Cl **163**　　　*SC* **163.9.2**　　　　　*P* **176**　　　*L* **30**　　　# 135

Ghiasi, Ali　　　　　　　　　Ghiasi Quantum/Inphi

Comment Type **TR**　　*Comment Status* **R**　　　　　*TP0v*

Transmit parameters must be measurable and well defined physical test point, the current TP0v test point methodology is not proven yet and is not uncommon when one inverts the channel spurious response to result. We have put into the draft unproven test method when the solution was trivial!

SuggestedRemedy

Just as we have done for the MCB and HCB losses, we need to increase the loss from the TP0 to TP0a a loss of 2.2 dB to 2.6 dB with nominal 2.4 dB loss is inline with MCB loss and allow construction of DUT boards with 2.5-3" long traces. Such traces combined with 2x8 or 2x12 2.5 mm pogo pins connectors allow breakout of high large 256 lanes switches. Make TP0a normative and make TP0v the method to de-embed when DUT PCB loss deviate from nominal range.

Response　　　　　*Response Status* **C**

REJECT.

The new test fixture specifications were adopted based on sufficient support by the task force. See Comment #33 in the following: https://www.ieee802.org/3/ck/comments/draft1p2/8023ck_D1p2_final_closedcomments.pdf

The comment does not provide sufficient evidence that the adopted approach will not work nor is the proposed remedy sufficiently complete to implement, e.g., limit values at TP0a, methodology.

Comment #73 proposes to remove TP0a as an example. Comment #136 proposes a new IL equation for the example test fixture.

This comment suggests to make TP0a normative same as previous draft and previous generations of PHYs and to use the TP0v method is to embed additional test fixture if its IL is out of range. TP0a is described an example in existing spec.

[Editor's note: CC: 120F, 163]

Based on straw poll #1 there is clear support to keep the TP0v test fixture methodology as normative.

Straw poll #1 is reproduced here for convenience:
I support keeping TP0v methodology as the normative specification (choose one)
Y: 27, N: 4, No Opinion: 11

Cl **163**　　　*SC* **163.9.3.1**　　　　*P* **180**　　　*L* **34**　　　# 40

Healey, Adam　　　　　　　　Broadcom Inc.

Comment Type **T**　　*Comment Status* **A**　　　　　*RX test fixture*

Now that the transmitter has relaxed test fixture requirements and taken a "test fixture embedding" approach, it seems appropriate for the receiver to follow suit.

SuggestedRemedy

Update 163.9.3.2 by changing references to "TP5a" to "TP5v" and add a pointer to 163.9.2.1 for test fixture requirements. Replace the specification of "ERL (min)" in Table 163-9 with a specification of "dERL" as is done for the transmitter and update 163.9.3.1 accordingly. Implement similar changes in Annex 120F. Update Annex 163A to include calculation of the reference ERL at TP5v (which should largely be a "mirror image" of the material currently describing the calculation of the reference ERL at TP0v). For interference tolerance and jitter tolerance test channel calibration, exceptions to 93A.2 and Annex 93C would need to be made to substitute TP0 to TP0v (and TP5v to TP5) replicas for their TP0 to TP0a (And TP5a to TP5) counterparts.

Response　　　　　*Response Status* **C**

ACCEPT IN PRINCIPLE.

Based on Strawpoll #5 there is clear consensus to align the RX test fixture with the TX test fixture. Straw poll #5 is reproduced here for convenience.

Straw Poll #5:
I support aligning RX to TP0v test fixture characteristics and methodology:
Y: 22, N: 1, No Opinion: 6

Align the RX test fixture specifications with the TX TF specifications based on slide 12 of: https://www.ieee802.org/3/ck/public/adhoc/sept16_20/brown_3ck_adhoc_01a_091620.pdf

For 163.9.3.2:
Change references to "TP5a" to "TP5v" and add a pointer to 163.9.2.1 for test fixture requirements.
Replace the specification of "ERL (min)" in Table 163-9 with a specification of "dERL" as is done for the transmitter and update 163.9.3.1 accordingly.

For 163.9.3.3 RITT, add a bullet at the beginning of the considerations, "In this subclause TP0v (TP5v) replaces TP0a (TP5a) in Annex 93A and Annex 93C'.

For 163.9.3.4 JTOL, add a sentence after "The test setup shown in Figure 93–12, or its equivalent, is used.": "In this subclause TP0v (TP5v) replaces TP0a (TP5a) in Annex 93A, Annex 93C, and Annex 120D"

Implement similar changes in Annex 120F.

For Annex 163A:
Change to include calculation of the reference ERL at TP5v (which should largely be a "mirror image" of the material currently describing the calculation of the reference ERL at

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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 Z/withdrawn
SORT ORDER: Clause, Subclause, page, line

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SC **163.9.3.1**　　　10/14/2020 2:25:00 PM

TP0v).

Implement with editorial license.

[Editor's note: CC: 163, 120F,163A]

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
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Cl **163**
SC **163.9.3.1**

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