

Proposed Responses

IEEE P802.3cx D2.3 ITSA Task Force 3rd Working Group recirculation ballot comments

CI FM SC FM P1 L29 # 490

Grow, Robert RMG Consulting

Comment Type E Comment Status D bucket

This list is not in amendment order. It also lists five previous amendments yet P802.3cx is identified as Amendment 5.

SuggestedRemedy

If new amendment numbers are assigned for the gaggle of amendments currently assumed to be hitting RevCom in September, obviously use that order. If amendment numbers remain unchanged from the last amendment number assignment, delete P802.3de from this list, and sort in amendment number order.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change "IEEE Std 802.3dd-202x, IEEE Std 802.3de-202x, IEEE Std 802.3cs-202x, IEEE Std 802.3db-202x, and IEEE Std 802.3ck-202x" to "IEEE Std 802.3dd-202x, IEEE Std 802.3cs-202x, IEEE Std 802.3db-202x, and IEEE Std 802.3ck-202x"

CI FM SC FM P11 L17 # 491

Grow, Robert RMG Consulting

Comment Type E Comment Status D bucket

The changes to the end of this paragraph are inconsistent with the current front matter as found in P802.3/D3.2.

SuggestedRemedy

Update for consistency with P802.3/D3.2.

Proposed Response Response Status W

PROPOSED ACCEPT.

CI FM SC FM P12 L39 # 492

Grow, Robert RMG Consulting

Comment Type E Comment Status D bucket

The section description is not consistent with the current front matter as found in P802.3/D3.2.

SuggestedRemedy

Update for consistency with P802.3/D3.2.

Proposed Response Response Status W

PROPOSED ACCEPT.

CI FM SC FM P12 L52 # 493

Grow, Robert RMG Consulting

Comment Type E Comment Status D bucket

The description of 802.3cs does not agree with the text in P802.3cs/D3.2.

SuggestedRemedy

Update for consistency with P802.3cs/D3.2.

Proposed Response Response Status W

PROPOSED ACCEPT.

CI FM SC FM P13 L8 # 494

Grow, Robert RMG Consulting

Comment Type E Comment Status D bucket

According to my records, P802.3db was designated Amendment 3 and P802.3ck was designated Amendment 4 by Mr. Law on 25 January 2023.

SuggestedRemedy

Interchange IEEE Std 802.3db and IEEE Std 802.3ck descriptions and numbers.

Proposed Response Response Status W

PROPOSED ACCEPT.

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Cl 3 SC 3.13.1.14 P23 L53 # 477

Tse, Richard Microchip Technology

Comment Type T Comment Status D

The limiting condition (based on DDMP capabilities of the PCS and DTE XS) on the configuration of the aTimeSyncSelectionDdmp management object needs to be added.

SuggestedRemedy

Change:

"The registers 3.1813.13 and 5.1813.13 are expected to be set to the same value.;"

to

"The registers 3.1813.13 and 5.1813.13 are expected to be set to the same value and can only be set to a value that corresponds to the capabilities of the PCS and DTE XS instances (see 45.2.3.69a.1 and 45.2.5.31.1).;"

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change:

"The registers 3.1813.13 and 5.1813.13 are expected to be set to the same value.;"

to

"The registers 3.1813.13 and 5.1813.13 are expected to be set to the same value that corresponds to the capabilities of the PCS and DTE XS instances (see 45.2.3.69a.1 and 45.2.5.31.1).;"

Cl 30 SC 30.13.1.13 P23 L22 # 476

Tse, Richard Microchip Technology

Comment Type T Comment Status D

The special condition (per 45.2.3.67.1) when all DDMP capability registers 3.1800.12, 3.1800.13, 5.1800.12, and/or 5.1800.13 are zeros has to be included in the description of the aTimeSyncCapabilityDdmp management object.

