

IEEE P802.3 (IEEE 802.3bx) Revision to IEEE Std 802.3-2012 1st Sponsor recirculation ballot comments

Cl 01 SC 1.3 P 65 L 1 # r01-9

Thompson, Geoffrey

Comment Type E Comment Status A

\*\*\* Comment submitted with the file 86274200003-BX Comments.txt attached \*\*\*

Please consider the items in the file as APPROVE/EDITORIAL comments for this cycle.

SuggestedRemedy

Per comment.

Response Response Status C

ACCEPT IN PRINCIPLE.

The comment is not against a changed portion of the draft, a portion of the draft affected by changes, or a portion of the draft that is the subject of unresolved comments associated with "Disapprove" votes. It is out of the scope of the recirculation ballot. However, there are several references that should be updated.

In 1.3 change:

"IEEE Std 802.1F™-1993 (Reaff 1998), IEEE Standard for Local and metropolitan area networks--Common Definitions and Procedures for IEEE 802 Management Information."  
to:

"IEEE Std 802.1F™-1993, IEEE Standard for Local and Metropolitan Area Networks: Common Definitions and Procedures for IEEE 802 Management Information."  
Include a footnote that the standard has been withdrawn.

In 1.3 change:

"IEEE Std 802.3.1™-2011, IEEE Standard for Management Information Base (MIB) Module Definitions for Ethernet."  
to an undated reference:

"IEEE Std 802.3.1™, IEEE Standard for Management Information Base (MIB) Module Definitions for Ethernet."

Note that IETF RFC 3621 to IETF RFC 4836 are referenced (undated) by Clauses 30 and 79 and should remain in the list of references.

Also note that ISO/IEC 15802-1:1995 is listed as a published standard and is available from ISO. Clause 2 contains 2 undated references.  
<[http://www.iso.org/iso/home/store/catalogue\\_tc/catalogue\\_detail.htm?csnumber=21507](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=21507)>

The reference to FCC Docket 20780-1980 corresponds to date-specific references made in Clause 8 (10BASE-5) and Clause 15 (10BASE-F) and hence this reference should remain date-specific.

In Annex A, remove [B43] since it is also in the list of normative references (it is referred to as "IEEE Std 802.9a-1995 (withdrawn)" by Clauses 28 and 30).

In 1.3, correct the title of IEEE Std 802.9a-1995. Change:

"IEEE Std 802.9a™-1995, IEEE Standards for Local and Metropolitan Area Networks: Supplement to Integrated Services (IS) LAN Interface at the Medium Access Control (MAC) and Physical (PHY) Layers: Specification of ISLAN16-T."

to:

"IEEE Std 802.9a™-1995, Local and Metropolitan Area Networks: 802.9 Supplement: IEEE Standard Specification of ISLAN 16-T (Supplement to 802.9-1994.)"  
Add a footnote to indicate that this standard is withdrawn.

In Annex A, change [B49] from:

"ISO/IEC TR 29125 (draft), Information technology—Telecommunications cabling guidelines for remote powering of data terminal equipment. Draft document number ISO/IEC JTC 1/SC 25 N 874."  
to:

to:

"ISO/IEC TR 29125:2010, Information technology—Telecommunications cabling requirements for remote powering of terminal equipment."

Note the there is undated reference to ISO/IEC 29125 in 33.1.4.1.

In Annex A, Change [B61] from:

"TIA TSB-184 (draft), Guidelines for Supporting Power Delivery over Balanced Twisted-Pair Cabling. Draft document number PN-3-0324A (TIA-TSB 184 D2.0)."  
to:

"TIA TSB-184 (2009), Guidelines for Supporting Power Delivery over Balanced Twisted-Pair Cabling."

Note the there is undated reference to TIA TSB-184 in 33.1.4.1.

Cl 22 SC 22.1.5 P 47 L 30 # r01-5

Thaler, Patricia

Broadcom Corporation

Comment Type T Comment Status A

To be consistent with the new changes (e.g. 22.1 a) "or Clause 45" should be added after 22.2.4. A GMII can use either Clause 22.2.4 or Clause 45.

SuggestedRemedy

The Gigabit Media Independent Interface (GMII) is similar to the MII. The GMII uses the MII management interface and register set specified in 22.2.4 or Clause 45.

Response Response Status C

ACCEPT IN PRINCIPLE.

