

IEEE P802.3ap draft 2.0 Comments

Cl 73 SC 73.1 P 133 L 05 # 707

David V James

JGG

Comment Type ER Comment Status D caps

DVJ-134

English words should not be capitalized simply because their meaning is different from normal English usage.

SuggestedRemedy

Introduction

==>

introduction

Proposed Response Response Status W

PROPOSED REJECT.

Identifying a special term rather than standard English usage is a valid reason to capitalize. However, introduction is used in the normal English sense and should not be capitalized.

Cl 73 SC 73.1 P 133 L 06 # 562

Grow, Robert

Intel

Comment Type E Comment Status D

The project identification is transitory and goes away when the amendment is merged into the base document.

SuggestedRemedy

Replace 802.3ap with backplane Ethernet.

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 73 SC 73.1 P 133 L 06 # 16

King, Iain

Comment Type E Comment Status D

I had to re-read the first para a few times before I realised it wasn't contradicting itself (I thought the first sentence says AN is mandatory, the second says it is optional!). I realised the key word is 'use' in the second sentence as opposed to 'implemented' in the first. I wonder if there is a better way of phrasing this para to minimise the potential for confusion.

SuggestedRemedy

Perhaps change the second sentence to read ""The use of the PHY's AN capabilities is optional, however. Parallel detection shall be provided for legacy devices that do not support AN.""

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

"The use of the PHY's AN capabilities is optional. Parallel detection shall be provided for legacy devices that do not support AN."

Cl 73 SC 73.1 P 133 L 06 # 13

Daines, Kevin

Comment Type ER Comment Status D

I don't think referencing this project is appropriate in the opening line of 73.1. I believe the specific PHYs, or the family of PHYs, or the Clauses in which the PHYs are specified should be referenced. ""802.3ap"" is a convenient shorthand but over time will fade while the PHY types and Clause numbers will remain.

SuggestedRemedy

Reword per comment above.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

See 562

IEEE P802.3ap draft 2.0 Comments

CI 73 SC 73.1 P 133 L 07 # 385
 Baumer, Howard Broadcom

Comment Type TR Comment Status D

Having a mandatory function who"s use is optional doesn"t make sense. Providing parallel detection for legacy devices that don"t support AN implies an 802.3ap phy without AN, a contradictory statement. Further more there is nothing in the any of the PMA/PMD type definitions that require auto-negotiation.

SuggestedRemedy

Make AN implementation optional for all PMA/PMD types

Proposed Response Response Status W

PROPOSED REJECT.

Having a mandatory to implement, optional to use feature is common. It allows for circumstances where a user configures for fixed operation mode or uses an alternate configuration mechanism such as an out of band channel to set operational mode.

The purpose of parallel detection is to allow connection of standard devices to pre-standard devices, e.g. connection of a 1000BASE-KX Phy to a device with a 1000BASE-X phy used in a backplane. Parallel dectection has been used for this function in the past.

CI 73 SC 73.1 P 133 L 18 # 9
 Daines, Kevin

Comment Type E Comment Status D

Suggest replacing ""Differential Manchester encoding"" with DME.

SuggestedRemedy

Per comment

Proposed Response Response Status W

PROPOSED REJECT.

Since this is the first usage in the Clause, it should be spelled out, but the spelled out term will be harmonized with the acronym defined in 1.4 (see comment 8).

CI 73 SC 73.1 P 133 L 18 # 8
 Daines, Kevin

Comment Type E Comment Status D

It is a nit, but DME was previously defined as ""Differential Manchester Encoding"" in 1.4. This text adds a ""-"" and uses ""Encoded"". This should be harmonized.

SuggestedRemedy

Per comment

Proposed Response Response Status W

PROPOSED ACCEPT.

Use Differential Manchester Encoding

CI 73 SC 73.1 P 133 L 25 # 532
 Dawe, Piers Agilent

Comment Type E Comment Status D

A piece of silicon doesn't understand

SuggestedRemedy

Change 'understand' to 'discover'

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 73 SC 73.1 P 133 L 29 # 386
 Baumer, Howard Broadcom

Comment Type E Comment Status D

Grammar changes

SuggestedRemedy

Change "à in an ordered fashion, permits" to "à in an orderly fashion, it permits"

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
 "in an orderly fashion, permits"

IEEE P802.3ap draft 2.0 Comments

CI 73 SC 73.1 P 133 L 30 # 387
 Baumer, Howard Broadcom

Comment Type E Comment Status D
 Missing "it"

SuggestedRemedy

Change "à and allows à" to "à and it allows à"

Proposed Response Response Status W
 PROPOSED REJECT.

There is no missing "it". This is a valid sentence with parallel structure:

"The Auto-Negotiation function allows . . . , permits . . . , and allows"

Inserting the suggested it would make the sentence structure incorrect.

CI 73 SC 73.1 P 133 L 32 # 533
 Dawe, Piers Agilent

Comment Type E Comment Status D
 Long sentence doesn't all make sense; not sure quite what was intended.

SuggestedRemedy

... disabled, and legacy devices that can interoperate with 1000BASE-KX and 10GBASE-KX4 devices, to be ...

Proposed Response Response Status W
 PROPOSED ACCEPT.

The Auto-Negotiation function also provides a parallel detection function to allow backplane Ethernet devices to connect to backplane Ethernet devices that have Auto-Negotiation disabled and to interoperate with legacy devices that do not support Clause 73 Auto-Negotiation.

CI 73 SC 73.1 P 133 L 36 # 388
 Baumer, Howard Broadcom

Comment Type TR Comment Status X

There is no conflict between Clause 73 auto-negotiation and Clause 37 auto-negotiation. If a Clause 73 enabled device is connected to a Clause 37 enabled device that wishes to transfer information through auto-negotiation the Clause 37 device will not be able to as it is prohibited from enabling its Clause 37 auto-negotiation.