SuggestedRemedy

Change

"The value of 'sfd' indicates that the registers 3.1800.13 and 5.1800.13 (see 45.2.3.67 and 45.2.5.28) are both set to 1."

to

"The value of 'sfd' indicates that the registers 3.1800.13 and 5.1800.13 (see 45.2.3.67 and 45.2.5.28) are both set to 1 or that all registers 3.1800.12, 3.1800.13, 5.1800.12, and 5.1800.13 are set to 0."

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 30 SC 30.13.1.16 P25 L27 # 489

Tse, Richard Microchip Technology

Comment Type T Comment Status D

In the right-most column of Table 30-6, there should not be "X" for the new optional (i.e., non-mandatory for TlmeSync) features.

SuggestedRemedy

Remove the "X" for all the management objects below aTimeSyncDelayNsRXmin

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Add a new column to Table 30-6 "Support for Time Sync (optional)" and move X for all the management objects below aTimeSyncDelayNsRXmin to the new optional column.

Cl 45 SC 45.2 P26 L4 # 539

Grow, Robert RMG Consulting

Comment Type E Comment Status D bucket

Base text error.

SuggestedRemedy

P802.3/D3.2 has title "MDIO Interface registers".

Proposed Response Response Status W

PROPOSED ACCEPT.

Proposed Responses

IEEE P802.3cx D2.3 ITSA Task Force 3rd Working Group recirculation ballot comments

CI 45 SC 45.2.1.175 P26 L32 # 554  
 Dawe, Piers Nvidia  
 Comment Type E Comment Status D bucket  
 This draft uses "path data delay" 550 times and "data path delay" 23 times  
 SuggestedRemedy  
 I wonder if some or all of the few "data path delay" should be otherwise.  
 Proposed Response Response Status W  
 PROPOSED ACCEPT IN PRINCIPLE.  
 Change all instances of "data path delay" to "path data delay", including names of primitives, i.e., "PCS Dynamic Data Path Delay" becomes "PCS Dynamic Path Data Delay" and "PDDPD" becomes "PDPDD", globally.

CI 45 SC 45.2.1.175 P26 L32 # 475  
 Tse, Richard Microchip Technology  
 Comment Type T Comment Status D bucket  
 "data path delay" should be "path data delay"  
 Total of 13 instances of "data path delay" in the draft. All should be changed except (perhaps) the two instances related to the name of the PDDPD primitive.  
 SuggestedRemedy  
 Change all instances (except possibly the two related to the name of the PDDPD primitive) from:  
 "data path delay"  
 to  
 "path data delay"  
 Proposed Response Response Status W  
 PROPOSED ACCEPT IN PRINCIPLE.  
 See comment #554

CI 45 SC 45.2.1.176 P27 L28 # 540  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 P802.3/D3.0 comment resolution (#i-42) became more precise than was the initial proposed response, which may have been the basis for correcting P802.3de: Approved response: "Editors to change the capitalization of register as follows: Replace "Register" with "register" throughout the draft where "Register" is not at the start of a sentence, is not part of a phrase that is a proper noun (e.g., a parameter name), and is not preceded by "(" as part of a Clause 22 or Clause 45 heading. All with editorial license." "Register 1.1" is wrong. (Individual comments entered for other occurrences.)  
 SuggestedRemedy  
 "register 1.1"  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

CI 45 SC 45.2.1.176 P27 L32 # 541  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(register 1.1803..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

CI 45 SC 45.2.1.176 P27 L42 # 542  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(register 1.1810..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

## Proposed Responses

## IEEE P802.3cx D2.3 ITSA Task Force 3rd Working Group recirculation ballot comments

Cl 45 SC 45.2.1.177 P28 L38 # 543  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "register 1.1"  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.1.177 P28 L42 # 544  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "register 1.1805..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.1.177 P28 L43 # 545  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "register 1.1811..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.1.177 P28 L51 # 546  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(register 1.1807..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.1.177 P28 L52 # 495  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(register 1.1812..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.2.21 P30 L49 # 496  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "register 2.1..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.2.21 P30 L52 # 497  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "registers 2.1891..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.2.21 P31 L1 # 498  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "register 2.1809..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

