

gement Parameters for 10 Mb/s Operation and Associated Power Delivery over a Single Balanced Pair of

Cl 01 **SC 1.4.495a** **P 29** **L 18** # **5**
Wienckowski, Natalie General Motors

Comment Type T **Comment Status D** *Editorial*
Missing Type E PoDL definition

SuggestedRemedy

Editors instuction: Insert the Type E PoDL System definition into the list after 1.4.495 Type D PoDL System as follows:

Text: "Type E PoDL System: A system comprising a PoDL PSE, link section, and PD that are compatible with 10BASE-T1L."

Proposed Response **Response Status W**
PROPOSED ACCEPT IN PRINCIPLE.

Insert Editor's instruction on line 19, "Insert the Type E PoDL System definition into the list after 1.4.494 Type D PoDL System (re-numbered from 1.4.495 due to the deletion of 1.4.294 by IEEE Std 802.3bt-2018) as follows:"

Followed by text, "1.4.494a Type E PoDL System: A system comprising a PoDL PSE, link section, and PD that are compatible with 10BASE-T1L."

Cl 30 **SC 30.2.3** **P 34** **L 19** # **201**
Kim, Yong NIO

Comment Type ER **Comment Status D** *Editorial*
The editing instruction says "Replace Figure 30-3 to add oPLCA as follows". Shouldn't it be "Change Figure.." Meaning allow other projects to change this Figure without such change being lost?

SuggestedRemedy

Consider use of "Change"

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

The use of the replace editing instruction is aligned with the text on page 26 that says, "Replace is used to make changes in figures or equations by removing the existing figure or equation and replacing it with a new one." A Change instruction would required the use of underlines and strikethroughs, which are impractical for figure blocks. Subsequent projects can change or replace this figure as needed.

Cl 30 **SC 30.3.9.2.6** **P 39** **L 44** # **9**
Anslow, Pete Ciena

Comment Type E **Comment Status D** *Editorial*
As pointed out by comment #36 against D2.0 and again in comment #96 against D2.1:

The 802.3 web page:

http://www.ieee802.org/3/WG_tools/editorial/requirements/words.html#mib

says: "In IEEE Std 802.3 the spelling 'behaviour' is used throughout MIB clauses and their associated Annexes, and in any references to the behaviours defined there."

SuggestedRemedy

Change "behavior" to "behaviour"

Proposed Response **Response Status W**
PROPOSED ACCEPT IN PRINCIPLE.

Replace, "in a single transmit opportunity. Behavior is specified in"

with, "in a single transmit opportunity as specified in"

(Editor's note: BEHAVIOUR in clause 30 is a reserved word and should be avoided in explanatory text.)

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CI 30 SC 30.5.1.1.2 P 40 L 10 # 10
Anslow, Pete Ciena

Comment Type E Comment Status D Editorial

Comment #41 against D2.0 and Comment #98 against D2.1 both point out that it is not appropriate to list the two new 10 Mb/s PHYs after 1000 Mb/s PHYs.

The response to Comment #98 against D2.1 was:

ACCEPT IN PRINCIPLE.

Replace "1000BASE-T" with "10BASE-FL"

There are two issues with this:

1) it has been replaced with "1000BASE-FL" (which does not exist) rather than "10BASE-FL"

2) "10BASE-FL" would make the list:

10BASE-FP in Clause 16

10BASE-FB in Clause 17

10BASE-FL in Clause 18

10BASE-T1L in Clause 146

10BASE-T1S in Clause 147

10BASE-FLHD in Clause 18

10BASE-FLFD in Clause 18

which places the two new PHYs in the middle of the three PHYs defined in Clause 18.

It seems more appropriate to put them at the end of the 10 Mb/s PHYs.

SuggestedRemedy

Change "1000BASE-FL" to "10BASE-FLFD"

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 45 SC 45.2.3.68f P 56 L 17 # 287
Jones, Peter Cisco Systems

Comment Type T Comment Status D Editorial

The description of PhysicalColCnt in Table 45-237f "16 bits field counting the number of remote jabber errors received since last read of this register" is a copy of the description of Remote Jabber Count in Table 45-237e

SuggestedRemedy

Fix description

"16 bit field counting the number of physical collisions that occurred since last read of this register"

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Master comment #287. Consider with #156.

Replace, "16 bits field counting the number of remote jabber errors received since last read of this register"

with, "16 bit field counting the number of physical collisions that occurred since last read of this register"

CI 45 SC Table 45-237f P 56 L 17 # 156
Griffiths, Scott Rockwell Automation

Comment Type E Comment Status D Editorial

Description of PhysicalColCnt in the table is wrong; it appears to be a copy & paste error.

SuggestedRemedy

Replace text in the description column of the table with appropriate text derived from 45.2.3.68f.1.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Master comment #287. Consider with #287.

Replace, "16 bits field counting the number of remote jabber errors received since last read of this register"

with, "16 bit field counting the number of physical collisions that occurred since last read of this register"

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Cl 98 SC 98.2.1.1.2 P74 L 12 # 222
Kim, Yong NIO

Comment Type E Comment Status D Editorial

This whole paragraph would be better placed under CL 98.2.1 after the existing paragraph (and fix up spelled out acronyms, etc)

SuggestedRemedy

Consider moving it there and do reasonable editorial changes.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change editing instruction at P74 L11 to "Insert new text as new second paragraph in 98.2.1 as follows:" and move instruction and new paragraph to subclause 98.2.1.