SuggestedRemedy

Delete this sentence.

Proposed Response Response Status W

I think the commenter is correct that this sentence is unnecessary. It may be possible to build a device that can operate either as a 1000BASE-X Phy or a 1000BASE-KX Phy and therefore implements both Clause 73 and Clause 37 Auto-Negotiation, but it is not necessary address such a device here.

CI 73 SC 73.1 P 133 L 36 # 1
 Daines, Kevin

Comment Type E Comment Status D
 clause should be ""Clause"" in two places on this line.

SuggestedRemedy

Per comment

Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 73 SC 73.10.4.2 P 162 L 12 # 46
 Claseman, George Micrel Semiconductor

Comment Type E Comment Status D
 ""wiht""

SuggestedRemedy

""with""

Proposed Response Response Status W
 PROPOSED ACCEPT.

IEEE P802.3ap draft 2.0 Comments

CI 73 SC 73.10.4.2 P 162 L 12 # 47
 Claseman, George Micrel Semiconductor
 Comment Type E Comment Status D
 ""supported""
 SuggestedRemedy
 ""supported""
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 73 SC 73.10.4.2 P 162 L 28 # 250
 Joergensen, Thomas Vitesse Semiconducto
 Comment Type E Comment Status D
 The reference in DT8, column ""Value/Comment"" is incorrect. 42.2.4.2 has to be replaced with 48.2.4.2.
 SuggestedRemedy
 Replace 42.2.4.2 with 48.2.4.2.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 73 SC 73.10.4.3 P 163 L 15 # 39
 Claseman, George Micrel Semiconductor
 Comment Type E Comment Status D
 ""Vaues""
 SuggestedRemedy
 ""Values""
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 73 SC 73.10.4.4 P 164 L 14 # 251
 Joergensen, Thomas Vitesse Semiconducto
 Comment Type E Comment Status D
 The reference in RF4, column ""Value/Comment"" should be Figure 73-9 instead of 73-10
 SuggestedRemedy
 Replace 73-10 with 73-9
 Proposed Response Response Status W
 PROPOSED ACCEPT.
 Also need to correct figure number in 73.7.3

CI 73 SC 73.10.4.6 P 165 L 40 # 254
 Joergensen, Thomas Vitesse Semiconducto
 Comment Type T Comment Status D
 The use of Clause 45 electrical interface should be optional, see other comment from me.
 SuggestedRemedy
 Replace ""Interface used for logical and electrical access"" with ""Interface used to access the device registers""
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 See 253

CI 73 SC 73.2 P 133 L 40 # 601
 Booth, Brad Intel
 Comment Type ER Comment Status D e
 Incorrect heading. The relationship is not to ISO/IEC 8802-3, it is to the ISO OSI reference model.
 SuggestedRemedy
 Change to read: Relationship to the ISO OSI reference model
 Proposed Response Response Status W
 PROPOSED ACCEPT.

IEEE P802.3ap draft 2.0 Comments

CI 73 SC 73.2 P 134 L 01 # 607

Booth, Brad

Intel

Comment Type TR Comment Status D

Incorrect figure. The figure is meant to show the placement of AN relative to the other sublayers and the OSI reference model.

SuggestedRemedy

Delete TBI and XSBI. Ensure PHY bracket on the right completely encompasses from the bottom of AN to the top of the PCS. Unshade the PMDs. Divide AN into three blocks and label each block AN*. Unshade MDI, and place a MDI and MEDIUM under each of the three PHYs.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

There is one AN which enables one of multiple PHY instances to connect to a single MDI/medium depending on the capabilities detected for the link partner. Therefore, keep one AN box, one MDI and one medium. Make the other changes that the commentor requests.

CI 73 SC 73.3 P 134 L 44 # 389

Baumer, Howard

Broadcom

Comment Type T Comment Status D

If the phy types aren't limited to these then what others are allowed? Any PMA/PMD types added in the future will modify this sentence to include them, therefore "but not limited to" is not needed.

SuggestedRemedy

Remove ", but are not limited to,"

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

In theory, at some point we could add vendor dependant next pages and a vendor could use them to support a proprietary PHY, but the statement that "Technology-dependant PHYs include . . ." is not exclusive and an explicit statement "but are not limited to" is unnecessary.

CI 73 SC 73.4 P 135 L 01 # 535

Dawe, Piers

Agilent

Comment Type E Comment Status D open

highest common local ability?

SuggestedRemedy

Delete 'local'.

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 73 SC 73.4 P 135 L 01 # 534

Dawe, Piers

Agilent

Comment Type E Comment Status D

Confusing choice of word if one cares about fiber optics.

SuggestedRemedy

Change 'multimode' to multi-ability'. Consider changing 'mode' to 'ability' or 'port type'. Similarly in 73.7.6

Proposed Response Response Status W

PROPOSED ACCEPT.

multi-ability

CI 73 SC 73.5 P 135 L 05 # 708

David V James

JGG

Comment Type ER Comment Status D caps

DVJ-135

English words should not be capitalized simply because their meaning is different from normal English usage.

SuggestedRemedy

Transmission

==>

transmission

Proposed Response Response Status W

PROPOSED ACCEPT.

Disagree with the principle suggested by the commentor, but in this case, the word appears to be used in its common English meaning and shouldn't be capitalized.

IEEE P802.3ap draft 2.0 Comments

CI 73 SC 73.5 P 135 L 08 # 536
 Dawe, Piers Agilent

Comment Type T Comment Status D
 Need more info (in particular, the signaling rate).

SuggestedRemedy
 Cross-reference to 72.5.10.2.2.

