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| 8802-3/802.3 REVISION REQUEST 1224 |  
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DATE: 14th April, 2010  
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REQUESTED REVISION:  
STANDARD: 802.3-2008  
CLAUSE NUMBER: 55  
CLAUSE TITLE: Physical Coding Sublayer (PCS), Physical Medium  
Attachment (PMA) sublayer and baseband medium, type 10GBASE-T

PROPOSED REVISION TEXT:

55.5.4.4 Alien crosstalk noise rejection

Change

"...a receiver shall operate with an Ethernet frame error rate less than  $6.4 \times 10^{-9}$  for 800 octet frames..."

to

"...a receiver shall operate with an Ethernet frame error ratio less than  $9.6 \times 10^{-9}$  for 800 octet frames with minimum IPG or greater than 799 octet IPG..."

RATIONALE FOR REVISION:

This brings the frame error rate requirement in line with sections 55.5.4.1 and 55.5.4.5.

The LDPC forward error correction can force one bit error to cause two frames to be marked as errored. For low BER, this is reflected by a 50% elevation of the frame error ratio.

Note also that the term "frame error rate" is misleading and "ratio" is generally preferred.

IMPACT ON EXISTING NETWORKS:

No impact to compliant devices. This change removes an unnecessarily stringent requirement in one test that is out of line with other test requirements. This may eliminate some false failures in rare circumstances.

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| Please attach supporting material, if any
| Submit to:- David Law, Chair IEEE 802.3
|   and copy:- Wael William Diab, Vice-Chair IEEE 802.3
|               E-Mail: stds-802-3-maint-req@ieee.org
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|           +----- For official 802.3 use -----+
|           | REV REQ NUMBER: 1224
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| For information about this Revision Request see -
| http://www.ieee802.org/3/maint/requests/revision\_history.html#REQ1224
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