/s implementation that could use this counter, but 10PASS-TS which
must support a variety of bit rates. The reader of this subclause (implementing
management registers) should be provided with simple, not misleading, facts.

SuggestedRemedy

Change the max rate to 100 000 counts per second, here and in 30.11.2.1.9

Response   *Response Status*   **C**

REJECT.

See comment #4.

Cl **30**   *SC* **30.11.2.1.8**   *P* **419**   *L* **44**   # 4

Dawe, Piers   Avago

Comment Type   **T**   *Comment Status*   **R**

There is no 10 Mb/s implementation that could use this counter, but 10PASS-TS which
must support a variety of bit rates. The reader of this subclause (implementing
management registers) should be provided with simple, not misleading, facts.

SuggestedRemedy

Change "10 Mb/s implementations" to "10PASS-TS PHYs" (as we have already on line 46),
here and in 30.11.2.1.9

Response   *Response Status*   **C**

REJECT.

This text does not preclude implementers from implementing different speeds with different
maximum rates. This text suggests to the implementer the increment rate for a 10Mb/s
implementation is as stated, which is true. There is general text at the beginning of the MIB
section telling implementers how to scale counters.

Cl **44**   *SC* **44.1.4.4**   *P* **4**   *L* **6**   # 6

Dawe, Piers   Avago

Comment Type   **T**   *Comment Status*   **R**

Deleting the words 'implementations based upon 64B/66B data coding method' in 44.1.4
Summary of 10 Gigabit Ethernet sublayers is going too far, and I don't see how it helps
make the document lower maintenance.

SuggestedRemedy

Reinstate 'implementations based upon 64B/66B data coding method'

Response   *Response Status*   **C**

REJECT.

While it is true that 10GBASE-R uses 64B66B encoding, that is not what the 'R' refers to,
instead it refers to seRial. There is no reason to choose the coding as the particular
characteristic as opposed to the others.

Cl **45**   *SC* **45.2.7.2**   *P* **138**   *L* **39**   # 7

Dawe, Piers   Avago

Comment Type   **E**   *Comment Status*   **A**

Font size

SuggestedRemedy

in 7.1.4 description

Response   *Response Status*   **C**

ACCEPT.

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

Cl **57A**   *SC* **57A.2**   *P* **513**   *L* **37**   # 23

Beck, Michael   Alcatel-Lucent

Comment Type **T**   *Comment Status* **R**

Due to the introduction of the Organization-Specific Slow Protocol (OSSP), the 10 frames per second rule is ambiguous: does it apply to each protocol under the OSSP codepoint separately, or to all of them together?

SuggestedRemedy

dd a note under a), reading "NOTE - This constraint is per slow protocol that may be defined per clause 57B (i.e., OSSP)"

Response   *Response Status* **C**

REJECT.

This coment is out of scope as it does not relate to changed text in this draft.

The introduction of OSSP has not changed the situation, there were already multiple slow protocols before its introduction.

Because the ballot group agrees that such a clarification would be good, the commenter is asked to resubmit at initial sponsor ballot. If the commenter is not in the ballot group, the commenter should ask the Working Group chair to submit the comment on his behalf.

Cl **57A**   *SC* **57A.4**   *P* **515**   *L* **22**   # 14

Parsons, Glenn   Nortel Networks

Comment Type **T**   *Comment Status* **A**

The original view at the July plenary was to set the subtype of the OSSP to 254 (0xFE), however at the Seoul meeting it was decided to change this to 10 (0x0A) as 254 was an illegal value. Re-reading the options of 57A.5, it would seem that b) would allow 10 or 254 to be processed in the MAC, but c) would only allow 10 to be passed to the client. This is assuming that an illegal value for a) would include 254 for 802.3-2005 implementations but not for 802.3-2008 implementations. The decision is then whether the newly defined OSSP should be restricted for use just within the MAC or not. The argument for 254 is that we could restrict OSSP to just the MAC and force an organization that wants to do a 'bridging' function to do something via an 802.1 mechanisms. The argument for 10 is that the OSSP function may still be in the MAC but not in the initial MAC HW chip so it would have to be passed through it. I suspect the latter argument outweighs the first, so we should stick with 0x0A.

SuggestedRemedy

Discuss if 0x0A is still the right choice.

Response   *Response Status* **C**

ACCEPT.

We discussed it and still believe that 0x0A is the right choice.