Proposed Response Response Status W
 PROPOSED REJECT.

The rate used in Clause 72 for DME during link training is not the rate used for AN. 73.5.3 defines the timing for AN DME signaling and there is no need to cross reference a part of 73.5 for one of the many characteristics of DME transmission that are covered within 73.5.

CI 73 SC 73.5.1.1 P 135 L 35 # 50
 Claseman, George Micrel Semiconductor

Comment Type E Comment Status D
 ""specified""

SuggestedRemedy
 ""specified""

Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 73 SC 73.5.2 P 135 L 38 # 709
 David V James JGG

Comment Type ER Comment Status D caps
 DVJ-136
 English words should not be capitalized simply because their meaning is different from normal English usage.

SuggestedRemedy
 Encoding
 ==>
 encoding

Proposed Response Response Status W
 PROPOSED ACCEPT.

Disagree with the principle suggested by the commentator, but in this case, the word appears to be used in its common English meaning and shouldn't be capitalized.

CI 73 SC 73.5.2 P 135 L 47 # 40
 Claseman, George Micrel Semiconductor

Comment Type E Comment Status D
 ""synchronization""

SuggestedRemedy
 ""synchronization""

Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 73 SC 73.5.2 P 136 L 01 # 390
 Baumer, Howard Broadcom

Comment Type E Comment Status D
 Reference not specific enough

SuggestedRemedy
 Change "à defined in 48.2.4.2." to "à defined in Figure 48-5 in 48.2.4.2."

Proposed Response Response Status W
 PROPOSED REJECT.

There is material in the text of 48.2.4.2 that is relevant in addition to the figure so leave the more general reference.

CI 73 SC 73.5.2 P 136 L 01 # 288
 McClellan, Brett Solarflare

Comment Type T Comment Status D
 It is not clear exactly what is being referenced in 48.2.4.2.
 Can the pseudo-random source be explicitly defined in clause 73?

SuggestedRemedy
 Specify the pseudo-random source in this clause.

Proposed Response Response Status W
 PROPOSED REJECT.

The reference is sufficient.

IEEE P802.3ap draft 2.0 Comments

Cl 73 SC 73.5.2 P 136 L 14 # 710

David V James

JGG

Comment Type ER Comment Status D caps

DVJ-137

Capitalization within figure callouts should be limited to the first word, as per IEEE Style Guide. This rule always applies, regardless of whether the callout is split into multiple lines.

SuggestedRemedy

Clock Transitions

==>

Clock transitions

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

The IEEE Style guide does not specify that. Its requirements on capitalization in figures are: Letter symbols not normally capitalized shall always be lowercase (see Figure 4). Only the initial letter of the first word and proper nouns shall be capitalized in figure titles.

The text in question is a figure caption and not a figure title.

However, the capitalization of "transition" and of "bit on wire" seems unnecessary so make lower case.

Cl 73 SC 73.5.2 P 136 L 20 # 711

David V James

JGG

Comment Type ER Comment Status D caps

DVJ-138

Capitalization within figure callouts should be limited to the first word, as per IEEE Style Guide. This rule always applies, regardless of whether the callout is split into multiple lines.

SuggestedRemedy

First Bit on Wire

==>

First bit on wire

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

See 710

Cl 73 SC 73.5.3 P 136 L 30 # 712

David V James

JGG

Comment Type ER Comment Status D caps

DVJ-139

English words should not be capitalized simply because their meaning is different from normal English usage.

SuggestedRemedy

Timing

==>

timing

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Disagree with the principle suggested by the commentor, but in this case, the word appears to be used in its common English meaning and shouldn't be capitalized.

Cl 73 SC 73.5.3 P 137 L 06 # 714

David V James

JGG

Comment Type ER Comment Status D e

DVJ-141

Nonstandard table line widths

SuggestedRemedy

==>

very thin in center

thin on edges of header and body

Proposed Response Response Status W

PROPOSED REJECT.

This is an Adobe PDF display quirk and not a source problem. The lines are all the same on the printed page. If you change the PDF magnification on the screen, you will also see the "real" line widths are uniform.

IEEE P802.3ap draft 2.0 Comments

CI 73 SC 73.5.3 P 137 L 07 # 289
 McClellan, Brett Solarflare

Comment Type T Comment Status D

In Table 73-2, it appears that the timing spec for T1 conflicts with T2 and T3. I assume that T1 is supposed to be the average period while T2 and T3 allow for instantaneous jitter, but this is not explicitly stated.

SuggestedRemedy

Clarify the difference between T1 and T2/T3 timing specs.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

T1 is in error. We originally had a tight tolerance for the spacing and in a later revision we modified it but apparently forgot to update T1. Change T1 to minimum of 3.1 and maximum of 3.3.

CI 73 SC 73.5.3 P 137 L 09 # 391
 Baumer, Howard Broadcom

Comment Type T Comment Status D

T2 will always be met if T1 is met so why not make T2 = 6.4 +/- 0.02%?

SuggestedRemedy

Make T2 = 6.4 +/- 0.02%

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
 Modify T1 to match the looser tolerance of T2 and T3.
 see 289.

CI 73 SC 73.5.3 P 137 L 11 # 392
 Baumer, Howard Broadcom

Comment Type T Comment Status D

Why is T3 looser than T1? Per T1 T3 will always be met.

SuggestedRemedy

Make T3 = T1

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

See 289

CI 73 SC 73.5.3 P 137 L 15 # 393
 Baumer, Howard Broadcom

Comment Type T Comment Status D

T5 will always be met if T1 is met so just make T5 = 339.2 +/- 1.06%

SuggestedRemedy

Make T5 = 339.2 +/- 1.06%

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. To make consistent with T2 and T3, minimum should be 328.6, maximum 349.8.