## Proposed Responses

## IEEE P802.3cx D2.3 ITSA Task Force 3rd Working Group recirculation ballot comments

Cl 45 SC 45.2.2.21 P31 L8 # 499  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(registers 2.1803..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.2.22 P32 L6 # 503  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(register 2.1811..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.2.21 P31 L10 # 500  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(register 1810..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.2.22 P32 L13 # 504  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "registers 2.1805..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.2.22 P31 L1 # 501  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "register 2.1..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.2.22 P32 L15 # 505  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(register 2.1812..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.2.22 P32 L4 # 502  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "registers 2.1805..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

## Proposed Responses

## IEEE P802.3cx D2.3 ITSA Task Force 3rd Working Group recirculation ballot comments

CI 45 SC 45.2.3.67.1 P34 L33 # 478

Tse, Richard Microchip Technology

Comment Type T Comment Status D

The data delay measurement point affects the calculation of both the transmit and receive path data delays.  
The statements in 45.2.3.67.1 and 45.2.3.67.2 only mention the PCS transmit path data delay.  
The statements in 45.2.5.28.1 and 45.2.5.28.2 only mention the DTE XS transmit path data delay.

*SuggestedRemedy*

Change the four instances of "PCS transmit path data delay" in 45.2.3.67.1 and 45.2.3.67.2 to "PCS path data delays".

Change the four instances of "DTE XS transmit path data delay" in 45.2.5.28.1 and 45.2.5.28.2 to "DTE XS path data delays".

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 45 SC 45.2.3.67.2 P34 L48 # 480

Tse, Richard Microchip Technology

Comment Type T Comment Status D

Register bit 3.1800.12 should be referenced here instead of 3.1800.13.

*SuggestedRemedy*

Change

"When read as a zero, bit 3.1800.13 indicates that the PCS..."

to

"When read as a zero, bit 3.1800.12 indicates that the PCS ..."

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 45 SC 45.2.3.67.3 P35 L3 # 563

Dawe, Piers Nvidia

Comment Type E Comment Status D bucket

indicates that the PCS supports the measurement of multiple PCS lane transmit and receive path data delays using the method described in 90.7 and 90A.4.

*SuggestedRemedy*

indicates that the PCS is able to report transmit and receive path data delays for multiple PCS lanes using the method described in 90.7 and 90A.4.  
Similarly in other places

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 45 SC 45.2.3.67.4 P35 L11 # 555

Dawe, Piers Nvidia

Comment Type E Comment Status D bucket

indicates that the PCS supports the calculation of the TX\_NUM\_BIT\_CHANGE and RX\_NUM\_BIT\_CHANGE values

*SuggestedRemedy*

indicates that the PCS is able to report PDDPD as TX\_NUM\_BIT\_CHANGE and RX\_NUM\_BIT\_CHANGE values  
Check the document for calculation vs. reporting.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change the text to read "indicates that the PCS is able to report PDDPD as TX\_NUM\_BIT\_CHANGE and RX\_NUM\_BIT\_CHANGE values"

Proposed Responses

IEEE P802.3cx D2.3 ITSA Task Force 3rd Working Group recirculation ballot comments

Cl 45 SC 45.2.3.67.4 P35 L12 # 556

Dawe, Piers Nvidia  
 Comment Type T Comment Status D

This bit reports two abilities together: reporting PDDPD, and doing it over xMII using NUM\_BIT\_CHANGE signals.

SuggestedRemedy  
 Should there be separate registers for each ability?

Proposed Response Response Status W  
 PROPOSED ACCEPT IN PRINCIPLE.

Separate registers for PDDPD and NUM\_BIT\_CHANGE are not really valuable, since they must both exist for the function to work. Also, the PDDPD exists at the RS layer.