Implement the changes in slides 17 to 26 of

<[http://ieee802.org/3/maint/public/healey\\_1\\_0715.pdf](http://ieee802.org/3/maint/public/healey_1_0715.pdf)>.

The suggested change is no longer needed given the changes specified above.

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Cl 22 SC 22.8.2.3 P 90 L 5 # r01-7  
Thaler, Patricia Broadcom Corporation

Comment Type TR Comment Status A

Implementation of the GMII (item GM) is used to condition PICS items on the extended register set, but these should all depend on whether the Clause 22.2.4 registers are used - they don't apply to PHYs using a GMII and Clause 45 registers.

SuggestedRemedy

Either make a replacement for item GM that covers when a GMII is used with the MII Management Interface (and possibly also when the 22.2.4 registers are mapped on the MDIO) or condition the items that currently are conditioned on GM on GM and item indicating that support.

Response Response Status C

ACCEPT IN PRINCIPLE.

Implement the changes in slides 17 to 26 of  
<[http://ieee802.org/3/maint/public/healey\\_1\\_0715.pdf](http://ieee802.org/3/maint/public/healey_1_0715.pdf)>.

The suggested change is no longer needed given the changes specified above.

Cl 22 SC 22.8.2.3 P 90 L 5 # r01-6  
Thaler, Patricia Broadcom Corporation

Comment Type TR Comment Status A

Since now the MII is defined to include a management interface based on either 22.2.4 or Clause 45, the PICS needs to be updated to reflect that. Mandatory functional and electrical requirements of the Clause 22.2.4 should only apply when the Clause 22.2.4 MII Management interface is implemented. Also, a capability should be added to indicate whether the Clause 22 registers are supported. This should be Mandatory if MII Management interface is supported and Optional if MDIO is supported.

SuggestedRemedy

Add to Major capabilities/options entries for MII Management Interface and MDIO Interface with the PICS notation O/<n> indicating that one of the two must be implemented. Make PICS entries that apply to the MII Management Interface conditional on whether the capability is supported. Register requirements should be conditional on whether the 22.2.4 register set is supported.

Response Response Status C

ACCEPT IN PRINCIPLE.

Implement the changes in slides 17 to 26 of  
<[http://ieee802.org/3/maint/public/healey\\_1\\_0715.pdf](http://ieee802.org/3/maint/public/healey_1_0715.pdf)>.

The suggested change is no longer needed given the changes specified above.

Cl 34 SC 34.1 P 16 L 43 # r01-8  
Thaler, Patricia Broadcom Corporation

Comment Type E Comment Status A

The wording of the new paragraph seems awkward and much of it is unnecessary. None of the speeds other than 10 Mb/s are in a contiguous set of Clauses. Also, nitpicking, no Gigabit PHY Clause is contiguous to Clause 34 since the Clause after 34 is RS and GMII which isn't a PHY.

SuggestedRemedy

Suggest deleting all but the first sentence.

Response Response Status C

ACCEPT IN PRINCIPLE.

Implement the changes in slides 17 to 26 of  
<[http://ieee802.org/3/maint/public/healey\\_1\\_0715.pdf](http://ieee802.org/3/maint/public/healey_1_0715.pdf)>.

Cl 45 SC 45.2.1.62 P 108 L 39 # r01-11  
Anslow, Peter Ciena Corporation

Comment Type E Comment Status A late

Table 45-54 is "10GBASE-T status register bit definitions" and should be under 45.2.1.62. However, the table anchor is actually at the end of 45.2.1.62.1, so appears there.

SuggestedRemedy

Change the anchor point so that the table appears in the appropriate place.

Response Response Status C

ACCEPT IN PRINCIPLE.

This will be passed on to the publication editor for consideration during preparation for publication.

Cl 45 SC 45.2.3.42 P 210 L 3 # r01-12  
Anslow, Peter Ciena Corporation

Comment Type E Comment Status A late

In 45.2.3.42 "The assignments of bits in the 10GBASE-PR and 10/1GBASE-PRX BER monitor status register is shown..." should be "The assignment of bits in the 10GBASE-PR and 10/1GBASE-PRX BER monitor status register is shown..."  
"assignments of bits" 1 instance  
"assignment of bits" 141 instance

SuggestedRemedy

Per comment.

Response Response Status C

ACCEPT.