If the commenter believes that item b) needs clarification he is encouraged to submit a comment at initial sponsor ballot. If the commenter is not in the ballot group, the commenter should ask the Working Group chair to submit the comment on his behalf.

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

Cl **57A**
SC **57A.4**

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Cl **57A** *SC* **57A.5**   *P* **515**   *L* **40**   # 15

Parsons, Glenn   Nortel Networks

Comment Type **T** *Comment Status* **R**

The maximum number of slow protocols that can be mapped to subtypes is limited to 10. With OSSP one could say that this is maintained if you view OSSP as one slow protocol. However it is also possible that many slow protocols could use the OSSP. And if that is the case, should we change the 'maximum slow protocols' text? Further, what does 57A.2 a) now refer to? It is not explicitly clear. Is it 10 frames per second for OSSP (and all slow protocols that use 0x0A) OR is it 10 frames per second for each slow protocol. I suspect the latter is diserable, and my interpretation of the text is that.

However, since this is not obvious should we make it obvious? I suggest we should.

SuggestedRemedy

Discuss if we want to make it obvious.

Making it obvious could be done by adding this note under 57A.2 a):

NOTE - Each Slow Protocol specified per OSSP OUI shall confirm to the recommended maximum transmission rate.

And adding this to the note under 57A.2 b):

While there may be many Slow Protocols specified per OSSP OUI, OSSP is considered one Slow Protocol for this recommendation.

Response   *Response Status* **C**

REJECT.

See #23.

Cl **57B** *SC* **0**   *P*   *L*   # 11

Dawe, Piers   Avago

Comment Type **T** *Comment Status* **A**

This text: 'The format and function of the Organization Specific Data field is dependent on the value of the OUI field and is beyond the scope of this standard. OSSPDUs are at least minFrameSize in length.' seems to imply that the minimum size of this field is minFrameSize.

SuggestedRemedy

Move 'OSSPDUs are at least minFrameSize in length.' to line 23. Mention that pads are not used if you think it would help.

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

Will move this text to be a new item e) at the end of the first list in Annex 57B. The BRC does not believe that this is a substantive change.

Cl **57B** *SC* **57B.1**   *P* **518**   *L* **16**   # 10

Dawe, Piers   Avago

Comment Type **T** *Comment Status* **R**

Do not know what if anything 'low-order bit' means

SuggestedRemedy

If it's the least significant bit, say so. If it means nothing, delete ', where 0 is the low-order bit'

Response   *Response Status* **C**

REJECT.

The usage is consistent with subclause 3.3 which describes the order of bit transmission.

Cl **57B** *SC* **57B.1.1**   *P* **518**   *L* **33**   # 12

Dawe, Piers   Avago

Comment Type **E** *Comment Status* **R**

Bad English

SuggestedRemedy

Change 'and so on through the eighth bit' to 'and so on up to the eighth bit.' (or if you want to be really fussy, 'and so on up to and including the eighth bit.' Similarly on line 34.

Response   *Response Status* **C**

REJECT.

Similar use of 'through' exists throughout the document. Publication editor has stated that the use of either 'through' and 'to' is acceptable.

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

Cl **57B**
SC **57B.1.1**

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Cl **57B**   *SC* **57B.1.1**   *P* **519**   *L* **10**   # 13

Parsons, Glenn   Nortel Networks

Comment Type **E**   *Comment Status* **A**

OSS is not the abbreviation used elsewhere, it is OSSP

SuggestedRemedy

Change in Table 57B-1:

Subtype = 0x0A (OSS)

to:

Subtype = 0x0A (OSSP)

Response   *Response Status*   **C**

ACCEPT.

The BRC does not believe that this is a substantive change.

Cl **64**   *SC* **1**   *P* **245**   *L* **12**   # 18

Hajduczenia, Marek   Nokia Siemens Networ

Comment Type **E**   *Comment Status* **R**

Affected: line 12 "trunk of the tree is called optical line terminal (OLT) and the DTEs connected at the branches of the tree are", figure 64-1 and lines 1-2 on page 246 "Each PON consists of a node located at the root of the tree assuming the role of OLT, and multiple nodes located at the tree leaves assuming roles of ONUs."