To address this comment, add a reference to the PDDPD function in the NUM\_BIT\_CHANGE ability register's description as shown: "When read as a one, bit 3.1800.10 indicates that the PCS supports the calculation of the TX\_NUM\_BIT\_CHANGE and RX\_NUM\_BIT\_CHANGE values, passed from the PCS across the xMII to the gRS. <new text> The gRS also supports the corresponding PDDPD parameter in its TS\_TX.indication and TS\_RX.indication primitives.</new text> When read as a zero, bit 3.1800.10 indicates that the PCS does not support the calculation of the TX\_NUM\_BIT\_CHANGE and RX\_NUM\_BIT\_CHANGE values."

Cl 45 SC 45.2.3.68 P36 L11 # 506

Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket

Incorrect capitalization of "Register"

SuggestedRemedy  
 "register 3.1..."

Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.3.68 P36 L14 # 507

Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket

Incorrect capitalization of "Register"

SuggestedRemedy  
 "(registers 3.1801..."

Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.3.68 P36 L16 # 508

Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket

Incorrect capitalization of "Register"

SuggestedRemedy  
 "(register 3.1809..."

Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.3.68 P36 L23 # 509

Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket

Incorrect capitalization of "Register"

SuggestedRemedy  
 "registers 3.1803..."

Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.3.68 P36 L25 # 510

Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket

Incorrect capitalization of "Register"

SuggestedRemedy  
 "(register 3.1810..."

Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.3.69 P37 L13 # 511

Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket

Incorrect capitalization of "Register"

SuggestedRemedy  
 "register 3.1..."

Proposed Response Response Status W  
 PROPOSED ACCEPT.

## Proposed Responses

## IEEE P802.3cx D2.3 ITSA Task Force 3rd Working Group recirculation ballot comments

Cl 45 SC 45.2.3.69 P37 L16 # 512  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "registers 2.1807..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.4.29 P39 L52 # 516  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(registers 4.1809..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.3.69 P37 L27 # 513  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(register 3.1812..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.4.29 P40 L6 # 517  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(registers 4.1803..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.4.29 P39 L47 # 514  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "register 4.1..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.4.30 P40 L48 # 518  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "register 4.0..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.4.29 P39 L51 # 515  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(registers 4.1801..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.4.30 P40 L52 # 519  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(registers 4.1805..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.



Proposed Responses

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Cl 45 SC 45.2.4.30 P40 L53 # 520  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(register 4.1811..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.4.30 P41 L7 # 521  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "registers 4.1807..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.4.30 P41 L9 # 522  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(register 4.1812..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.5.28.2 P43 L36 # 479  
 Tse, Richard Microchip Technology  
 Comment Type T Comment Status D  
 Register bit 5.1800.12 should be referenced here instead of 5.1800.13.  
 SuggestedRemedy  
 Change  
 "When read as a zero, bit 5.1800.13 indicates that the DTE XS..."  
 to  
 "When read as a zero, bit 5.1800.12 indicates that the DTE XS ..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.5.28.3 P43 L46 # 481  
 Tse, Richard Microchip Technology  
 Comment Type E Comment Status D bucket  
 "PCS" should be replaced by "DTE XS" in 45.2.5.28.3, 45.2.5.28.4, and 45.2.5.31.  
 SuggestedRemedy  
 Replace six instances of "PCS" with "DTE XS" in 45.2.5.28.3, 45.2.5.28.4, and 45.2.5.31.  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.5.29 P44 L37 # 523  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "register 5.0..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Proposed Responses

IEEE P802.3cx D2.3 ITSA Task Force 3rd Working Group recirculation ballot comments

Cl 45 SC 45.2.5.29 P44 L41 # 524  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(registers 5.1801..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.5.29 P44 L51 # 527  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(register 5.1810..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.5.29 P44 L42 # 525  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(register 5.1809..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.5.30 P45 L41 # 528  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "register 5.1..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.5.29 P44 L42 # 482  
 Tse, Richard Microchip Technology  
 Comment Type E Comment Status D bucket  
 "PHY XS" should be replaced by "DTE XS" in 45.2.5.29  
 SuggestedRemedy  
 Replace two instance of "PHY XS" with "DTE XS" in 45.2.5.29  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.5.30 P45 L44 # 529  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "registers 5.1805..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.5.29 P44 L50 # 526  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(registers 5,1803..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.5.30 P45 L46 # 530  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(register 5.1811..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