CI 73 SC 73.5.3 P 137 L 17 # 394
 Baumer, Howard Broadcom

Comment Type T Comment Status D

T6 will always be met if T1 is met so just make T6 = 12.8 +/- 0.04%

SuggestedRemedy

Make T6 = 12.8 +/- 0.04%

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Make numbers consistent with T2 and T3. Minimum 12.4, Maximum 13.2

CI 73 SC 73.5.3.1 P 137 L 40 # 617
 Ganga, Ilango Intel

Comment Type E Comment Status D

In figure 73-4 missing bit cell edges are indicated by solid lines. Change this to dotted lines

SuggestedRemedy

In figure 73-4 Change missing bit cell edges to dotted lines instead of solid lines.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

They are dotted lines - check the print out or up the magnification on the screen display. Editor will see if there is a smaller dot size for lines that shows up better on the screen.

IEEE P802.3ap draft 2.0 Comments

CI 73 SC 73.6 P 137 L 47 # 713

David V James

JGG

Comment Type ER Comment Status D caps

DVJ-140

English words should not be capitalized simply because their meaning is different from normal English usage.

SuggestedRemedy

Encoding

==>

encoding

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Disagree with the principle suggested by the commentator, but in this case, the words appear to be used in their common English meaning and shouldn't be capitalized.

CI 73 SC 73.6 P 138 L 22 # 618

Ganga, Ilango

Intel

Comment Type E Comment Status D

change line 22 ""The remaining capability bits are reserved."" to read as ""The remaining capability bit C[2] is reserved.""

SuggestedRemedy

Change line 22 ""The remaining capability bits are reserved."" to read as ""The remaining capability bit C[2] is reserved.""

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 73 SC 73.6 P 138 L 25 # 279

McClellan, Brett

Solarflare

Comment Type E Comment Status D

""Pause capability resolution is referenced in 28B.3""

Use ""defined"" instead of ""referenced.""

SuggestedRemedy

change text to: ""Pause capability resolution is defined in 28B.3""

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Delete the line instead per 620 as the material is covered in 73.6.5.

CI 73 SC 73.6 P 138 L 26 # 620

Ganga, Ilango

Intel

Comment Type E Comment Status D

Delete line 26 ""Pause capability resolution is referenced in 28B.3"". This information not relevant here it is already specified in section 73.6.5 Pause

SuggestedRemedy

Delete line 26 ""Pause capability resolution is referenced in 28B.3"".

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 73 SC 73.6.1 P 138 L 34 # 780

Beck, Michael

Alcatel Bell n.v.

Comment Type E Comment Status D

Current text reads:

""The selector field for 802.3 Backplane Ethernet is the following: ""

This is not a good idea, as tables may float away from their original position in the text when final lay-out is done.

SuggestedRemedy

Replace quoted text with:

""The selector field for 802.3 Backplane Ethernet is shown in Table 73-3.""

Proposed Response Response Status W

PROPOSED ACCEPT.

IEEE P802.3ap draft 2.0 Comments

CI 73 SC 73.6.2 P 138 L 45 # 18

King, Iain

Comment Type E Comment Status D open

In the UK there is an alternative meaning to the word 'nonce' that may raise a few eyebrows when this standard is read (see <http://www.missingimages.com/thesweeney/dictionary.html>). It is unlikely, though, that there will be much chance of confusion, given the target audience.

On a more serious note, this term is not defined in section 1.

SuggestedRemedy

Consider an alternative term, and/or add a definition to section 1

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Either need to add a definition or rename. Any suggestions? I don't share the commentator's concern since this technical term is used elsewhere in security, but I am concerned that security folks won't consider our small nonce worthy of the term.

CI 73 SC 73.6.3 P 139 L 04 # 238

Dudek, Mike Picolight

Comment Type E Comment Status D
spelling

SuggestedRemedy

Change entry to entry

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 73 SC 73.6.3 P 139 L 04 # 280

McClellan, Brett Solarflare

Comment Type E Comment Status D
typo

SuggestedRemedy

change ""enry"" to ""entry""

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 73 SC 73.6.4 P 139 L 17 # 718

David V James JGG

Comment Type ER Comment Status D caps

DVJ-145
English words should not be capitalized simply because their meaning is different from normal English usage.

SuggestedRemedy

Encoding
==>
encoding

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Encoding is used in its normal English sense and should not be capitalized per style guide on figure titles.

CI 73 SC 73.6.4 P 139 L 20 # 717

David V James JGG

Comment Type ER Comment Status D e

DVJ-144
Nonstandard table line widths

SuggestedRemedy

==> very thin in center
==> thin on edges of header and body

Proposed Response Response Status W

PROPOSED REJECT.

Acrobat display problem. If you print the page or change the magnification you will see that the line widths of the source are uniform.

CI 73 SC 73.6.4 P 139 L 30 # 395

Baumer, Howard Broadcom

Comment Type E Comment Status D

Resolve TBD

SuggestedRemedy

Remove "/TBD could be used either"

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. See 283

IEEE P802.3ap draft 2.0 Comments

CI 73 SC 73.6.4 P 139 L 31 # 283
 McClellan, Brett Solarflare

Comment Type ER Comment Status D e

""The fields A[26:3] are Reserved/TBD could be used either for future expansion of new technologies for 802.3 Backplane Ethernet or additional parameters to be negotiated for 802.3ap Backplane Ethernet.""

The TBD should have been removed going into draft 2.0.
 The field can't be both Reserved and TBD and used for additional parameters.

SuggestedRemedy

Change text to: ""The fields A[26:3] are Reserved.""

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

"reserved for future use"

Do we need to add "shall be sent as zero and ignored on receive"?