Cl 98 SC 98.5.6.3 P84 L 6 # 34
Graber, Steffen Pepperl+Fuchs GmbH

Comment Type E Comment Status D Editorial

Within the state diagram 98-11 different styles (without and with true ore false compares) are used.

SuggestedRemedy

Unitfy the used style within the state diagram. As most of the conditions have already the true/false statements removed, it is suggested, to write "an_link_good" instead of "an_link_good = true" at two positions and also "!an_link_good" instead of "an_link_good = FALSE" at one position within the state diagram. Alternatively add to all state transition conditions the true/false statements, if the intention is to be aligned with the rest of Clause 98.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Replace, "an_link_good = TRUE" with, "an_link_good" in two locations

Replace, "an_link_good = FALSE" with, "!an_link_good" in one location

(Editor's note: Project Chair may file a sponsor ballot to change the structure here and have a single function to get the speed mode, which will make all of this look like clause 98 and simplify the diagram so its obvious the two branches are mutually exclusive.)

Cl 104 SC 104.7.1.4 P99 L 5 # 48
Graber, Steffen Pepperl+Fuchs GmbH

Comment Type E Comment Status D Editorial

"Cable Resistance Measurement" is written with capital letters at the beginning of the words in some occurances, in other occurances it is written in all small letters.

SuggestedRemedy

Please align the text throughout the document (suggested is to replace all occurances by "Cable Resistance Measurement").

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change, "Cable Resistance Measurement" to "cable resistance measurement" in these five locations:

P99, L5
P99, L8
P99, L37
P99, L39
P100, L1

Change, "Cable Resistance Measurement" to "Cable resistance measurement" on page 101, line 18.

Cl 104 SC 104.7.1.4 P99 L 15 # 50
Graber, Steffen Pepperl+Fuchs GmbH

Comment Type E Comment Status D Editorial

. during presence pulse .

SuggestedRemedy

. during the presence pulse . (align with text of the following variable descriptions).

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Replace, "during presence pulse"

with, "during the presence pulse"

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CI 104 **SC 104.7.2.6** **P 102** **L 17** # **89**
 Graber, Steffen Pepperl+Fuchs GmbH

Comment Type E **Comment Status D** *Editorial*
 Text in column "Name" should be left aligned.

SuggestedRemedy
 Please left align text.

Proposed Response **Response Status W**
 PROPOSED ACCEPT IN PRINCIPLE.

Insert "PPD_req" (with PD_req in subscript) before "Requested Power" on P102, L13.

Left justify "Voltage at PD PI during Presence Pulser" on P102, L17.

Insert "PPD_assign" (with PD_assign in subscript) before "PD Assigned Power" on P102, L42.

CI 104 **SC 104.9.1** **P 103** **L 7** # **24**
 Anslow, Pete Ciena

Comment Type E **Comment Status D** *Editorial*
 The name of the clause appears in several places in the PICS and while this amendment has changed some, others are unaltered.

SuggestedRemedy
 Bring the heading and first paragraph of 104.9.1 in to the draft. Add an editing instruction: "Change the first paragraph of 104.9.1 as follows:" in the first paragraph, show " Balanced Twisted" in strikethrough font

Bring the heading for 104.9.2 and 104.9.2.2 and the table in 104.9.2.2 in to the draft. in the table, show " Balanced Twisted" in strikethrough font

In the heading for 104.9.4, show " Balanced Twisted" in strikethrough font

Proposed Response **Response Status W**
 PROPOSED ACCEPT.

CI 104 **SC 104.9.4.2** **P 103** **L 43** # **25**
 Anslow, Pete Ciena

Comment Type E **Comment Status D** *Editorial*
 The editing instruction for the table in 104.9.4.2 does not include the row for "*CRM"
 The reference to "CRM" in item "PSE37" points to an entry that is later in the PICS tables. This is not usual practice.
 The Status entry of item "*CRM" is "SCC:O" but item "*SCC" does not exist. (Should this be "SCCP"?)

SuggestedRemedy
 Move item "*CRM" to be before item "PSE37". Preferably put this with the other options in the table in 104.9.3.
 Include the insertion of the row for "*CRM" in an editing instruction
 If appropriate, change "SCC:O" to "SCCP:O"

Proposed Response **Response Status W**
 PROPOSED ACCEPT IN PRINCIPLE.

Delete row for *CRM in table in 104.9.4.2.