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Cl 45 SC 45.2.5.30 P45 L53 # 531  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(registers 5.1807..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.6.15 P48 L46 # 535  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(register 6.1810..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.5.30 P46 L1 # 532  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(register 5.1812..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.6.16 P49 L36 # 536  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "register 6.0..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.6.15 P48 L37 # 533  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(register 6.1809..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.6.16 P49 L39 # 537  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "registers 6.1805..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.6.15 P48 L44 # 534  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(registers 6.1803..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.6.16 P49 L41 # 538  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(register 6.1811..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

## Proposed Responses

## IEEE P802.3cx D2.3 ITSA Task Force 3rd Working Group recirculation ballot comments

Cl 45 SC 45.2.6.16 P49 L48 # 547  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(registers 6.1807..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 45 SC 45.2.6.16 P49 L50 # 548  
 Grow, Robert RMG Consulting  
 Comment Type E Comment Status D bucket  
 Incorrect capitalization of "Register"  
 SuggestedRemedy  
 "(registers 6.1812..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 90 SC 90.5.3 P60 L11 # 483  
 Tse, Richard Microchip Technology  
 Comment Type T Comment Status D  
 "number of bits" needs further clarification  
 SuggestedRemedy  
 Change  
 "The value reports number of bits of dynamic transmit path data delay that are experienced by the data transferred from the gRS to the PHY..."  
 to  
 "The value reports number of xMII bit times of dynamic transmit path data delay that are experienced by the data transferred from the gRS to the PHY ..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 90 SC 90.5.4 P60 L38 # 484  
 Tse, Richard Microchip Technology  
 Comment Type T Comment Status D  
 "number of bits" needs further clarification  
 "gRS to the PHY" should be "PHY to the gRS"  
 SuggestedRemedy  
 Change  
 "The value reports number of bits of dynamic receive path data delay that are experienced by the data transferred from the gRS to the PHY..."  
 to  
 "The value reports number of xMII bit times of dynamic receive path data delay that are experienced by the data transferred from the PHY to the gRS ..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 90 SC 90.7 P63 L4 # 557  
 Dawe, Piers Nvidia  
 Comment Type TR Comment Status D  
 This proposes to change the base text to: "The TimeSync capability requires measurement of data delay in the transmit and receive paths, as shown in Figure 90–5. The data delay measurement point shall be either the beginning of the start of frame delimiter (SFD) or the beginning of the first symbol after the SFD (see 45.2.3.69a)". The figure is unchanged from the base standard, and shows an arrow between two points, the bottom of the gRS and the boundary between MDI and medium. This is confusing.  
 SuggestedRemedy  
 If you must describe a marker in a signal that moves as a "point", add text to distinguish this from the real points in static space, which are also relevant to this clause. It would be better to change "data delay measurement point" to "data delay reference marker" or "data delay marker" or "data delay reference", throughout.  
 Proposed Response Response Status W  
 PROPOSED REJECT.  
 The name "data delay measurement point" is associated with the name "message timestamp point", which is used by IEEE 1588 and IEEE 802.1AS to identify the same thing. No changes to the draft needed.

CI 90 SC 90.7 P63 L6 # 558

Dawe, Piers

Nvidia

Comment Type TR Comment Status D

This proposes to change the base text to: "The data delay measurement point shall be either the beginning of the start of frame delimiter (SFD) or the beginning of the first symbol after the SFD (see 45.2.3.69a)".