CI 73 SC 73.6.4 P 139 L 36 # 396
 Baumer, Howard Broadcom

Comment Type E Comment Status D

Case correction

SuggestedRemedy

Change "à (C0:C1) is encoded in bit D11:D10 à" to "à (C0:C1) are encoded in bits D11:D10 à"

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 73 SC 73.6.5 P 139 L 39 # 2
 Daines, Kevin

Comment Type E Comment Status D

""Clause 28B"" should be ""Annex 28B""

SuggestedRemedy

see comment

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 73 SC 73.6.5 P 139 L 42 # 3
 Daines, Kevin

Comment Type E Comment Status D

""Clause 28B.2"" should be ""Annex 28B.2""

SuggestedRemedy

see comment

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 73 SC 73.6.7 P 140 L 09 # 397
 Baumer, Howard Broadcom

Comment Type E Comment Status D

Redundant word

SuggestedRemedy

Change "à encoded in bit D14 of Link Code Word encoding." to "à encoded in bit D14 of the Link Code Word."

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 73 SC 73.6.8 P 140 L 23 # 398
 Baumer, Howard Broadcom

Comment Type E Comment Status D

Redundant word

SuggestedRemedy

Change "à encoded in bit D15 of Link Code Word encoding." to "à encoded in bit D15 of the Link Code Word."

Proposed Response Response Status W

PROPOSED ACCEPT.

IEEE P802.3ap draft 2.0 Comments

CI 73 SC 73.7.1 P 141 L 01 # 399
 Baumer, Howard Broadcom

Comment Type TR Comment Status D
 Is this a recommendation or should this be a "shall"?

SuggestedRemedy
 If this is a requirement then change "should" to "shall"

Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.

Change "should be" on lines 1 and 3 to "is".

The requirement is stated in 73.5.1.1 and does not need to be restated.

Another alternative would be to reference 73.5.1.1 and delete these lines.

CI 73 SC 73.7.1 P 141 L 03 # 400
 Baumer, Howard Broadcom

Comment Type TR Comment Status D
 Is this a recommendation or should this be a "shall"?

SuggestedRemedy
 If this is a requirement then change "should" to "shall"

Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 See 399

CI 73 SC 73.7.4 P 141 L 23 # 36
 Marris, Arthur

Comment Type E Comment Status D
 Change ""discribed"" to ""described"".

SuggestedRemedy
 Change ""discribed"" to ""described"".

Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 73 SC 73.7.4.1 P 141 L 34 # 619
 Ganga, Ilango Intel

Comment Type E Comment Status D
 delete duplicate information on line 34

SuggestedRemedy
 Delete the following construct from lines 34-35, ""to allow 1000BASE-KX, 10GBASE-KX, 10GBASE-KX4 and 10GBASE-KR devices that have Auto-Negotiation disabled""

Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 73 SC 73.7.4.1 P 141 L 34 # 249
 Joergensen, Thomas Vitesse Semiconducto

Comment Type E Comment Status D
 Duplicate text

SuggestedRemedy
 Remove the following text starting on line 34: ""to allow 1000BASE-KX, 10GBASE-KX4 and 10GBASE-KR devices that have Auto-Negotiation disabled""

Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 73 SC 73.7.4.1 P 142 L 02 # 622
 Ganga, Ilango Intel

Comment Type ER Comment Status D
 incorrect register description on line 2. The line 2 should read as follows, ""bit (45.2.7.2.3) in the AN Status register""

SuggestedRemedy
 Correct page 142, line 2 to read as follows, ""bit (45.2.7.2.3) in the AN Status register""

Proposed Response Response Status W
 PROPOSED ACCEPT.

IEEE P802.3ap draft 2.0 Comments

CI 73 SC 73.7.6 P 135 L 47 # 538
 Dawe, Piers Agilent
 Comment Type T Comment Status D
 Can't parse 'Clause 73 Auto-Neg(management function shall use MMD7) function.' Should spell out 'negotiation'
 SuggestedRemedy
 ?
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Spell out Negotiation, delete the item in the parenthesis which is unnecessary to the note.

CI 73 SC 73.7.6 P 135 L 47 # 537
 Dawe, Piers Agilent
 Comment Type T Comment Status D
 You can't put a 'shall' in one of these NOTES, they are informative.
 SuggestedRemedy
 If you mean it, make it into regular text.
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 The "shall"s here unnecessary. Delete the first shall and the parenthetical item with the shall.

CI 73 SC 73.7.6 P 142 L 24 # 781
 Beck, Michael Alcatel Bell n.v.
 Comment Type E Comment Status D
 The current text contains the phrase ""the highest priority as defined below"".
 This is not a good idea, as tables may float away from their original position in the text when final lay-out is done.
 SuggestedRemedy
 Replace quoted text with:
 ""the highest priority as defined in Table 73-5""
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 73 SC 73.7.6 P 142 L 29 # 720
 David V James JGG
 Comment Type ER Comment Status D caps
 DVJ-147
 Capitalization within a clause or subclause title should be limited to the first word, as per the IEEE Style Guide.
 SuggestedRemedy
 Priority Resolution
 ==>
 Priority resolution
 Proposed Response Response Status W
 PROPOSED REJECT.
 Priority Resolution is the function name and both words will be capitalized as is common in our function names.

CI 73 SC 73.7.6 P 142 L 32 # 719
 David V James JGG
 Comment Type ER Comment Status D e
 DVJ-146
 Nonstandard table line widths
 SuggestedRemedy
 ==> very thin in center
 ==> thin on edges of header and body
 Proposed Response Response Status W
 PROPOSED REJECT.
 This is an Adobe PDF display quirk and not a source problem. The lines are all the same on the printed page. If you change the PDF magnification on the screen, you will also see the "real" line widths are uniform.