Insert the following row before the row marked "." in the table in 104.9.3:

Item: *CRM
 Feature: Implements cable resistance measurement functionality
 Subclause: 104.7
 Value/Comment: [blank]
 Status: SCCP:O
 Support: Yes [] No [] N/A []

Change Editing Instruction for 104.9.3 from, "Insert a row for new Item *PSETE after Item *PSETC and insert a row for new Item *PDTE after Item *PDTC in the table in 104.9.3 as follows (unchanged rows not shown):"

to, Insert a row for new Item *CRM before Item *PSETA, insert a row for new Item *PSETE after Item *PSETC, and insert a row for new Item *PDTE after Item *PDTC in the table in 104.9.3 as follows (unchanged rows not shown):"

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CI 146 SC 146.1.3.1 P 107 L 8 # 224
Kim, Yong NIO

Comment Type E Comment Status D Editorial

It would be good to say, "The conventions of 21.5 are adopted, with the following extensions." and replace the existing first sentence with it. The value of doing this is that a reader is informed that all stated conventions are common, and additoinal IF-THEN-ELSE-END was added in this clause.

SuggestedRemedy

Please consider the suggestion.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
Change "The notation used in the state diagrams follows the conventions of 21.5. Some..." to "The conventions of 21.5 are adopted with the extension that some"...

CI 146 SC 146.2 P 108 L 37 # 161
Griffiths, Scott Rockwell Automation

Comment Type E Comment Status D Editorial

It might be appropriate to note here that the Technology Dependent Interface is defined in Clause 98.4.

SuggestedRemedy

After "(GMII).", add "The optional Technology Dependent Interface is used for Auto-Negotiation and is described in 98.4." or something similar.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
After "(GMII).", add "The optional Technology Dependent Interface is used for Auto-Negotiation and is described in 98.4."

CI 146 SC 146.3.3.1.4 P 120 L 1 # 35
Graber, Steffen Pepperl+Fuchs GmbH

Comment Type E Comment Status D Editorial

Within state diagram 146-5 different styles, when to use brackets, are used. Looking into other 802.3 Clauses, in most cases, where there is no explicit ordering of the logic equation required, the brackets are omitted.

SuggestedRemedy

To align with the rest of 802.3, please omit the backets within the conditions in line 33, 37, 49, and 51.

Proposed Response Response Status W

PROPOSED REJECT.
Use of brackets for clarity differs throughout 802.3. the brackets as they are add clarity.

CI 146 SC 146.3.3.2.5 P 123 L 37 # 225
Kim, Yong NIO

Comment Type E Comment Status D Editorial

"The same ternary symbol.". The word "same" is ambiguous as a part of the first sentence. Where it was before (last sentence in the same paragraph), it was not ambiguous. Please fix it.

SuggestedRemedy

Just deleting "same" may work, but you be the judge.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
Change "The same ternary symbol encoding is used while in SEND_I and SEND_N." to "Both SEND_I and SEND_N use the following ternary symbol encoding."

CI 146 SC 146.3.4.1.3 P 128 L 2 # 36
Graber, Steffen Pepperl+Fuchs GmbH

Comment Type E Comment Status D Editorial

Within state diagram 146-8 different styles, when to use brackets, are used. Looking into other 802.3 Clauses, in most cases, where there is no explicit ordering of the logic equation required, the brackets are omitted.

SuggestedRemedy

Apply the following changes to state diagram in Figure 146-8: remove all round "("") brackets of the transition conditions within Figure 146-8. Convert all squared brackets of the transition conditions within Figure 146-8 to round brackets.

Proposed Response Response Status W

PROPOSED REJECT.
Use of brackets in 802.3 is inconsistent and based on clarity. Square brackets are used to add clarity where brackets are nested.

CI 146 SC 146.3.4.1.3 P 129 L 12 # 37
Graber, Steffen Pepperl+Fuchs GmbH

Comment Type E Comment Status D Editorial

Within state diagram 146-9 different styles, when to use brackets, are used. Looking into other 802.3 Clauses, in most cases, where there is no explicit ordering of the logic equation required, the brackets are omitted.

SuggestedRemedy

Please remove all round "("") brackets of the transition conditions within Figure 146-9.

Proposed Response Response Status W

PROPOSED REJECT.
Bracket usage adds clarity here.

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CI 146 SC 146.3.4.1.3 P 130 L 22 # 38
Graber, Steffen Pepperl+Fuchs GmbH

Comment Type E Comment Status D Editorial

Within state diagram 146-10 different styles, when to use brackets, are used. Looking into other 802.3 Clauses, in most cases, where there is no explicit ordering of the logic equation required, the brackets are omitted.

SuggestedRemedy

Please omit the brackets around (link_status = FAIL)

Proposed Response Response Status W

PROPOSED REJECT.
PROPOSED REJECT.
Bracket usage adds clarity here.

CI 146 SC 146.4.4 P 134 L 41 # 291
Jones, Peter Cisco Systems

Comment Type E Comment Status D Editorial

Text says "the link_fail_inhibit timer will be considered failed".
Timers don't fail but they do expire.

SuggestedRemedy

Change "the link_fail_inhibit timer will be considered failed" to "the link_fail_inhibit timer will be considered expired".

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 146 SC 146.4.4.3 P 137 L 2 # 40
Graber, Steffen Pepperl+Fuchs GmbH

Comment Type E Comment Status D Editorial

Within state diagram 146-14 different styles, when to use brackets, are used. Looking into other 802.3 Clauses, in most cases, where there is no explicit ordering of the logic equation required, the brackets are omitted.