I checked clauses 3 and 4: the SFD field is 1 octet long (Clause 3) or 8 MAC bits long (Clause 4), and the SFD field and the Destination Address field which follows it are "fields". I checked a couple of RS clauses - they don't have "symbol"s. But see the definitions 1.4.545 symbol, 1.4.546 symbol period, 1.4.547 symbol rate (SR), and 1.4.548 symbol time (ST). So a symbol is a unit interval on the line, which doesn't relate simply to MAC octets at the gRS because of line coding overhead, multilevel coding, FEC, and alignment markers. Also, there are 10-bit symbols in Reed-Solomon FEC clauses.

To the same text: the regular clauses are responsible for specifying; Clause 45 MDIO is only an optional way of implementing it.

I see that 1.5 says "SFD start-of-frame delimiter" and "3.2.2 Start Frame Delimiter (SFD) field The SFD field is..."

#### SuggestedRemedy

I believe what is meant is "octet" as used in Clause 3 and 90A.3 or "8 Change this to:

"the beginning of the Start Frame Delimiter field (SFD) or the beginning of the first field after the SFD (see Figure 3-1) An implementation may be capable of one or both methods; this may be advertised and configured with MDIO registers (the beginning of the start of frame delimiter (SFD) or the beginning of the first symbol after the SFD (see 45.2.3.67 and 45.2.3.69a)"

Replace "symbol" with "field" throughout the document. It seems it is used as "the first symbol after the SFD" so we don't need to discuss the duration of this field, only when it starts.

Proposed Response Response Status W

PROPOSED REJECT.

The timestamping of the data delay measurement point is supposed to take place at the MDI so "symbol" is correct, per the definitions given by the commenter.

The The capturing of the timestamp at the xMII is just an implementation model used by 802.3 to enable estimation of the timestamp at the MDI.

No changes to the draft needed.

CI 90 SC 90.7 P63 L15 # 559

Dawe, Piers

Nvidia

Comment Type T Comment Status D

Confusion between points and events.

Also, the delay exists whether measured or not.

#### SuggestedRemedy

Change

The transmit path data delay is measured from the data delay measurement point at the xMII input to the data delay measurement point at the MDI output. The receive path data delay is measured from the data delay measurement point at the MDI input to the data delay measurement point at the xMII output.

to

The transmit path data delay is defined from the time the data delay measurement point passes the xMII input to the time {it | the data delay measurement point} passes the MDI output. The receive path data delay is measured from the time the data delay measurement point passes the MDI input to the time it passes the xMII output.

Check the document for other occurrences of "data delay measurement point" when an event is meant, such as at line 38 (suggestion in another comment).

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Change

The transmit path data delay is measured from the data delay measurement point at the xMII input to the data delay measurement point at the MDI output. The receive path data delay is measured from the data delay measurement point at the MDI input to the data delay measurement point at the xMII output.

to

The transmit path data delay is defined from the time the data delay measurement point passes the xMII input to the time it passes the MDI output. The receive path data delay is measured from the time the data delay measurement point passes the MDI input to the time it passes the xMII output.

Apply similar change on page 63, line 38.