CI 73 SC 73.7.7 P 143 L 23 # 401
 Baumer, Howard Broadcom
 Comment Type E Comment Status D
 Missing "be"
 SuggestedRemedy
 Change "à Codes can transmitted à" to "à Codes can be transmitted à"
 Proposed Response Response Status W
 PROPOSED ACCEPT.

IEEE P802.3ap draft 2.0 Comments

CI 73 SC 73.7.7 P 143 L 24 # 239
 Dudek, Mike Picolight
 Comment Type E Comment Status D
 incorrect grammar
 SuggestedRemedy
 Change ""Can transmitted"" to ""Can be transmitted""
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 73 SC 73.7.7 P 143 L 24 # 51
 Claseman, George Micrel Semiconductor
 Comment Type E Comment Status D
 ""can transmitted""
 SuggestedRemedy
 ""can be transmitted""
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 73 SC 73.8 P 145 L 04 # 539
 Dawe, Piers Agilent
 Comment Type TR Comment Status D
 You can't say 'The clause 45 Management Data Input/Output (MDIO) interface shall be used ...' because per 45.1, 'The MDIO electrical interface is optional.'
 SuggestedRemedy
 Change to 'may be used', 'may conveniently be used', 'is recommended' or similar.
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 See 253

CI 73 SC 73.8 P 145 L 04 # 253
 Joergensen, Thomas Vitesse Semiconducto
 Comment Type T Comment Status D
 The electrical part of the Clause 45 MDIO management interface should be optional. As it is written here it requires the electrical interface to be present (there is a ""shall"").
 SuggestedRemedy
 Change the sentence to read: ""The clause 45 Management Data Input/Output (MDIO) interface shall be used to access the device registers for Auto-Negotiation and other Management purposes.""
 and add: ""The MDIO electrical interface is optional. Where no physical embodiment of the MDIO exists, provision of an equivalent mechanism to access the registers is recommended.""

Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 The commentor's suggestion is consistant with Clause 45.
 In the PICS, split MR1 into two items - a mandatory one for the management functionality and an optional one for the management electrical interface.
 Editor's note: should 73.8.1 be deleted? 73.8 says the logical management interface is mandatory so why do we have 73.8.1 about what to do if isn't provided?

CI 73 SC 73.8 P 145 L 08 # 540
 Dawe, Piers Agilent
 Comment Type E Comment Status D
 Management
 SuggestedRemedy
 management
 Proposed Response Response Status W
 PROPOSED ACCEPT.

IEEE P802.3ap draft 2.0 Comments

CI 73 SC 73.8 P 145 L 46 # 541
 Dawe, Piers Agilent
 Comment Type T Comment Status D
 Variable name, last row of table 73-6, seems wrong.
 SuggestedRemedy
 ?
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 There is no variable name.
 One could put "set to one" here or put an asterisk and say that in a note. Auto-negotiation support is mandatory for backplane Ethernet so this bit will be 1 for the devices in this clause.

CI 73 SC 73.8.1 P 145 L 10 # 782
 Beck, Michael Alcatel Bell n.v.
 Comment Type E Comment Status D
 Table 73-6 is not cited in the text. Although this is no longer mandatory (a novelty in the 2005 edition of the Style Guide), it is still a good idea to do so, especially considering the fact that tables can float away from their original position in the text when the page lay-out is altered.
 SuggestedRemedy
 Cite Table 73-6 in the text.
 Proposed Response Response Status W
 PROPOSED ACCEPT.
 In 73.8 add
 Table 73-6 provides the mapping of state diagram variables to management registers.

CI 73 SC 73.8.1 P 145 L 18 # 402
 Baumer, Howard Broadcom
 Comment Type T Comment Status D
 Wrong register reference
 SuggestedRemedy
 Change "6.16.15:0" to "7.16.15:0"
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 73 SC 73.8.1 P 145 L 18 # 721
 David V James JGG
 Comment Type ER Comment Status D e
 DVJ-148
 Nonstandard table line widths
 SuggestedRemedy
 ==> very thin in center
 ==> thin on edges of header and body
 Proposed Response Response Status W
 PROPOSED ACCEPT.
 This is an Adobe PDF display quirk and not a source problem. The lines are all the same on the printed page. If you change the PDF magnification on the screen, you will also see the "real" line widths are uniform.

CI 73 SC 73.8.1 P 145 L 19 # 37
 Marris, Arthur
 Comment Type T Comment Status D
 The MMD should be 7 rather than 6.
 SuggestedRemedy
 Change 6.16.15:0 to 7.16.15:0
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 73 SC 73.9.1 P 148 L 38 # 52
 Claseman, George Micrel Semiconductor
 Comment Type E Comment Status D
 ""Mancehster""
 SuggestedRemedy
 ""Manchester""
 Proposed Response Response Status W
 PROPOSED ACCEPT.

IEEE P802.3ap draft 2.0 Comments

Cl 73 SC 73.9.1 P 148 L 38 # 17
 King, Iain
 Comment Type E Comment Status D
 Typo 'Mancehster'
 SuggestedRemedy
 Change to 'Manchester'
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 73 SC 73.9.1 P 151 L 19 # 53
 Claseman, George Micrel Semiconductor
 Comment Type E Comment Status D
 ""an DME page""
 SuggestedRemedy
 ""a DME page""
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 73 SC 73.9.1 P 150 L 19 # 41
 Claseman, George Micrel Semiconductor
 Comment Type E Comment Status D
 ""Auto-Negotiaion""
 SuggestedRemedy
 ""Auto-Negotiation""
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 73 SC 73.9.2 P 152 L 53 # 42
 Claseman, George Micrel Semiconductor
 Comment Type E Comment Status D
 ""or or""
 SuggestedRemedy
 ""or""
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 73 SC 73.9.1 P 150 L 38 # 403
 Baumer, Howard Broadcom
 Comment Type T Comment Status D
 The transmitted nonce from the link partner is highly unlikely to match the transmitted nonce of the local device. Section 73.6.2 discusses an echoed nonce field that is intended to match the transmitted nonce field.
 SuggestedRemedy
 Change "à the transmitted nonce received à" to "à the echoed nonce received à"
 Proposed Response Response Status W
 PROPOSED REJECT.