SuggestedRemedy

Apply the following changes to state diagram in Figure 146-14: remove all round ("()") brackets of the transition conditions within Figure 146-14. Convert squared brackets in lines 19 and 21 to round brackets. Convert the inner squared brackets in the equation in lines 40 and 41 to round brackets, keep the outer squared brackets.

Proposed Response Response Status W

PROPOSED REJECT.
Use of brackets in 802.3 is inconsistent and based on clarity. Square brackets are used to add clarity where brackets are nested. Round brackets add clarity here, and order of operations is not specified in 21.5.

CI 146 SC 146.4.4.3 P 138 L 7 # 41
Graber, Steffen Pepperl+Fuchs GmbH

Comment Type E Comment Status D Editorial

Within state diagram 146-15 different styles, when to use brackets, are used. Looking into other 802.3 Clauses, in most cases, where there is no explicit ordering of the logic equation required, the brackets are omitted.

SuggestedRemedy

Please remove all round ("()") brackets of the transition conditions within Figure 146-15.

Proposed Response Response Status W

PROPOSED REJECT.
Use of brackets in 802.3 is inconsistent and based on clarity. Brackets add clarity here, and order of operations is not specified in 21.5.

CI 146 SC 146.4.5.2 P 139 L 22 # 42
Graber, Steffen Pepperl+Fuchs GmbH

Comment Type E Comment Status D Editorial

Within state diagram 146-16 different styles, when to use brackets, are used. Looking into other 802.3 Clauses, in most cases, where there is no explicit ordering of the logic equation required, the brackets are omitted.

SuggestedRemedy

Change (link_control = DISABLE) to link_control = DISABLE, change (tx_mode = SEND_Z) * (!loc_lpi_req) to tx_mode = SEND_Z * !loc_lpi_req

Proposed Response Response Status W

PROPOSED REJECT.
Use of brackets in 802.3 is inconsistent and based on clarity. Brackets add clarity here, and order of operations is not specified in 21.5.

CI 146 SC 146.5.3 P 141 L 5 # 43
Graber, Steffen Pepperl+Fuchs GmbH

Comment Type E Comment Status D Editorial

Transmitter load: 100 O

SuggestedRemedy

Please align text horizontally with resistor and remove ":-".

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
Delete "Transmitter load: " (leave 100 ohms)
Align label with center of resistor.
(these changes mirror the same figure in other PHY clauses)

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CI 146 SC 146.5.3 P 141 L 19 # 94
Graber, Steffen Pepperl+Fuchs GmbH

Comment Type E Comment Status D Editorial

A new line between the figure 146-17 and the descriptive text of the figure is missing.

SuggestedRemedy

Please add a new line before the descriptive text of Figure 146-17.

Proposed Response Response Status W

PROPOSED REJECT.

Comment is out of scope of recirculation (no changes to this text)

Figure is clear. There is no new line.

CI 146 SC 146.5.4.5 P 144 L 29 # 168
Griffiths, Scott Rockwell Automation

Comment Type E Comment Status D Editorial

Symbol rates should use Baud.

SuggestedRemedy

Either change from discussing symbol rate to clock rate, or change MHz to MBd. This should be harmonized with PICS entry PMAE17.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change all instances where the text says "symbol rate" to units of Baud

per 1.4.468

(note, 802.3 is all over the place on this, but it seems to be the more recent trend)

CI 146 SC 146.5.5.2 P 144 L 44 # 169
Griffiths, Scott Rockwell Automation

Comment Type E Comment Status D Editorial

Symbol rates should use Baud.

SuggestedRemedy

Either change from discussing symbol rate to clock rate, or change MHz to MBd. This should be harmonized with PICS entry PMAE20.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Accommodated by comment 168. Resolution to comment 168 is:

PROPOSED ACCEPT IN PRINCIPLE.

Change all instances where the text says "symbol rate" to units of Baud

per 1.4.468

(note, 802.3 is all over the place on this, but it seems to be the more recent trend)

CI 146 SC 146.8.1 P 154 L 30 # 55
Graber, Steffen Pepperl+Fuchs GmbH

Comment Type E Comment Status D Editorial

Depending on the screen resolution and magnifying value the left line of Figure 146-30 is not visible in the PDF.

SuggestedRemedy

Please use thicker lines in Figure 146-30.

Proposed Response Response Status W

PROPOSED REJECT.

Lines appear at many resolutions and zooms. Commenter's reader may be the issue.

Figures are still in flux, commenter is welcome to resubmit during sponsor ballot if there is still an issue.

CI 146 SC 146.20 P 239 L 17 # 197
Kim, Yong NIO

Comment Type ER Comment Status D Editorial

DCR used the 1st time. Customary to expand the acronym even if it is stated in acronym section in CL1

SuggestedRemedy

pls do so. "Direct Current Resistance". Also consider deleting DCR in CL1 if this term is purely local use in this informative annex.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Replace "DCR" with "direct current resistance (DCR) "

CI 147 SC 147 P 167 L 2 # 179
Griffiths, Scott Rockwell Automation

Comment Type E Comment Status D Editorial

[EZ] Add comma after "sublayer" to match T1L title.

SuggestedRemedy

Add comma after "sublayer".