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Cl 90 SC 90.7 P63 L18 # 566  
 Dawe, Piers Nvidia  
 Comment Type E Comment Status D bucket  
 "For a PHY that includes an FEC and/or multiple PCS lane distribution functions": hard to parse, could mean multiple PCSs or multiple functions. We don't have PCS lane distribution without multiple PCS lanes. How many functions: just one, or one per Tx, Rx?  
 SuggestedRemedy  
 Change to  
 For a PHY that includes an FEC and/or a PCS lane distribution function  
 Similarly, change  
 For PHYs with both FEC and multiple PCS lane distribution, the start of the FEC block is guaranteed to coincide with the start of a multiple PCS lane distribution sequence.  
 to  
 For PHYs with both FEC and PCS lane distribution, the start of the FEC block is guaranteed to coincide with the start of a PCS lane distribution sequence.  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 90 SC 90.7 P63 L21 # 567  
 Dawe, Piers Nvidia  
 Comment Type E Comment Status D bucket  
 "FEC block": I know what you mean, but in 802.3 it's "FEC codeword" because 64B/66B got "block" first  
 SuggestedRemedy  
 Change "block" to "codeword", three times  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 90 SC 90.7 P63 L29 # 560  
 Dawe, Piers Nvidia  
 Comment Type T Comment Status D  
 the transmit path data delay measurement starting point (the data delay measurement point at the xMII input)  
 ...  
 the receive path data delay measurement ending point (the data delay measurement point at the xMII output)  
 SuggestedRemedy  
 the transmit path data delay measurement starting event (when the data delay measurement point passes the xMII input)  
 ...  
 the receive path data delay measurement ending event (when the data delay measurement point passes the xMII output)  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 90 SC 90.7 P64 L42 # 485  
 Tse, Richard Microchip Technology  
 Comment Type T Comment Status D  
 The Tx and Rx path data delays are no longer reported by a simple quartet of values. The existence of nanosecond and optional sub-nanosecond resolution managed objects should be mentioned.  
 SuggestedRemedy  
 Change  
 "The obtained data delay measurement shall be reported in the form of a quartet of values; the maximum transmit data delay, the minimum transmit data delay, the maximum receive data delay, and the minimum receive data delay, as defined for the oTimeSync managed object class (30.13.1)."  
 to  
 "The obtained data delay measurement shall be reported in the form of a quartet of values; the maximum transmit data delay, the minimum transmit data delay, the maximum receive data delay, and the minimum receive data delay, each of which can be derived from corresponding managed objects with nanosecond resolution and, optionally, also with sub-nanosecond resolution, as defined for the oTimeSync managed object class (30.13.1)."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Proposed Responses

IEEE P802.3cx D2.3 ITSA Task Force 3rd Working Group recirculation ballot comments

Cl 90A SC 90A.2 P68 L31 # 565  
 Dawe, Piers Nvidia  
 Comment Type E Comment Status D bucket  
 "and multi-physical coding sublayer (PCS) lane distribution/merging": we have removed most of the multi-physics from the draft, we aren't discussing multiple PCSs in this sentence, and we don't have lane distribution/merging without multiple lanes.  
 Capitals.  
 SuggestedRemedy  
 Simplify to "and Physical Coding Sublayer (PCS) lane distribution/merging", or elaborate to "and distribution/merging of multiple Physical Coding Sublayer (PCS) lane "  
 Proposed Response Response Status W  
 PROPOSED ACCEPT IN PRINCIPLE.  
 Change to read "and Physical Coding Sublayer (PCS) lane distribution/merging"

Cl 90A SC 90A.3 P68 L51 # 562  
 Dawe, Piers Nvidia  
 Comment Type T Comment Status D  
 "For implementations that do not use the NUM\_BIT\_CHANGE ability and Multilane ability registers (see Table 45-293)": I suspect the criterion is not whether the implementation uses MDIO to report these abilities, but whether it is using the abilities themselves.  
 Rogue capital.  
 SuggestedRemedy  
 Change to "If the NUM\_BIT\_CHANGE ability and multilane ability are not in use (see 90.7, 90.5.3, 90.5.4, Table 45-293, and Table 45-295a)"  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 90A SC 90A.3 P69 L8 # 561  
 Dawe, Piers Nvidia  
 Comment Type E Comment Status D bucket  
 Gratuitous capitals in table  
 SuggestedRemedy  
 Ethernet rate  
 Magnitude of potential timestamp accuracy impairments per transmit or receive port (ns)  
 Mismatched data delay measurement point  
 Idle insertion / removal  
 Alignment marker/ codeword marker insertion / removal  
 PCS lane distribution / merging  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 90A SC 90A.3 P69 L44 # 549  
 Dawe, Piers Nvidia  
 Comment Type E Comment Status D bucket  
 Implementations that support sub-nanosecond accuracy path delay measurement capabilities  
 SuggestedRemedy  
 Implementations with sub-nanosecond resolution path data delay reporting abilities  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 90A SC 90A.3 P69 L46 # 550  
 Dawe, Piers Nvidia  
 Comment Type E Comment Status D bucket  
 only suffer? rather than pay a penalty or be disqualified?  
 SuggestedRemedy  
 Change "only suffer a timestamp accuracy impairment of one octet time" to "suffer a timestamp accuracy impairment of only one octet time"  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Proposed Responses

