

# IEEE P802.3da D2.1 10 Mbps Multidrop Enhancements

Cl 148 SC 148.4.7.1 P63 L1 # 10

Maguire, Valerie Copperopolis; affl w/ CME Consulting and Cisco

Comment Type E Comment Status D Editorial

The phrase "at any time" is not needed here.

## SuggestedRemedy

Replace "If at any time BEACONS cease to be regularly" with "If BEACONS cease to be regularly"

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 188 SC 188.5.3 P90 L24 # 11

Maguire, Valerie Copperopolis; affl w/ CME Consulting and Cisco

Comment Type T Comment Status D Editorial

It's unclear what exactly "the PMA and PCS Receive functions have at most 800 ns from when the first DME symbol after SILENCE is detected to find the 5B boundary, and to synchronize on the DME stream respectively" is requiring.

## SuggestedRemedy

Replace "In order to meet the specifications of 188.6.5.1, the PMA and PCS Receive functions have at most 800 ns from when the first DME symbol after SILENCE is detected to find the 5B boundary, and to synchronize on the DME stream respectively."

with "In order to meet the specifications of 188.6.5.1, the PMA and PCS Receive functions must find the 5B boundary and synchronize on the DME stream within 800 ns of when the first DME symbol after SILENCE is detected."

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 45 SC 45.2.3.73.2 P41 L1 # 14

Maguire, Valerie Copperopolis; affl w/ CME Consulting and Cisco

Comment Type E Comment Status D Editorial

"that" typically refers to a specific subset, while "which" is more commonly used in relative statements to provide extra information not essential to the meaning of the sentence.

## SuggestedRemedy

Replace "PHYs, which do not" with "PHYs that do not" (keep text in underline)

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 30 SC 30.17.2.1.1 P31 L13 # 15

Maguire, Valerie Copperopolis; affl w/ CME Consulting and Cisco

Comment Type E Comment Status D Editorial

Type, by itself, is not a proper noun.

## SuggestedRemedy

Replace "indicates the MPD Type" with "indicates the MPD type"

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Replace "indicates the MPD Type" with "indicates the MPD type" on P31, L13

Editor to perform a global review to ensure that 'type' is not capitalized unless it's at the start of the sentence or being used as a proper noun (e.g., Type 0).

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CI 148 SC 148.4.4.2 P55 L9 # 20

Regev, Alon

Keysight

Comment Type T Comment Status D Editorial

three state machines seem to have slightly different definitions for COL and CRS. It would be good to harmonize these as they refer to the same signals.

Current data in 148.4.4.2:

COL

The MII signal COL.

Values: TRUE or FALSE

CRS

The MII signal CRS.

Values: TRUE or FALSE

RX\_DV

The MII signal RX\_DV.

Values: TRUE or FALSE

TX\_EN

The MII signal TX\_EN.

Values: TRUE or FALSE

Current data in 148.4.5.2:

COL

The MII signal COL specified in 22.2.2.12.

CRS

The MII signal CRS (see 22.2.2.11).

TXD□

The MII signals TXD<3:0> specified in 22.2.2.4.

TX\_EN

The MII signal TX\_EN specified in 22.2.2.3.

TX\_ER

The MII signal TX\_ER specified in 22.2.2.5.

Current data in 148.4.7.2;

COL

The MII signal COL.

Values: TRUE or FALSE

COR

The MII signal COR.

Values: TRUE or FALSE

#### SuggestedRemedy

change all 3 locations (148.4.4.2, 148.4.5.2, and 148.4.7.2) to the following definitions (only populate these where used):

COL

The MII signal COL (see 22.2.2.12).

Values: TRUE or FALSE

CRS□

The MII signal CRS (see 22.2.2.11).

Values: TRUE or FALSE

RX\_DV

The MII signal RX\_DV.

Values: TRUE or FALSE

TXD□

The MII signals TXD<3:0> (see 22.2.2.4).

TX\_EN

The MII signal TX\_EN.(see 22.2.2.3)

Values: TRUE or FALSE

TX\_ER

The MII signal TX\_ER (see 22.2.2.5)

Values: TRUE or FALSE

Proposed Response

Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

(Editor's note: There are some extraneous marks following CRS and TXD in the Suggested Remedy that don't belong.)

Align the definitions in 148.4.4.2, 148.4.5.2, and 148.4.7.2 with the following (only populate these where used):

COL

The MII signal COL (see 22.2.2.12).