Proposed Response Response Status W

PROPOSE ACCEPT IN PRINCIPLE

Title is consistent with 802.3, it is the title to clause 146 which was incorrectly changed to add a comma on draft 2.2. Delete comma after "Sublayer" at:

- page 104/1-3 (clause title for 146)

- page 158/1-3 (sub-clause title for 146.11)

- page 158/7-9

- page 158/36-38

- page 159/25-26 (sub-clause title for 146.11.4)

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

CI 147

SC 147

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CI 147 SC 147.1 P 167 L 12 # 297
Jones, Peter Cisco Systems

Comment Type E Comment Status D Editorial

Text says "All 10BASE-T1S PHYs can operate a half-duplex PHY with a single link partner over a point-to-point link segment defined in 147.7, and, additionally, there are two mutually exclusive optional operating modes: ...".
Saying these are "mutually exclusive" gives the wrong impression. These are just different modes.

SuggestedRemedy

Change "" and, additionally, there are two mutually exclusive optional operating modes: " to
"and, there are two additional optional operating modes: ...".

Proposed Response Response Status W

PROPOSED REJECT.
Text clearly states that mutual exclusivity refers to operating mode.
Commenter did not elaborate on what the wrong impression is believed to be.

CI 147 SC 147.1 P 167 L 26 # 180
Griffiths, Scott Rockwell Automation

Comment Type E Comment Status D Editorial

[EZ] Move "10BASE-T1S does not define an AUI" to the end of line 10. This placement seems to make more sense, and matches T1L.

SuggestedRemedy

Move "10BASE-T1S does not define an AUI" to the end of line 10.

Proposed Response Response Status W

PROPOSED REJECT.
Comment is out of scope (text is unchanged from previous draft) and proposed change does not fix a problem with the specification.

CI 147 SC 147.1.2 P 167 L 39 # 232
Kim, Yong NIO

Comment Type T Comment Status D Editorial

"..can operate.. Should just be "..operate.." by definition. So this is just a statement of fact, not capability

SuggestedRemedy

Please make the change.

Proposed Response Response Status W

PROPOSED REJECT.
The word "can" does express capability/possibility and intends to do so.
Current text was introduced during last comment resolution cycle (d2.1->d2.2) and it does reflect the will of the group under consensus.

CI 147 SC 147.1.2 P 167 L 39 # 233
Kim, Yong NIO

Comment Type E Comment Status D Editorial

Wordy. ""All 10BASE-T1S.. In reach." paragraph. D2.1 was better but was not technically correct.

SuggestedRemedy

Please reword. How about, " All 10BASE-T1S PHYs operate in half-duplex, and may operate in full-duplex, on point-to-point communications on a link segment using a single balanced pair of conductors, supporting up to four in-line connectors and up to at least 15 meters in reach.

Proposed Response Response Status W

PROPOSED REJECT.
Current text was introduced during last comment resolution cycle (d2.1->d2.2) and it does reflect the will of the group under consensus.
Moreover text is not technically incorrect (no problem is being fixed).

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CI 147 SC 147.1.3.1 P 168 L 40 # 235
Kim, Yong NIO

Comment Type E Comment Status D Editorial

It would be good to say, "The conventions of 21.5 are adopted, with the following extensions." and replace the existing first sentence with it. The value of doing this is that a reader is informed that all stated conventions are common, and additoinal IF-THEN-ELSE-END was added in this clause.

SuggestedRemedy

Please consider the suggestion.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
Change "The notation used in the state diagrams follows the conventions of 21.5. Some ." to "The conventions of 21.5 are adopted with the extension that some ."

CI 147 SC 147.2 P 169 L 42 # 181
Griffiths, Scott Rockwell Automation

Comment Type E Comment Status D Editorial

It might be appropriate to note here that the Technology Dependent Interface is defined in Clause 98.4.

SuggestedRemedy

After "Clause 22.", add "The optional Technology Dependent Interface is used for Auto-Negotiation and is described in 98.4." or something similar.

Proposed Response Response Status W

PROPOSED REJECT.
Comment is out of scope (text is unchanged from previous draft) and proposed change does not fix a problem with the specification.

CI 147 SC 147.2.2.2 P 170 L 36 # 183
Griffiths, Scott Rockwell Automation

Comment Type E Comment Status D Editorial

[EZ] Change "When generation" to "When generated"

SuggestedRemedy

Change "When generation" to "When generated"

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
Already dealt with by #69, which is as follows:
====
PROPOSED ACCEPT IN PRINCIPLE.
Change the title of sub-clause 147.2.2. from "When generation" to "When generated"
Note: also resolves #183
====

CI 147 SC 147.3.2.1 P 174 L 1 # 26
Huszak, Gergely Kone

Comment Type E Comment Status D Editorial

Calling our 5B symbols by their name, plus by their literal value/content is not only redundant, but also creates space for error. These mappings are already there, unambiguously, in "Table 147-1-4B/5B Encoding"

SuggestedRemedy

Remove " (binary vector of 1,1,1,1,1)"

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
Replace "(binary vector of 1,1,1,1,1)" with "(see Table 147-1)"

CI 147 SC 147.3.3.2 P 180 L 2 # 130
Beruto, Piergiorgio Canova Tech Srl

Comment Type E Comment Status D Editorial

"by the means of an equivalent interface" sounds too constrained and it's not in line with similar text across the clause.