Observation. Figure 64-1 clearly indicates the shared section of the fiber and denotes it as "feeder". Why in line 12 on page 245 and lines 1-2 on page 246 the very same "feeder" is termed "trunk" and "tree root", respectively? It is confusing and I received comments from people reading Clause 64 for the first time that this particular issue does not increase readibility.

I would suggest unifocation of the terms to "trunk" for the shared fiber section and "drop" for the section between the splitter and the ONU.

SuggestedRemedy

Alter line 12 on page 245 to "trunk fibre section is called optical line terminal (OLT) and the DTEs connected at the drop fibre sections"
Alter figure 64-1, replacing the word "feeder" with "trunk"
Alter lines 1-2 on page 246 to "Each PON consists of a node located at the end of the trunk fibre section assuming the role of OLT, and multiple nodes located at the end of the drop fibre sections assuming roles of ONUs"

Response   *Response Status*   **C**

REJECT.

Such out of scope changes at this stage in the ballot will not receive sufficient review from the Working Group.

The commenter is invited to re-submit this comment at initial sponsor ballot, or alternatively, to the IEEE P802.3av 10Gb/s EPON project where the technical expertise is current located.

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

Cl **64**
SC **1**

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Cl **64** *SC* **1** *P* **246** *L* # 19
Hajduczenia, Marek Nokia Siemens Networ

Comment Type **E** *Comment Status* **R**
Figure 64-2 was revised for clarity ... see attached file Figure_64_2_revised.fm for details.

SuggestedRemedy
Figure 64-2 was revised for clarity ... see attached file Figure_64_2_revised.fm for details. Scope of changes: aligned fragments of individual elements of the drawing, added white rectangles under the words "MULTIPLE MAC CONTROL" - otherwise the term seems to be hardly readable.

Response *Response Status* **C**
REJECT.

See comment #18.

Cl **64** *SC* **2.1** *P* **250** *L* **15** # 20
Hajduczenia, Marek Nokia Siemens Networ

Comment Type **E** *Comment Status* **X**
The sentence "As depicted in Figure 64–3, Multipoint MAC Control sublayer may instantiate multiple Multipoint MAC Control instances in order to interface multiple MAC and MAC Control clients above with multiple MACs below." seems to indicate that a Multipoint MAC Control interface multiple MACs, multiple MAC Control clients and multiple MACs again.

SuggestedRemedy
Suggestion to alter as follows: "As depicted in Figure 64–3, Multipoint MAC Control sublayer may instantiate multiple Multipoint MAC Control instances. The said instances shall interface multiple MAC Control clients located above with multiple MACs below."

Proposed Response *Response Status* **W**
REJECT.

See comment #18.

Cl **64** *SC* **2.2.1** *P* **255** *L* **3** # 21
Hajduczenia, Marek Nokia Siemens Networ

Comment Type **E** *Comment Status* **R**
Lines 3/5 read "This overhead is measured in units of time quanta." versus the definitions used further on which say "This value is measured in units of time_quantum (16 bit times).". Request to unify the definition as suggested below.

SuggestedRemedy
Alter the text "This overhead is measured in units of time quanta." in line 3/4 on page 255 to the following "This value is measured in units of time_quantum (16 bit times)."

Response *Response Status* **C**
REJECT.

See comment #18.

Cl **64** *SC* **2.2.1** *P* **255** *L* **3** # 22
Hajduczenia, Marek Nokia Siemens Networ

Comment Type **E** *Comment Status* **R**
The sentence "This value is measured in units of time_quantum (16 bit times)." in all the clause ought to be altered. The time_quantum variable is defined as 16 ns in the following definition in 64.2.2.1 "The unit of time_quantum is used by all mechanisms synchronized to the advancement of the localTime variable. All variables that represent counters and time intervals are defined using time_quantum. Each time_quantum is 16 ns.". This leaves no doubt that a single time_quantum is 16 ns. Only reference to the variable should be made.

SuggestedRemedy
Replace all occurences of the text "This value is measured in units of time_quantum (16 bit times)." with "This value is measured in units of time_quantum."

Response *Response Status* **C**
REJECT.

See comment #18.

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

Cl **64**
SC **2.2.1**

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Cl **64**   *SC* **3.3.6**   *P* **276**   *L*   # 17

Hajduczenia, Marek   Nokia Siemens Networ

Comment Type **E**   *Comment Status* **R**

Figure 64-21, block DEREGISTER, line "data_tx <= REGISTER|LLID|status <= deregister)"

SuggestedRemedy

To be changed to: Figure 64-21, block DEREGISTER, line "data_tx <= REGISTER|LLID|status <= deregister"
(bracket at the end of the line to be removed)

Response   *Response Status* **C**

REJECT.