Values: TRUE or FALSE

CRS

The MII signal CRS (see 22.2.2.11).

Values: TRUE or FALSE

RX\_DV

The MII signal RX\_DV.

Values: TRUE or FALSE

TXD

The MII signals TXD<3:0> (see 22.2.2.4).

TX\_EN

The MII signal TX\_EN.(see 22.2.2.3)

Values: TRUE or FALSE

TX\_ER

The MII signal TX\_ER (see 22.2.2.5)

Values: TRUE or FALSE

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CI 148 SC 148.4.7.6 P67 L19 # 21

Regev, Alon Keysight

Comment Type E Comment Status D Editorial

The multi-level IF-THEN-ELSE-END statement in the TXOP\_STATE does not have consistent indentation, making it confusing to read

## Suggested Remedy

```
change
"
IF dplca_txop_id = 0 THEN
  IF short_cnt = soft_aging_cycles THEN
    CLEAR_SOFT_CLAIMS(txop_claim_table)
    CLEAR_SOFT_CLAIMS(txop_claim_table_new)
    short_cnt <= 0
  ELSE
    short_cnt <= short_cnt + 1
  END
  IF long_cnt = hard_aging_cycles THEN
    txop_claim_table <= txop_claim_table_new
    CLEAR_TXOP_TABLE(txop_claim_table_new)
    dplca_new_age <= TRUE
    long_cnt <= 0
  ELSE
    long_cnt <= long_cnt + 1
  END
END"
```

```
to
"
IF dplca_txop_id = 0 THEN
  IF short_cnt = soft_aging_cycles THEN
    CLEAR_SOFT_CLAIMS(txop_claim_table)
    CLEAR_SOFT_CLAIMS(txop_claim_table_new)
    short_cnt <= 0
  ELSE
    short_cnt <= short_cnt + 1
  END

  IF long_cnt = hard_aging_cycles THEN
    txop_claim_table <= txop_claim_table_new
    CLEAR_TXOP_TABLE(txop_claim_table_new)
    dplca_new_age <= TRUE
    long_cnt <= 0
  ELSE
    long_cnt <= long_cnt + 1
  END
END"
```

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Accommodated by comment #80.

Change text in TXOP\_END state to:

```
IF dplca_txop_id = 0 THEN
  IF short_cnt = soft_aging_cycles THEN
    CLEAR_SOFT_CLAIMS(txop_claim_table)
    CLEAR_SOFT_CLAIMS(txop_claim_table_new)
    short_cnt <= 0
  ELSE
    short_cnt <= short_cnt + 1
  END

  IF long_cnt = hard_aging_cycles THEN
    txop_claim_table <= txop_claim_table_new
    CLEAR_TXOP_TABLE(txop_claim_table_new)
    dplca_new_age <= TRUE
    long_cnt <= 0
  ELSE
    long_cnt <= long_cnt + 1
  END
END
```

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CI 188 SC 188.4.2.2 P77 L36 # 22

Regev, Alon

Keysight

Comment Type T Comment Status D Editorial

The definition of TX\_ER is somewhat outdated. TX\_ER does not necessarily indicate an errored transmission (errors are indicated if BOTH TX\_EN and TX\_ER are asserted), but rather it is also used (typically more commonly) for COMMIT, BEACON, and LPI indications

*SuggestedRemedy*

change

"TX\_ER"

The TX\_ER signal of the MII as specified in 22.2.2.5.  
When set to FALSE it indicates a non-errored transmission.  
When set to TRUE it indicates an errored transmission.  
Values: TRUE or FALSE"

to:

"TX\_ER"

The TX\_ER signal of the MII as specified in 22.2.2.5 and 22.2.2.4.  
When set to TRUE it indicates an errored transmission (if TX\_EN is TRUE) or a special indication (if TX\_EN is FALSE)  
When set to FALSE it indicates a non-errored transmission and no special incation  
Values: TRUE or FALSE"

alternatively, remove these details from TX\_ER (and TX\_EN) and refer to clause 22.2.2.4 and 22.2.2.5 which define the behavior.

Note that even though 22.2.2.4 definex TX\_EN, I think that TX\_ER should also reference this clause as all the indications using combinations of TX\_ER and TX\_EN is in section 22.2.2.4 and not 22.2.2.5.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

(Editor's note: Two Suggested Remedies are proposed. Editors recommend removing the details and refering to 22.2.2.4 and 22.2.2.5 to avoid redefining this signal inadvertently.)