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Cl 90A SC 90A.4 P70 L4 # 553  
 Dawe, Piers Nvidia  
 Comment Type TR Comment Status D  
 This is the first mention of "intrinsic delay variation" and I don't see an explanation of what "intrinsic" means.  
 SuggestedRemedy  
 Explain or delete. It appears that anything "intrinsic" is a delay variation or a varying delay, so delete may work.  
 Proposed Response Response Status W  
 PROPOSED REJECT.  
 The adjective "intrinsic" is used in the meaning of "belonging naturally". The use of this adjective emphasizes that certain types of delays are intrinsic to a specific function and it is not used to describe any implementation-dependent delays.

Cl 90A SC 90A.5.1 P70 L52 # 564  
 Dawe, Piers Nvidia  
 Comment Type T Comment Status D  
 "the PDDPD parameter, which mirrors the corresponding value of TX\_NUM\_BIT\_CHANGE": but it's the other way round; the TX\_NUM\_BIT\_CHANGE signals convey the parameter PDDPD, as 90.4.3.1.1 says.  
 SuggestedRemedy  
 Change to "the PDDPD parameter, which is conveyed by TX\_NUM\_BIT\_CHANGE". Similarly in 90A.5.2.  
 Proposed Response Response Status W  
 PROPOSED ACCEPT IN PRINCIPLE.  
 Comment type was changed to T  
 Change to "the PDDPD primitive, which is conveyed by TX\_NUM\_BIT\_CHANGE". Similarly in 90A.5.2.

Cl 90A SC 90A.5.1 P70 L53 # 486  
 Tse, Richard Microchip Technology  
 Comment Type T Comment Status D  
 PDDPD is a primitive, not a parameter  
 Make the same change to both 90A.5.1 and 90A.5.2  
 SuggestedRemedy  
 change the following in both 90A.5.1. and 90A.5.2:  
 "...in which the PDDPD parameter..."  
 to  
 "...in which the PDDPD primitive..."  
 Proposed Response Response Status W  
 PROPOSED ACCEPT IN PRINCIPLE.  
 See comment #564

Cl 90A SC 90A.6 P72 L12 # 487  
 Tse, Richard Microchip Technology  
 Comment Type E Comment Status D bucket  
 "Skew" in the heading of 90A.6 should not have a capitalized "S"  
 SuggestedRemedy  
 Change  
 "Considerations for transmit Skew"  
 to  
 "Considerations for transmit skew"  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.



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Cl 90A SC 90A.7 P74 L3 # 551

Dawe, Piers Nvidia  
Comment Type E Comment Status D bucket

"Arial font is preferred.  
Preferred font size is 9 points (can be 8 or 10 points if needed)."  
This is 6 and 7 point, Calibri. There is plenty of space.

SuggestedRemedy  
Change to 9 point Arial (in black)

Proposed Response Response Status W  
PROPOSED ACCEPT.

Cl 90A SC 90A.7 P74 L26 # 552

Dawe, Piers Nvidia  
Comment Type E Comment Status D bucket

Not house style

SuggestedRemedy  
Figures 90A-3 to 5 would be better using black text, Arial. "PHY Delay" should be "PHY delay", or possibly "PHY path data delay". If there is room to change dly to delay, that would be good too.

Proposed Response Response Status W  
PROPOSED ACCEPT.

Cl 999 SC 999 P16 L4 # 488

Tse, Richard Microchip Technology  
Comment Type E Comment Status D bucket

Subclause 90A.1 doesn't appear in the table of contents

SuggestedRemedy  
Update table of contents so subclause 90A.1 is included

Proposed Response Response Status W  
PROPOSED ACCEPT.