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Cl 55 SC 55.1 P 91 L 19 # r01-1  
Marris, Arthur Cadence Design Syst

Comment Type T Comment Status R

Inappropriate to mention Clause 30 here

SuggestedRemedy

Replace  
"Management is specified in Clause 30."  
With  
"Management functions are optionally accessible through the management interface defined in Clause 45, or equivalent."

Response Response Status C

REJECT.

The comment is not against a changed portion of the draft, a portion of the draft affected by changes, or a portion of the draft that is the subject of unresolved comments associated with "Disapprove" votes. It is out of the scope of the recirculation ballot.

Use of Clause 45 MDIO is described in 55.6. The statement is correct as written.

Cl 83E SC 83E.3.1.6 P 627 L 8 # r01-10  
Anslow, Peter Ciena Corporation

Comment Type E Comment Status A late

In 83E.3.1.6 and 83E.3.4.1.1 "register 1.169 (see 45.2.1.96)" should be "register 1.179 (see 45.2.1.96)". This is very clear since 45.2.1.96 is about 1.179.

SuggestedRemedy

Change "1.169" to "1.179" in two instances per the comment.

Response Response Status C

ACCEPT.

Cl 83E SC 83E.3.3.1 P 631 L 21 # r01-4  
Dawe, Piers J G Mellanox Technologie

Comment Type E Comment Status A

In 83E.3.1.3, RLdc is common to differential output conversion return loss (following the convention for S-parameters where the response comes first then the stimulus). In 83E.3.3.1, differential to common mode input return loss was shown in P802.3bm D2.0 as RLcd, which is consistent with 3E.3.1.3. In P802.3bm D2.1, an error crept into Eq. 83E-6: RLdc in the equation. although still "where" RLcd below it. The published 802.3bm made the "where" follow the equation, which was the wrong choice - but I didn't notice it had changed. Now this draft is making the same error.

SuggestedRemedy

In Eq. 83E-6, change RLdc(f) to RLcd(f). At line 29, revert RLdc to RLcd as it was in P802.3bm and D3.0 of this project.

Response Response Status C

ACCEPT IN PRINCIPLE.

In Equation 83E-6, change RLdc(f) to RLcd(f).  
At line 29, change RLdc to RLcd.

This will make the use of this term consistent between clauses.

Cl 85 SC 85.8.3 P 224 L 28 # r01-3  
Dawe, Piers J G Mellanox Technologie

Comment Type E Comment Status A

More importantly than consistent hyphenation (because Acrobat Reader will find a hyphen or a space, but won't find words in a different order), we should make the two "Common-mode AC" consistent with the 59 (in section 6) "C common-mode" or "C common mode". There are no "common mode AC or "common mode DC" (with or without with hyphens), and one "DC common-mode", in section 5.

SuggestedRemedy

Here and at 85A.2 p642 line 36, change  
Common-mode AC output voltage  
to  
AC common-mode output voltage

Response Response Status C

ACCEPT.

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Cl 94 SC 94.3.12.4 P 517 L 19 # r01-2  
Dawe, Piers J G Mellanox Technologie

Comment Type E Comment Status A

While we are making the hyphenation of AC coupled / AC-coupled and so on consistent, we could apply this to common mode / common-mode, when used in a compound adjective. Section 6 uses common-mode 229 times and common mode 17 times (some may be legit). Section 5 seems OK.

*SuggestedRemedy*

In 94.3.12.4 p517 line 19, consider changing  
Transmitter common mode return loss limit  
to  
Transmitter common-mode return loss limit  
or  
Deprecate the clause and don't bother.

In 83D.3.3 p612 line 42, consider changing  
common mode input return loss  
to  
common-mode input return loss  
Also 83E.3.3 p630 line 42; 83E.3.3.1 p631 lines 16, 29; p632 line 22; 83E.3.4 p634 line 32.

Response Response Status C

ACCEPT IN PRINCIPLE.

Change "common mode" to "common-mode" in:

- 94.3.12.4, Page 517 line 19
- 83A.3.4.4, Page 576 line 19
- 83D.3.3, Page 612 line 42
- 83D.6.4.2 Page 620 line 8
- 83E.3.3, Page 630 line 42
- 83E.3.3.1, Page 631 line 16
- 83E.3.3.1, Page 631 line 29
- 83E.3.3.1, Page 632 line 11
- 83E.3.3.1, Page 632 line 22
- 83E.3.4, Page 634 line 32