SuggestedRemedy

Replace "by the means of an equivalent interface" with "by equivalent means".

Proposed Response Response Status W

PROPOSED ACCEPT.

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Cl 147 SC 147.3.3.2 P 180 L 18 # 240
Kim, Yong NIO

Comment Type E Comment Status D Editorial

SILENCE is not a variable. Either constant or value.

SuggestedRemedy

Please correct.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

1. Introduce a new sub-clause 147.3.2.3 Constants" and move the definitions of SYNC, SSD, ESD, ESDERR, ESDOK, SILENCE and ESDJAB at pages pages 176/52-177/15 to it.

2. Introduce a new sub-clause 147.3.3.3 Constants" and move the definition of SILENCE at page 180/17-18 to it.

Editorial license to similarly create Constants sections on other state diagrams and move defined symbols there in ALL clauses: editors are to scrub all clauses.

Cl 147 SC 147.3.7 P 184 L 1 # 190
Griffiths, Scott Rockwell Automation

Comment Type E Comment Status D Editorial

I find the current organization of sections 147.3.7 and 147.3.8 to be misleading. The single line in 147.3.7 indicates that the entire contents of 147.3.8 only applies to PLCA. However, the heartbeat functionality does not apply to PLCA and mixing segments because they are prohibited from using Auto-Negotiation (see 147.1.1). But 147.3.8 says: "If Clause 98 Auto-Negotiation functions are implemented... Otherwise all of the HB functions shall be disabled."

SuggestedRemedy

Move the Heartbeat content (147.3.8, 147.3.8.1, 147.3.8.2) earlier, to section 147.3.7, and rename this section so that it indicates it is for heartbeat. Rename 147.3.8 "Optional support for PLCA Reconciliation Sublayer PCS status generation" or something similar. Keep the BEACON and COMMIT subsections here.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Move all text at page 188/31-48 (effectively the headers and content of sub-clauses "147.3.8.3 Generation of BEACON indication" and "147.3.8.4 Generation of COMMIT indication") before sub-clause "147.3.8 Optional support for PCS status generation", turning those into "147.3.7.1 Generation of BEACON indication" and "147.3.7.2 Generation of COMMIT indication"

Cl 147 SC 147.3.7 P 184 L 5 # 209
Kim, Yong NIO

Comment Type TR Comment Status D Editorial

Optional support for RS layer, separatated from the PHY via xMII and PCS does not seem to have any existing interface to convey message primitives referred to here. Please describe HOW it is conveyed from PHY to RS.

SuggestedRemedy

Please point out the message passing interface that conveys these additional and optional messages between PHY and RS -- in which case, this comment will be withdrawn. Or describe how these messages are conveyed.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Replace content of 147.3.7 by the editor's note under "147.5.4.5 Transmit clock frequency" that says "Editor's Note (to be removed prior to publication): This clause has been deleted, and will be removed with renumbering at draft 3.0."

Cl 147 SC 147.3.8 P 184 L 5 # 208
Kim, Yong NIO

Comment Type E Comment Status D Editorial

Clause level for this should be 4, such that it is sub-section of current 147.3.7

SuggestedRemedy

do so.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Accommodated by comments #190.

Proposed resolution of #190 is:

>>>>

PROPOSED ACCEPT IN PRINCIPLE.

Move all text at page 188/31-48 (effectively the headers and content of sub-clauses "147.3.8.3 Generation of BEACON indication" and "147.3.8.4 Generation of COMMIT indication") before sub-clause "147.3.8 Optional support for PCS status generation", turning those into "147.3.7.1 Generation of BEACON indication" and "147.3.7.2 Generation of COMMIT indication"

<<<<

gement Parameters for 10 Mb/s Operation and Associated Power Delivery over a Single Balanced Pair of

CI 147 SC 147.3.8.1 P 186 L 30 # 331
Brandt, David Rockwell Automation

Comment Type T Comment Status D Editorial

Variable hb_cmd is set to HEARTBEAT in the rightmost TWAIT_TX, and it is never set to NONE again, resulting in continuous slave HEARTBEATs once the first master HEARTBEAT is heard.

SuggestedRemedy

Set exit condition from rightmost TWAIT_TX to go to WAIT_HB.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change the arrow going from "TWAIT_TX" on the right-side to "WAIT_RX" to go to "WAIT_HB" instead.

Note: this is an editorial mistake (implementation of d2.1 comments) that is being fixed (see http://www.ieee802.org/3/cg/public/Nov2018/Clause%20147%20-%20Link%20Status%20for%20AN_changesonly.pdf for more details)

CI 147 SC 147.3.8.1 P 186 L 36 # 330
Brandt, David Rockwell Automation

Comment Type T Comment Status D Editorial

Two states have the same name TWAIT_TX.

SuggestedRemedy

Rename the left state as TWAIT_TX1 and the right state as TWAIT_TX2.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

- Rename the left state from "TWAIT_TX" to "WAIT_TX"
- Rename the right state from "TWAIT_TX" to "REPLY_HB"

Note: these are editorial mistakes (implementation of d2.1 comments) that are being fixed (see http://www.ieee802.org/3/cg/public/Nov2018/Clause%20147%20-%20Link%20Status%20for%20AN_changesonly.pdf for more details)

CI 147 SC 147.4 P 189 L 1 # 191
Griffiths, Scott Rockwell Automation

Comment Type E Comment Status D Editorial

This section needs minor reorganization.