Replace,

"TX\_EN

The TX\_EN signal of the MII as specified in 22.2.2.3.

When set to FALSE transmission is disabled.

When set to TRUE transmission is enabled.

Values: TRUE or FALSE

TX\_ER

The TX\_ER signal of the MII as specified in 22.2.2.5.

When set to FALSE it indicates a non-errored transmission.

When set to TRUE it indicates an errored transmission.

Values: TRUE or FALSE"

with,

"TX\_EN

The TX\_EN signal of the MII as specified in 22.2.2.3.

TX\_ER

The TX\_ER signal of the MII as specified in 22.2.2.4 and 22.2.2.5."

CI 30 SC 30.17.1.1.9 P30 L23 # 25

Zimmerman, George

CME Consulting/ADI,APLgp,Cisco,Marvell,Onsemi,Sor

Comment Type E Comment Status D Editorial

"A count of the cumulative energy" - you don't count energy.

*SuggestedRemedy*

Change "A count of the cumulative energy" to "The value of the counter represents the cumulative energy"

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 148 SC 148.4.4.1 P54 L28 # 28

Zimmerman, George

CME Consulting/ADI,APLgp,Cisco,Marvell,Onsemi,Sor

Comment Type E Comment Status D Editorial

"The PLCA node should be configured appropriately before transmit functions are enabled to achieve error free operation when D-PLCA is not enabled." reads odd. The condition usually goes first.

*SuggestedRemedy*

Change "The PLCA node should be configured appropriately before transmit functions are enabled to achieve error free operation when

D-PLCA is not enabled." to "When D-PLCA is not enabled, the PLCA node should be configured appropriately before transmit functions are enabled."

Proposed Response Response Status W

PROPOSED ACCEPT.

## IEEE P802.3da D2.1 10 Mbps Multidrop Enhancements

CI 189 SC 189.1 P110 L8 # 31

Zimmerman, George CME Consulting/ADI,APLgp,Cisco,Marvell,Onsemi,Sor

Comment Type E Comment Status D Editorial

The defined entities are listed as MPD & MPSE (in that order), but are described in the reverse order (supply power / draw power).

#### SuggestedRemedy

Change "These entities allow devices to supply/draw power using the..." to "These entities allow devices to draw power or supply power using the ..."

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

(Editor's note: Not necessary to mention power twice.)

Change "These entities allow devices to supply/draw power using the..."

to "These entities allow devices to draw or supply power using the ..."

CI 189 SC 189.1.1 P110 L32 # 32

Zimmerman, George CME Consulting/ADI,APLgp,Cisco,Marvell,Onsemi,Sor

Comment Type T Comment Status D Editorial

"that incorporate compliant MPoE TCIs" - we call these "MPIs that are also TCIs" and they are "also compatible" with thir Physical Layer standards.

#### SuggestedRemedy

Change "DTEs that incorporate compliant MPoE TCIs are compatible ..." to "DTEs that incorporate MPIs that are also TCIs are also compatible..."

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

(Editor's note: Not necessary to say 'also' twice.)

Change "DTEs that incorporate compliant MPoE TCIs are compatible ..."

to "DTEs that incorporate MPIs that are also TCIs are compatible..."

CI 148 SC 148.4.7.1 P62 L15 # 49

Jones, Peter Cisco Systems

Comment Type E Comment Status D Editorial

Improve text clarity

#### SuggestedRemedy

Change

"When using D-PLCA with statically assigned IDs, values in the range of 0 to 7 should be use first. "

to

"When using D-PLCA with statically assigned IDs, values in the range of 0 to 7 should be assigned first. "

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 148 SC 148.4.7.3 P65 L20 # 56

Jones, Peter Cisco Systems

Comment Type E Comment Status D Editorial

Improve text clarity

#### SuggestedRemedy

Change

it shall not return an ID greater than the highest HARD claimed in the table, unless there is no ID available less than the highest HARD claimed in the table. If there is no ID available less than the highest HARD claimed in the table, the function will return the next TO immediately

following the highest HARD claimed TO in the table.

to

It returns an available ID less than the highest HARD claimed ID if possible. If not, it returns the next ID after the highest HARD claimed ID.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

(Editor's note: 'It' should not be capitalized as it appears at the start of a lettered list.)