See comment #18.

Cl **64**   *SC* **3.6.1**   *P* **292**   *L* **2834**   # 16

Hajduczenia, Marek   Nokia Siemens Networ

Comment Type **E**   *Comment Status* **R**

The text block "Pad/Reserved. This is an empty field that is transmitted as zeros, and ignored on reception when constructing a complying MPCP protocol implementation. The size of this field depends on the used Grant #n Length/Start Time entry-pairs, and varies in length from 13 – 39 accordingly. The GATE MPCPDU shall be generated by a MAC Control instance mapped to an active ONU, and as such shall be marked with a unicast type of LLID, except when the discovery flag is set where the MAC Control instance is mapped to
all ONUs and such frame is marked by the broadcast LLID." is malformed. Pad/Reserved field descriptino should be separated to bullet f) as presented in Suggested Remedy.

SuggestedRemedy

Replace the text with the following block:
f) Pad/Reserved. This is an empty field that is transmitted as zeros, and ignored on reception when constructing a complying MPCP protocol implementation. The size of this field depends on the used Grant #n Length/Start Time entry-pairs, and varies in length from 13 – 39 accordingly.

The GATE MPCPDU shall be generated by a MAC Control instance mapped to an active ONU, and as such shall be marked with a unicast type of LLID, except when the discovery flag is set where the MAC Control instance is mapped to
all ONUs and such frame is marked by the broadcast LLID.

Response   *Response Status* **C**

REJECT.

See comment #18.

Cl **70**   *SC* **70.1**   *P* **383**   *L* **8**   # 8

Dawe, Piers   Avago

Comment Type **E**   *Comment Status* **A**

Font size

SuggestedRemedy

Response   *Response Status* **C**

ACCEPT.

Cl **70**   *SC* **70.3**   *P* **383**   *L* **37**   # 1

Dawe, Piers   Avago

Comment Type **TR**   *Comment Status* **R**

D1.1 comment 45 was implemented in reverse, undoing part of what was implemented of D1.0 comment 132. The response to D1.2 comment 53 does not resolve the issue raised by these comments. As we have established previously, we are discussing a requirement on the PCS. The PCS is specified in Clause 36. This requirement is explicit in 36.2.5.2.7 with PICS in 36.7.4.3. Clause 70 cannot make requirements on something outside its scope: the sentence in this draft is improper (maybe the style guide has not yet got round to forbidding such an obviously improper thing to do - maybe few projects attempt it). All Clause 70 should (can) do is inform the reader that another clause has normative requirements that are of interest. The style guide allows "must" "to describe unavoidable situations", which is exactly what we have here. But I note that the style guide says "shall equals is required to."

SuggestedRemedy

Change 70.3 to the intention of D1.1: to read 'The reader is advised that 36.2.5.2.7 requires the PCS associated with this PMD to support shall support the AN service interface primitive AN_LINK.indication as defined in 73.9.' Make the similar change in 71.3 and 72.3. Delete 71.10.4.1 and 72.10.4.1 (whole subclauses - the equivalent in Clause 70 has gone since D1.1). Alternatively 'The PCS associated with this PMD must support the AN service interface primitive AN_LINK.indication as
defined in 73.9 (See 36.2.5.2.7).', make the similar change in 71.3 and 72.3, delete 71.10.4.1 and 72.10.4.1.

Response   *Response Status* **W**

REJECT.

This comment is restatement (a 'pile on' to D1.2 comment #53) of a previously submitted comment and the WG chair has therefore determined that this does not require recirculation.

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

Cl **70**   Page 6 of 7
SC **70.3**   25/10/2007 17:36:26

Cl **72**　　　*SC* **72.7.1.4**　　　　　*P* **435**　　　*L* **3**　　　　# 9

Dawe, Piers　　　　　　　　　　　　　　Avago

Comment Type　**E**　　　*Comment Status*　**A**

　votlage

SuggestedRemedy

　voltage

Response　　　　　　　*Response Status*　**C**

　ACCEPT.

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

Cl **72**　　　　　　　　Page 7 of 7
SC **72.7.1.4**　　　　　25/10/2007 17:36:26