SuggestedRemedy

Move the paragraph that starts with "The PMA couples" to the beginning of the section. After "onto the 10BASE-T1S physical medium" add ", as shown in Figure 147-12." Move the sentence about the PMA Reset not being shown to someplace more sensible, perhaps after the textual reference to Figure 147-12.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Accommodated by comments #190.

Proposed resolution of #190 is:

>>>>

PROPOSED ACCEPT IN PRINCIPLE.

Move all text at page 188/31-48 (effectively the headers and content of sub-clauses "147.3.8.3 Generation of BEACON indication" and "147.3.8.4 Generation of COMMIT indication") before sub-clause "147.3.8 Optional support for PCS status generation", turning those into "147.3.7.1 Generation of BEACON indication" and "147.3.7.2 Generation of COMMIT indication"

<<<<

CI 147 SC 147.4 P 189 L 29 # 138
Griffiths, Scott Rockwell Automation

Comment Type E Comment Status D Editorial

[EZ] The text "from medium employing DME. The interface between PMA" needs some smoothing.

SuggestedRemedy

Change "from medium employing DME. The interface between PMA" to "from a physical [or baseband] medium using DME signaling. The interface between the PMA" or something similar.

Proposed Response Response Status W

PROPOSED REJECT.

Out of scope (text has not changed during last comment resolution cycle). Moreover text is not technically incorrect (no problem is being fixed).

gement Parameters for 10 Mb/s Operation and Associated Power Delivery over a Single Balanced Pair of

CI 147 SC 147.5.4.6 P 195 L 35 # 141
Griffiths, Scott Rockwell Automation

Comment Type E Comment Status D Editorial

Alien crosstalk noise rejection relates to the receiver. This subclause should be moved to the end of 147.5.5. This is where it is located for T1L, 100BASE-T1, and 1000BASE-T1.

SuggestedRemedy

Move 147.5.4.6 to the end of 147.5.5.

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 147 SC 147.5.4.8 P 196 L 6 # 143
Griffiths, Scott Rockwell Automation

Comment Type E Comment Status D Editorial

The PMA Local Loopback subclause should be under the PMA electrical specifications, not just the transmitter electrical specifications.

SuggestedRemedy

Move 147.5.4.8 to 147.6.

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 147 SC 147.5.5.1 P 196 L 26 # 250
Kim, Yong NIO

Comment Type ER Comment Status D Editorial

sub clause title does not match the content.

SuggestedRemedy

Receiver characteristics, or receive bit error, or something equivalent that convey the sense of this text content

Proposed Response Response Status W

PROPOSED REJECT.

Commenter is incorrect, as this is the title that IEEE Std 802.3-2018 uses for this content on BASE-T and BASE-T1 PHY clauses. See clauses 14.3.1.3.2, 23.5.1.3.2, 32.6.1.3.4, 40.6.1.3.2, 55.5.4.1, 96.5.5.1, 97.5.4.1, 113.5.4.1, and 126.5.4.1.

CI 147 SC 147.8 P 197 L 52 # 145
Griffiths, Scott Rockwell Automation

Comment Type E Comment Status D Editorial

[EZ] Presumably, (1.4.332) is a reference to the mixing segment definition, but the reference is incorrect.

SuggestedRemedy

Change the reference to 1.4.277 and highlight it as a cross-reference.

Proposed Response Response Status W

PROPOSED REJECT.

1.4.332 is the correct reference for mixing segment in 802.3-2018 (1.4.227 was the reference in 802.3-2015)

CI 148 SC 148.1.1.1 P 213 L 21 # 263
Kim, Yong NIO

Comment Type E Comment Status D Editorial

It would be good to say, "The conventions of 21.5 are adopted, with the following extensions." and replace the existing first sentence with it. The value of doing this is that a reader is informed that all stated conventions are common, and additoinal IF-THEN-ELSE-END was added in this clause.

SuggestedRemedy

Please consider the suggestion.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change "The notation used in the state diagrams follows the conventions of 21.5. Some..." to "The conventions of 21.5 are adopted with the extension that some."

gement Parameters for 10 Mb/s Operation and Associated Power Delivery over a Single Balanced Pair of

Cl 148 SC 148.2 P 213 L 45 # 261
Kim, Yong NIO

Comment Type ER Comment Status D Editorial

"avoiding physical collisions" should just be "avoiding collisions". Collisions on the medium. There is no other kind. The other collision "local collision" referred to in CL148 is more of access control and asserting COL signal in order to do access control. Readers of 802.3 understand collision, and introducing two new terms would be confusing without any derived benefit.

SuggestedRemedy

Consider and do so (accepting this comment means careful global search and repace of "physical collision")

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
Resolve with #223.

Resolution of comment #223 is:

There are 3 parts to this comment, so all 3 will be addressed.

A. "local collision" - There is no such thing as a local collision in the draft. There is only the 'local collision domain', where local refers to the domain, not the collision. The term collision domain is used as defined in 1.4.203.