Cl 73 SC 73.9.2 P 152 L 54 # 43
 Claseman, George Micrel Semiconductor
 Comment Type E Comment Status D
 ""or or""
 SuggestedRemedy
 ""or""
 Proposed Response Response Status W
 PROPOSED ACCEPT.

This is the test that checks whether the received signal is possibly crosstalk from ones own transmitter. If the received transmitted nonce field matches the sent transmitted nonce field, one goes from ABILITY DETECT to TRANSMIT DISABLE to restart the auto-negotiation. Either the received signal was ones own transmitter or both partners used the same nonce. In the latter case, the next nonce chosen should be different and the negotiation should succeed the next time. ack_nonce_match checks for the match between the transmitted nonce value and the echoed value.

IEEE P802.3ap draft 2.0 Comments

CI 73 SC 73.9.2 P 153 L 15 # 404
 Baumer, Howard Broadcom
 Comment Type T Comment Status D
 The data_det_min_timer has a range of 1.4ns but the data_detect_max_timer only has a range of 0.8ns. Making these ranges the same, 1.4ns, allows for implementations using the KX baud time.
 SuggestedRemedy
 Make the data_detect_max_timer range 3.4-4.8ns as in table 73-7.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 73 SC 73.9.2 P 153 L 45 # 54
 Claseman, George Micrel Semiconductor
 Comment Type E Comment Status D
 ""withthe""
 SuggestedRemedy
 ""with the""
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 73 SC 73.9.2 P 154 L 08 # 722
 David V James JGG
 Comment Type ER Comment Status D e
 DVJ-149
 Nonstandard table line widths
 SuggestedRemedy
 ==> very thin in center
 ==> thin on edges of header and body
 Proposed Response Response Status W
 PROPOSED REJECT.

This is an Adobe PDF display quirk and not a source problem. The lines are all the same on the printed page. If you change the PDF magnification on the screen, you will also see the "real" line widths are uniform.

CI 73 SC 73.9.2 P 154 L 43 # 59
 Claseman, George Micrel Semiconductor
 Comment Type T Comment Status D
 Value = 0 is not stated. This would seem to be included in the not_done condition.
 SuggestedRemedy
 ?
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Change range to "0 to 48 inclusive"

CI 73 SC 73.9.4 P 155 L 01 # 602
 Booth, Brad Intel
 Comment Type ER Comment Status D e
 The TDI is located in the wrong place. It is in the middle of the state machine variables and diagrams.
 SuggestedRemedy
 Move TDI from 73.9.4 to be 73.9. Move the State diagrams and variable definitions to be 73.10.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

IEEE P802.3ap draft 2.0 Comments

CI 73 SC 73.9.4.1 P 155 L 08 # 99

Healey, Adam

Comment Type TR Comment Status D

The technology dependent interface defines PMA_LINK.indication and PMA_LINK.request primitives. Unfortunately, these primitives are not defined in the clause 36 (1000BASE-X), clause 48 (10GBASE-X), or clause 51 (10GBASE-R/W) PMAs. This interface definition is broken and the auto-negotiation function is rendered unusable since it has no means to check the status of, or enable/disable the different port types.

SuggestedRemedy

1. The technology dependent interface needs to be re-defined in terms of existing services primitives (PCS, PMA, or PMD)...

-or-

2. The PMA_LINK.indication or PMA_LINK.request primitives need to be added to the clause 36, 48, and 51 PMAs, and the behavior of these PMAs with respect to those primitives must be defined.

Option #1 is preferred if it proves to be feasible. Otherwise, major work will have to be done to amend (or perhaps create backplane specific versions of) the PMA sublayers.

Proposed Response Response Status W

OPEN

There don't appear to be suitable primitives defined for interface to an AN sublayer in any of Clauses 36, 48 and 51. However opening these clauses also seems to be undesirable. Suggest we add to clauses 70, 71 and 72 a requirement that the PMAs for these PMDs also support the additional PMA primitives defined in 73.9.4.1.

Ideally, the definition in 73.9.4.1 could be more complete by identifying the state machine variables in each of the layers that these primitives connect to.

Should this be deferred to sponsor ballot?

CI 73 SC 73.9.4.1.1 P 155 L 20 # 405

Baumer, Howard

Broadcom

Comment Type T Comment Status X

PMA_CARRIER.indication and PMA_UNITDATA.indication are undefined

SuggestedRemedy

Either define these or delete "READY, the PMA_CARRIER.indication and PMA_UNITDATA.indication primitives are undefined"

Proposed Response Response Status W

PMA_UNITDATA.indication is a defined primitive in each of the related primitive clauses and PMA_CARRIER.indication appears in one of the PMA clauses.

73.9.4 should say that Backplane Ethernet PMAs provide these primitives in addition to the PMA primitives defined in clause 36, 49 and 51 so the relationship is clarified.

CI 73 SC 73.9.4.2.1 P 155 L 42 # 406

Baumer, Howard

Broadcom

Comment Type T Comment Status X

SCAN_FOR_CARRIER mode is undefined

SuggestedRemedy

Either define SCAN_FOR_CARRIER mode or delete this value and its description

Proposed Response Response Status W

open

I don't think we can delete this as it is used for parallel detect. We may need to define it more completely.