Replace, "it shall not return an ID greater than the highest HARD claimed in the table, unless there is no ID available less than the highest HARD claimed in the table. If there is no ID available less than the highest HARD claimed in the table, the function will return the next TO immediately following the highest HARD claimed TO in the table.

With, "it returns an available ID less than the highest HARD claimed ID if possible. If not, it returns the next ID after the highest HARD claimed ID.

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CI 188 SC 188.4.2.9 P82 L16 # 57

Jones, Peter Cisco Systems

Comment Type E Comment Status D Editorial

Improve text clarity.  
The text says "This sequence notifies the receivers" but it's not clear what it notifies them of.

SuggestedRemedy  
Replace "This sequence notifies the receivers" with ""This sequence notifies the receivers of the transmitter jabber event"

Proposed Response Response Status W  
PROPOSED ACCEPT IN PRINCIPLE.

(Editor's note: Remove double quotes.)

Replace "This sequence notifies the receivers" with "This sequence notifies the receivers of the transmitter jabber event"

CI 148 SC 148.4.4.6 P58 L50 # 67

Slavick, Jeff Broadcom

Comment Type TR Comment Status D Editorial

The exit transitions from NEXT\_TX\_OPPORTUNITY to B does a greater than or equal to compare to plca\_node\_count and it looks like the exit to G does a less than or equal to comparison. If so then which branch are you supposed to take if curlD is equal to plca\_node\_count.

SuggestedRemedy  
Change the transition to G to be just a less than compare to plca\_node\_count.

Proposed Response Response Status W  
PROPOSED REJECT.

No change to draft. The Commenter appears to have misread the use of < and underline (to indicate inserted text) as a less than or equal to sign on the exit condition to branch G.

CI 188 SC 188.4.2.7 P81 L9 # 70

Slavick, Jeff Broadcom

Comment Type TR Comment Status D Editorial

"not\_done" is not a timer property, just "\_done"

SuggestedRemedy  
Change "xmit\_max\_timer\_not\_done" to "xmit\_max\_timer\_done" in the ESD -> GOOD\_ESD and DATA -> DATA transitions in Figure 188-5 part b

Proposed Response Response Status W  
PROPOSED ACCEPT IN PRINCIPLE.

(Editor's note: No change to Suggested Remedy, but Commenter may wish to submit a Maintenance request to also make this change to Figure 147-5.)

Change "xmit\_max\_timer\_not\_done" to "xmit\_max\_timer\_done" in the ESD -> GOOD\_ESD and DATA -> DATA transitions in Figure 188-5 part b

CI 45 SC 45.2.3.72.2 P40 L8 # 76

Brandt, David Rockwell Automation

Comment Type E Comment Status D Editorial

The loopback path is not stated clearly. PCS has upper and lower interfaces.

SuggestedRemedy  
Change from: "PCS shall accept data on the transmit path and return it on the receive path",  
To: "PCS shall accept data on the transmit path from the MII and return it on the receive path to the MII". Otherwise add "as described in 188.4.3.9"

Proposed Response Response Status W  
PROPOSED ACCEPT IN PRINCIPLE.

(Editor's note: Two options are provided in the Suggested Remedy.)

Change from: "PCS shall accept data on the transmit path and return it on the receive path"

To: "PCS shall accept data on the transmit path from the MII and return it on the receive path to the MII".

# IEEE P802.3da D2.1 10 Mbps Multidrop Enhancements

Cl 188 SC 188.6.4 P92 L37 # 78

Brandt, David Rockwell Automation

Comment Type T Comment Status D Editorial

States: "it is recommended that the PHY provide access to TX\_CLK". PICS PMAE8 shows Mandatory.

## SuggestedRemedy

Change to shall or change PICs to O.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

(Editor's note: Two Suggested Remedies are provided.)

Replace PICS PMAE8 entry "M" with "O".

Cl 188 SC 188.2 P72 L16 # 109

Law, David HPE

Comment Type E Comment Status D Editorial

Suggest that 'Larger PHY count and reach can ...' should read 'Larger PHY count and longer reach can ...'.

## SuggestedRemedy

See comment

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 188 SC 188.8 P96 L13 # 110

Law, David HPE

Comment Type E Comment Status D Editorial

Suggest that '10BASE-T1M PHYs are designed to operate ...' should read 'The 10BASE-T1M PHY is specified to operate ...'.

## SuggestedRemedy

See comment

Proposed Response Response Status W

PROPOSED ACCEPT.