B. "logical collision" - In this case, the term collision will suffice. Delete use of "logical collision" in the only two places it occurs:

148.4.6.1, P224 L6: Delete "This is called a logical collision."

148.4.6.1, P225, L10: Change "and a logical collision is triggered" to "and a collision is triggered"

Cl 148 SC 148.2 P 213 L 48 # 262
Kim, Yong NIO

Comment Type TR Comment Status D Editorial

What is "new cycle" and later "PLCA cycle"? The term is used without definition or clear reference. Also this text indicates BEACON indicates start of new cycle, but RESYNC also starts new cycle from node ID <> 0, in presumably exception handling case. Shouldn't we know how node ID =0 function (coordinator) behaves to implementj a system?

SuggestedRemedy

Define or specifiy [PLCA] cycle somewhere and provide a reference to it.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change, "cycle" to "cycle of transmit opportunities" at P213 L48, P219 L26, and P219 L29.

Change "PLCA cycle" to "cycle of transmit opportunities" on P218 L41.

Cl 148 SC 148.4.1 P 214 L 47 # 132
Beruto, Piergiorgio Canova Tech Srl

Comment Type E Comment Status D Editorial

After removal of the "Generic RS" concept from C148 the following text does not make sense anymore: "This subclause specifies services provided by an extension to the Reconciliation sublayers specified in Clause 22. Within the scope of Clause 148, the term Reconciliation sublayer (RS) is used to denote any IEEE 802.3 Reconciliation sublayer (RS) used to interface a MAC with any Physical Layer Entity supporting the PLCA capability through the MII."

SuggestedRemedy

Replace the quoted text with "This subclause specifies services provided by the PLCA RS as an extension to the MII RS specified in Clause 22.

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 148 SC 148.4.1 P 214 L 47 # 266
Kim, Yong NIO

Comment Type ER Comment Status D Editorial

"Within the scope of Clause 148, the term Reconciliation sublayer (RS) is used to denote any IEEE 802.3 Reconciliation sublayer (RS) used to interface a MAC with any Physical Layer Entity supporting the PLCA capability through the MII". The use of word "any" in two places are problematic. Delete the both instances of "any" in this sentence. Otherwise, it looks to have an intention is to use PLCA with other speeds and other medium -- and if that is the case, do that in a separate CFI.

SuggestedRemedy

Please Delete the both instances of "any" in this sentence.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.
Accomoded by #132.

Comment #132 resolution is:

"

Replace the quoted text with "This subclause specifies services provided by the PLCA RS as an extension to the MII RS specified in Clause 22.

"

gement Parameters for 10 Mb/s Operation and Associated Power Delivery over a Single Balanced Pair of

Cl 148 SC 148.4.4.1.1 P 217 L 32 # 267
Kim, Yong NIO

Comment Type ER Comment Status X Editorial

148.4.4 says "Requirements for the PHY". The text in 148.4.4.1.1 says "The BEACON function is specified in 148.4.5.1.", And 148.4.5.1 specifies Beacon control function overall. It does NOT clearly contain requiremetns for support of BEACON in PHY.

SuggestedRemedy

Provide a better referece to only the PHY requirement that supports the PLCA function.

Proposed Response Response Status W

PROPOSED REJECT.

Text out of scope for recirculation, text was unchanged, and does not fix a problem. See also #268.

Commenter is incorrect. The remainder of 148.4.4.1.1 contains 2 "shall" requirements on the PHY. (one of them mentioned in comments 270 by same commenter). The reference he mentions here is an informative reference tying the reader to how the BEACON works in the clause 148 State Diagram.

Cl 148 SC 148.4.4.1.1 P 217 L 36 # 270
Kim, Yong NIO

Comment Type TR Comment Status D Editorial

"Upon the reception of this request, the PHY shall send a message over the media for other PHYs to decode and report to their respective RS via MII interface as specified in 22.2.2.8." -- I am probably confused. This text read by itself sounds like 22.2.2.8 compliance means getting RS state of remote node via remote PHY through PHY sending a message.

SuggestedRemedy

I hope you did not mean how I read it. If you agree, please correct the text -- if this sub clause is kept (I have a separate comment to consider deleting all and do tight coupling to CL147 PHY)

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Replace "send a message over the media for other PHYs to decode and report to their respective RS via MII interface as specified in 22.2.2.8." with "encode and transmit a signal communicating the BEACON to other PHYs on the segment so that they generate a BEACON indication."

Cl 148 SC 148.4.5.1 P 218 L 1 # 309
Jones, Peter Cisco Systems

Comment Type E Comment Status D Editorial

In D2.2, we changed from "PHY" to "node" in text, looks like we missed Equation (148-1).

SuggestedRemedy

changes Equation (148-1) from "Skew across PHYs" to "Skew across nodes"

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 148 SC 148.4.5.2 P 222 L 33 # 272
Kim, Yong NIO

Comment Type ER Comment Status D Editorial

"helper variable, defined as.". Unncessary text. I thought I commented this on D2.1.

SuggestedRemedy

Change to "Defined as.."

Proposed Response Response Status W

PROPOSED ACCEPT.