IEEE 802.3bv D3.0 GEPOF Initial Sponsor ballot comments

Cl **115**   *SC* **115.6.4.8**   *P* **103**   *L* **17**   # i-15

Anslow, Peter   Ciena Corporation

Comment Type   **TR**   *Comment Status*   **A**

The multi-vendor interoperability of this PHY is critically dependent on the ability of the specification to define a suitable quality for the worst case transmitter. It is very difficult without a physical implementation to assess whether the transmitter distortion measurement defined here does this adequately.
I can't find any presentations on the P802.3bv web pages that show any correlation between the performance of transmitters in actual links and the transmitter distortion measurement defined here.
While there is no rule that requires this to be done, it has been seen as a requirement in other projects before new specification methods have been accepted. See for instance, http://www.ieee802.org/3/bm/public/nov14/petrilla_01b_1114_optx.pdf#page=8 which has plots of receiver sensitivity vs the newly proposed TDEC transmitter quality metric.

SuggestedRemedy

As this measurement method is crucial to multi-vendor interoperability of these PHY types, please provide some measurement results showing the correlation between link performance and the transmitter distortion measurements that show that HD2 of -20 dB, HD3 of -26 dB, HD4 of -36 dB, and RD of -40 dB are attainable using transmitters that work in conformant links and that transmitters with HD2 of worse than -20 dB or HD3 of worse than -26 dB or HD4 of worse than -36 dB or RD of worse than -40 dB do not work in conformant links.

Response   *Response Status*   **U**

ACCEPT IN PRINCIPLE.

The commenter did not provide specific text indicating what changes to the draft would be required to resolve the comment.

In http://www.ieee802.org/3/bv/public/Sep_2016/perezaranda_3bv_1c_0916.pdf are provided measurement results of the trasnmitter distortion parameters for new 4 PMD implementations. Based on those measurement results, the document proposes to do a refinement of the specifications of HD3 and HD4 parameters to allow more implementations. The presentation shows that this refinement does not have relevant impact on the expected receiver sensitivity and discussion on the selection of the new values is provided.
The presentation also provides an analysis on the correlation of the obtained measurement results with the prediction simulation models and analysis on robustness of the specification.

As comment i-35 proposes:
In Table 115-8, change HD3 max value from -26 to -23. In the same table, change HD4 max value from -36 to -34.

Cl **115**   *SC* **115.6**   *P*   *L*   # i-47

Stassar, Peter   Huawei Technologies

Comment Type   **TR**   *Comment Status*   **A**

The test results in perezaranda_3bv_1b_0916 appear to show that the optical interface specifications in P802.3bv draft 3.0 need significant further refinement, so that a set of devices, when meeting these requirements, a will operate satisfactorily in the field on worst case versions of standard POF, and that, when they fail these requirements, they do not operate in the field.
Such a robust specification is extremely important to protect the user in home applications against inadequate equipment.
I remain therefore unconvinced that this optical specification is sufficiently complete and therefore have the opinion that the Task Force has not completed its work.

SuggestedRemedy

Perform further testing to enable a refinement and increase of quality of the specification.

Response   *Response Status*   **W**

ACCEPT IN PRINCIPLE.

The commenter did not provide specific text indicating what changes to the draft would be required to resolve the comment.

In http://www.ieee802.org/3/bv/public/Sep_2016/perezaranda_3bv_1c_0916.pdf are provided measurement results of the trasnmitter distortion parameters for new 4 PMD implementations. Based on those measurement results, the document proposes to do a refinement of the specifications of HD3 and HD4 parameters to allow more implementations. The presentation shows that this refinement does not have relevant impact on the expected receiver sensitivity and discussion on the selection of the new values is provided.
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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 U/unsatisfied Z/withdrawn
SORT ORDER: Comment ID

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