CI 73 SC 73.9.4.2.3 P 156 L 13 # 407

Baumer, Howard

Broadcom

Comment Type T Comment Status X

link integrity test function is not defined for any of the PMAs KX, KX4, KR.

SuggestedRemedy

Define the link integrity test function

Proposed Response Response Status W

open

Each of the PMD's related to these PMAs has some sort of link integrity function; e.g. the lock monitor state machine in Clause 49. We should provide more specific information on how this primitive connects to the technology dependent sub-layers.

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CI 73 SC 73.9.5 P 157 L 05 # 544
 Dawe, Piers Agilent
 Comment Type E Comment Status D
 There's room to make the font in figure 73-8 more readable.
 SuggestedRemedy
 Please make the font in figure 73-8 bigger.
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Will try

CI 73 SC 73.9.5 P 157 L 40 # 55
 Claseman, George Micrel Semiconductor
 Comment Type T Comment Status D
 There is no definition of interval_timer_done. Perhaps this should be interval_timer=done.
 SuggestedRemedy
 ?
 Proposed Response Response Status W
 PROPOSED REJECT.
 Timer_x_done is defined in the timer conventions 14.2.3.2 which are referenced in the timer definition clause.

CI 73 SC 73.9.5 P 158 L # 44
 Claseman, George Micrel Semiconductor
 Comment Type E Comment Status D
 multipel lines: Some text is covered by connecting arrows.
 SuggestedRemedy
 Reposition as needed.
 Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 73 SC 73.9.5 P 158 L # 45
 Claseman, George Micrel Semiconductor
 Comment Type E Comment Status D
 Multipel lines: ""start_clock_detect_min_timer"" , ""start_clock_detect_max_timer""
 SuggestedRemedy
 ""Start clock_detect_min_timer"" , ""Start clock_detect_max_timer""
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.
 Not clear what the commentor is requesting. If it is that Start be capitalized, then that is accepted.

CI 73 SC 73.9.5 P 158 L # 57
 Claseman, George Micrel Semiconductor
 Comment Type T Comment Status D
 Multipel lines: There is no definition of clock_detect_min_timer_done / _not_done. Perhaps this should be clock_detect_min_timer=done / !done.
 SuggestedRemedy
 ?
 Proposed Response Response Status W
 PROPOSED REJECT.
 It is defined in the timer conventions. See 14.2.3.2.

CI 73 SC 73.9.5 P 158 L # 38
 Claseman, George Micrel Semiconductor
 Comment Type T Comment Status D
 Multipel lines: There is no definition of page_test_min_timer_done / _not_done. Perhaps this should be page_test_min_timer=done / !done.
 SuggestedRemedy
 ?
 Proposed Response Response Status W
 PROPOSED REJECT. It is defined in the timer conventions. See 14.2.3.2.

IEEE P802.3ap draft 2.0 Comments

Cl 73 SC 73.9.5 P 158 L # 56
 Claseman, George Micrel Semiconductor

Comment Type T Comment Status D
 Multipel lines: There is no definition of page_test_max_timer_done / _not_done. Perhaps this should be page_test_max_timer=done / !done.

SuggestedRemedy
 ?

Proposed Response Response Status W
 PROPOSED REJECT.
 It is defined in the timer conventions. See 14.2.3.2.

Cl 73 SC 73.9.5 P 158 L # 58
 Claseman, George Micrel Semiconductor

Comment Type T Comment Status D
 Multipel lines: There is no definition of clock_detect_max_timer_done / _not_done. Perhaps this should be clock_detect_max_timer=done / !done.

SuggestedRemedy
 ?

Proposed Response Response Status W
 PROPOSED REJECT.
 It is defined in the timer conventions. See 14.2.3.2.

Cl 73 SC Figure P 159 L 01 # 11
 Daines, Kevin

Comment Type ER Comment Status D e
 Entries to states should be from the top rather than the bottom or side.
 Exits from states should be from the bottom rather than the top or side.

SuggestedRemedy
 Per comment

Consider aliases to help with space constraints.
 Proposed Response Response Status W
 PROPOSED ACCEPT IN PRINCIPLE.

Note that the current state diagrams are similar to what was done in Clause 37 though the commentor is correct that most IEEE 802.3 Clauses have used a convention that exits are always from the bottom and entries are always from the top. The suggested change will result in some crossing lines or require labeled links.

What is the pleasure of the task force?

Cl 73 SC Figure 73-10 P 159 L 38 # 252
 Joergensen, Thomas Vitesse Semiconducto

Comment Type T Comment Status D
 Signal an_good is not defined, has to be replaced by an_link_good.

SuggestedRemedy
 Replace an_good with an_link_good.

Proposed Response Response Status W
 PROPOSED ACCEPT.

CI 73 SC Figure 73-10 P 159 L 44 # 408
Baumer, Howard Broadcom

Comment Type E Comment Status D open
ability_match_wordability_match is not defined nor is it used anywhere.

SuggestedRemedy

Either define ability_match_wordability_match or delete it or if it is actually ability_match then replace it with ability_match

Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE.

It should be ability_match but the whole note seems unnecessary. The variable is defined in the variable definition and there are other cases of variables set according to their definitions where we don't have a note.

Delete the note.

CI 73 SC Figure 73-8 P 157 L 21 # 10
Daines, Kevin

Comment Type ER Comment Status D e
Entries to states should be from the top rather than the bottom or side.
Exits from states should be from the bottom rather than the top or side.

SuggestedRemedy

Per comment

Proposed Response Response Status W
PROPOSED ACCEPT IN PRINCIPLE.

See 11.