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DATE: 11th September, 2015
NAME: David Law
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REQUESTED REVISION:
STANDARD: IEEE Std 802.3-2015
CLAUSE NUMBER: 90.7
CLAUSE TITLE: Data delay measurement

PROPOSED REVISION TEXT:

- [1] Change the text in the first sentence of subclause 90.7 as follows
'... to its presentation by the PHY to the TX MDI.'
- [2] Change the text in the second sentence of subclause 90.7 as follows
'... of the SFD at the RX MDI to its presentation ...'
- [3] Add a third sentence to the end of subclause 90.7 that reads 'In the case of a multi-lane PHY, the receive path data delay is measured from the input of the beginning of the SFD at the RX MDI on the lane with the maximum media propagation delay.'

RATIONALE FOR REVISION:

Items [1] and [2] are to clarify which of the two MDIs, the TX or the RX, on a link is being refer to in each case.

Item [3] clarifies which lane should be used as the timing reference point to set the receive path data delay register to in a multi-lane PHY. The reference point defined for the receive path is the input of the beginning of the SFD at the MDI, however in the case of a multi-lane PHYs there may be different media lane delays, resulting in differing arrival times for the beginning of the SFD on each lane.

Without a definition of which lane of the MDI is used as the timing reference point, the entire inter-lane skew may need to be accounted for in the receive minimum and receive maximum path data delay register values, impacting upon the timing accuracy that can be supported.

IMPACT ON EXISTING NETWORKS:

None. This will support improved timing accuracy in the future.

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| Please attach supporting material, if any |
| Submit to:- David Law, Chair IEEE 802.3 |
| and copy:- Adam Healey, Vice-Chair IEEE 802.3 |
|
| At:- E-Mail: stds-802-3-maint-req@ieee.org |
|
| +----- For official 802.3 use -----+ |
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| For information about this Revision Request see - |
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